

Міністерство молоді та спорту України
Міністерство освіти і науки України
Харківська державна академія фізичної культури

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**Практикум з Мови спеціальності та культури
професійного мовлення (англійська мова)
для здобувачів першого бакалаврського курсу
спеціальності 227 Охорона здоров'я**

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С 54 Практикум з Мови спеціальності та культури професійного мовлення (англійська мова) для здобувачів першого бакалаврського курсу спеціальності 227 Охорона здоров'я / Соїна І.Ю., Петрусенко Н.Ю. – Харків: ХДАФК, 2026. – 129 с.

Практикум адресовано здобувачам першого курсу бакалаврату, які опановують мову спеціальності та культуру професійного мовлення (англійську мову). Запропонований тематичний матеріал охоплює лексико-синтаксичний мінімум із найуживаніших тем професійної комунікації, що вивчаються на першому курсі бакалаврської підготовки.

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Передмова

Пропонована праця являє собою практикум, спрямований на підвищення рівня іншомовної професійно-комунікативної компетентності здобувачів першого бакалаврського курсу спеціальності 227 «Охорона здоров'я» ХДАФК у процесі вивчення дисципліни «Мова спеціальності та культура професійного мовлення (англійська мова)». Поглиблене опанування зазначеного курсу є важливим чинником підготовки студентів до наукової та професійної діяльності, оскільки забезпечує можливість ефективного використання іноземної мови у фаховому середовищі.

Практикум розроблено відповідно до сучасних вимог Міністерства освіти і науки України та Робочої програми навчальної дисципліни «Мова спеціальності та культура професійного мовлення (англійська мова)» для здобувачів першого бакалаврського курсу спеціальності 227 «Охорона здоров'я» ХДАФК. Практикум укладено з урахуванням положень кредитно-модульної системи організації навчального процесу.

Основними завданнями дисципліни «Мова спеціальності та культура професійного мовлення (англійська мова)» є підтримка та вдосконалення раніше сформованих умінь і навичок професійного іншомовного спілкування, використання їх як бази для подальшого розвитку комунікативної компетентності у науковій і професійній сферах, а також розширення фахового лексичного запасу відповідно до спеціалізації та напряму діяльності здобувачів.

Метою практикуму є підготовка студентів ХДАФК до формування професійно значущих умінь і набуття досвіду іншомовної комунікації в усіх видах мовленнєвої діяльності (читанні, говорінні, аудіюванні, письмі) в умовах наукового та професійного спілкування, а також розвиток умінь самостійно працювати над підвищенням рівня володіння іноземною мовою та застосовувати її у професійній діяльності.

Практикум містить 19 практичних занять, у яких представлено необхідний навчальний матеріал, що послідовно та ґрунтовно забезпечує опанування тем, передбачених Робочою програмою курсу.

Матеріали практикуму можуть використовуватися як для самостійної роботи здобувачів, так і в процесі навчання під керівництвом викладача.

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Модуль 1. Спілкування і комунікація

Практичне заняття № 1, 2

Модуль 1. Спілкування і комунікація

Тема: Physical therapy in trauma. Physical therapy in recovering period.

Мета: активізація та закріплення знань з правопису, синтаксису та граматики за темою заняття. Формування навичок перекладу речень з англійської мови на українську. Виховання любові до мови.

План.

1. Physical therapy in trauma. Physical therapy in recovering period.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми : Physical therapy in trauma. Physical therapy in recovering period варто зосередити увагу на засвоєнні лексико-граматичного матеріалу, простежити функціонування лексичних одиниць у тексті за фахом. Бажано пропонувати усний переказ теми.

Практичне заняття № 1, 2

Тема: Physical therapy in trauma. Physical therapy in recovering period.

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

disrupt to the way the brain functions

a blow to the head

concussion

to be at higher risk

to risk due to sports injuries

to be at risk from falls

to regain physical function

to relearn daily tasks

to restore fitness and wellness

Завдання 2. Прочитайте текст і знайдіть нову лексику.

Physical Therapist and Traumatic Brain Injury

Traumatic brain injury (TBI) occurs when an injury disrupts the way the brain functions. The most common causes of TBI are falls, car crashes, and blows to the head. There are 2.8 million cases of TBI diagnosed each year in the United States. Concussion, which is a mild TBI, makes up approximately 80% of all diagnosed TBIs. Traumatic brain injury can happen to anyone; however, some people are at higher risk than others. Children under the age of 4 are at risk of injury from falls and child abuse. Adolescents aged 15 to 19 are at an increased risk due to sports injuries and car crashes. People aged 75 years and older are at risk from falls. Physical therapists help people

with TBI regain their physical function, relearn daily tasks, and restore their fitness and wellness.

Завдання 3. Дайте відповіді на запитання.

1. When does traumatic brain injury (TBI) occur?
2. What are the most common causes of TBI ?
3. What is a mild TBI?
4. Where traumatic brain injury can happen?

Завдання 4. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

the forces exerted on brain tissue

the skull is intact a closed injury

to break through the skull

a penetrating injury

to sustain moderate-to-severe TBI

outside stimulation

to be affected by the injury

Завдання 5. Прочитайте текст і знайдіть нову лексику.

What is Traumatic Brain Injury?

TBI occurs as a result of forces exerted on brain tissue. Common causes of TBI are falls, car accidents, blows to the head, and battlefield injuries. Movement of the brain that causes damage even though the skull is intact is called a closed injury. Damage caused by a wound that breaks through the skull, such as a gunshot or a puncture by a sharp object, is called a penetrating injury.

Those who sustain moderate-to-severe TBI require specialized hospital and rehabilitative care to address the serious physical, cognitive, and emotional changes that result from injury to the brain. Nearly half (43%) of those who need hospitalization for TBI will have some form of disability 1 year after the injury.

Severe TBI often causes a period of unconsciousness, called coma. During this time, the person may not be responsive to outside stimulation. Consciousness may gradually improve, but many brain functions can be affected by the injury, including those guiding thought, movement, sensation, and behaviour.

Завдання 6. Дайте відповіді на запитання.

1. How does TBI occur?
2. What trauma is called a closed injury?
3. What damage is called a penetrating injury?
4. Who requires specialized hospital and rehabilitative care?

Завдання 7. Знайдіть еквівалентні пари словосполучень:

to disrupt the way the brain functions	закрита травма
concussion	порушити спосіб функціонування мозку
to risk due to sports injuries	струс мозку
to regain physical function	ризикувати через спортивну травму
to relearn daily tasks	проникаюча травма
a closed injury	підтримувати середньо-тяжкі травми мозку
a penetrating injury	бути пошкодженим із-за поранення
to sustain moderate-to-severe TBI	відновити фізичні функції
to be affected by the injury	заново вивчати щоденні дії

Завдання 8. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

the affected person

to have a reduced awareness of these difficulties

emotional agitation

Завдання 9. Прочитайте текст і знайдіть нову лексику.

Signs and Symptoms

Because the brain controls our ability to move, think, sense, and socialize, the symptoms that result from TBI can vary widely. They may include:

- Physical symptoms, such as weakness or difficulty moving the arms, legs, body, and head. The affected person may have difficulty sitting, standing, balancing, walking, or lying down and changing position in bed.
- Cognitive symptoms, which can include difficulty remembering, paying attention, or solving problems. The affected person may have a reduced awareness of these difficulties, which can cause safety concerns.
- Sensory symptoms, which can include changes in vision, hearing, or the sense of touch. Balance senses that are aided by the inner ear may also be impaired.
- Emotional and behavioral symptoms, which can include difficulty in controlling emotions, or a change in personality. If cognitive deficits are significant, the affected person's inability to understand what has happened may result in significant emotional agitation.

Завдання 10. Дайте відповіді на запитання.

1. What does the brain control?

2. What may include symptoms that result from TBI?

Завдання 11. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

to address the challenges and functional limitations associated with the injury

to be in a vegetative state

to be unaware of surrounding activity

ensure proper posture and flexibility

reduce the likelihood of any problems

to be in a minimally conscious state

help with stretching, positioning, and equipment use

to maintain alertness and follow commands

equipment, such as an ankle brace, a walker, or a wheelchair

Завдання 12. Прочитайте текст і знайдіть нову лексику.

How Can a Physical Therapist Help?

The physical therapist will work with the patient, family, and other health care providers to develop goals and an individualized treatment plan to address the challenges and functional limitations associated with the injury. Depending on the severity of the injury, the patient's level of consciousness, and the problems the patient has the treatment plan will widely vary.

When a person is said to be in a vegetative state, some basic brain functions resume, such as eye-opening on a regular sleep/wake cycle, breathing, and digestive functions, but they are unaware of surrounding activity. During this phase, the physical therapist will help with positioning and equipment that will ensure proper posture and

flexibility, reduce the likelihood of any problems, such as bed sores, and encourage the individual's responsiveness to the environment.

When a person is said to be in a minimally conscious state, they show beginning signs of awareness (the ability to do purposeful things), but these responses are often not consistent. During this phase, a physical therapist will help with stretching, positioning, and equipment use while working with the individual to increase consistent responses to commands for movement and communication.

As the person becomes more conscious and is able to more actively participate in physical therapy, the physical therapist will use a combination of exercise, task-specific training, patient and family education, and different types of equipment to help the patient improve, including:

- The ability to maintain alertness and follow commands
- Muscle and joint flexibility that may be reduced after inactivity
- The ability to move around in bed, to sit without support, and to stand up
- The ability to balance safely when sitting, standing, or walking
- The ability to move by strengthening and the practicing of functional activities
- Balance and coordination
- Strength and energy, reducing any feelings of fatigue that occur from inactivity or injury to the brain itself
- A return to sports and fitness activities

If limitations prevent the return to preinjury activities, a physical therapist can help an individual improve mobility and master the use of equipment, such as an ankle brace, a walker, or a wheelchair.

Завдання 13. Дайте відповіді на запитання.

1. What will the physical therapist do in the hospital?
2. What will the physical therapist do when a person is said to be in a vegetative state?

3. How can the physical therapist help to a person who is said to be in a minimally conscious state?
4. What will use the physical therapist to help the patient improve his abilities?

Завдання 14. Прочитайте та перекладіть текст.

Real Life Experiences

Ryan is a 20-year-old college engineering student at a local university. He has many friends, but doesn't own a car. He often relies on a friend to drive him to meetings or social events.

Just last week, Ryan sustained a severe brain injury with facial wounds and a broken left arm when the car in which he was a passenger rolled over in an accident. He was unresponsive at the scene of the accident and was taken by ambulance to the nearest trauma center. On the way to the hospital, Ryan needed help breathing. His initial diagnosis showed a severe injury: he was not opening his eyes, could not speak, and was unable to move his arms or legs. His parents rushed to be by his side in the hospital.

Ryan remained in a coma for several days, but eventually resumed breathing on his own, opened his eyes, and moved the right side of his body. Although groggy and confused, he was able to begin physical therapy. Ryan's physical therapist worked with him each day on sitting and moving in bed, standing at the side of the bed, and taking a few steps with the help of a walker. His left-sided weakness was an important focus, so strengthening and coordination exercises were part of his routine.

With focused medical care and work with his physical therapist, Ryan began to recover some of his faculties. After his condition improved, Ryan was transferred to a rehabilitation center. Ryan clearly still had problems with important skills such as paying attention, memory, and the ability to plan and problem-solve.

At the rehabilitation center, Ryan's physical therapist's main focus was on helping him improve control of the left side of his body in order to perform important skills safely and independently. At first, he needed physical help to stand up, walk more than a short distance, and climb stairs. As he progressed in physical therapy, Ryan began to walk with a cane and build his endurance by exercising on a treadmill. He and his physical therapist developed a fitness workout that was similar to what he used to do at the college fitness facility.

During rehabilitation, Ryan's speech-language pathologist and neuropsychologist completed specific testing to determine the extent of his cognitive problems. While his ability to pay attention, remember, and problem-solve improved gradually, upon leaving the rehabilitation center, Ryan still wasn't ready to go back to the cognitive challenges of college. Further outpatient therapy was planned in speech pathology to address the goals he had yet to achieve.

After his discharge from the rehabilitation center, Ryan continued to see a physical therapist on an outpatient basis to work more on the remaining weakness in his left ankle that affected his endurance, balance, and ability to jump and run. Ryan's goal was to resume playing intramural basketball.

After a few more months of hard work, Ryan was able to return to the university. This week, his physical therapist informed his coach that, with careful guidance, Ryan was ready to rejoin his intramural basketball team for modified practices.

Завдання 15. Напишіть 10 питань до тексту.

Завдання 16. Розкажіть про травму Райана.

Завдання 17. Напишіть повідомлення про травму, яку ви знаєте.

Практичне заняття № 3

Модуль 1.

Тема: Endoprosthetics of the joint

Мета: формування вміння отримувати з тексту нові знання, розвивати вміння самостійно застосовувати правила, пробудити пізнавальний інтерес до теми заняття.

План:

1. Endoprosthetics of the joints.
2. Правила з правопису, морфології, синтаксису та граматики
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми: Endoprosthetics of the joints.

варто зосередити увагу на засвоєнні лексико-граматичного матеріалу. Необхідно з'ясувати функціонування лексичних одиниць у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 3

Тема: Endoprosthetics of the joints

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

a blood transfusion

the reducing the chance of complications

walking aids

the affected joint

joint replacement surgery

size-matching to the x ray images

strength and toughness

healing

knee replacements

to be at risk for complications

shard break off

to prevent cracks

a high fracture toughness and a high shear toughness.

Завдання 2. Знайдіть еквівалентні пари словосполучень:

the reducing the chances of complications переливання крові

a blood transfusion загоєння

healing заміна коліна

knee replacement зменшення можливості ускладнення

the affected joint запобігти тріщини

walking aids	відламати уламок
strength and toughness	хірургія по заміні суглобів
shard break off	засоби пристосування для ходьби
to prevent cracks	міцність та в'язкість
joint replacement surgery	уражений суглоб

Завдання 3. Прочитайте текст і дайте йому назву. Знайдіть нову лексику.

Before major surgery is performed, a complete pre-anaesthetic work-up is required. In elderly patients this usually would include ECG, urine tests, hematology and blood tests. Cross match of blood is routine also, as a high percentage of patients receive a blood transfusion. Preoperative planning requires accurate X Rays of the affected joint, implant design selecting and size-matching to the x ray images (a process known as templating).

A few days' hospitalization is followed by several weeks of protected function, healing and rehabilitation. This may then be followed by several months of slow improvement in strength and endurance.

Early mobilisation of the patient is thought to be the key to reducing the chances of complications such as venous thromboembolism and Pneumonia. Modern practice is to mobilize patients as soon as possible and ambulate with walking aids when tolerated. Depending on the joint involved and the pre-op status of the patient, the time of hospitalization varies from 1 day to 2 weeks, with the average being 4–7 days in most regions.

Physiotherapy is used extensively to help patients recover function after joint replacement surgery. A graded exercise programme is needed initially, as the patients' muscles take time to heal after the surgery; exercises for range of motion of the joints

and ambulation should not be strenuous. Later when the muscles have healed, the aim of exercise expands to include strengthening and recovery of function.

Some ceramic materials commonly used in joint replacement are alumina, zirconia, silica, hydroxyapatite, titanium nitride, silicon nitride. A combination of titanium and titanium carbide is a very hard ceramic material often used in components of arthroplasties due to the impressive degree of strength and toughness it presents, as well as its compatibility with medical imaging.

Titanium carbide has proved to be possible to use combined with sintered polycrystalline diamond surface (PCD), a superhard ceramic which promises to provide an improved, strong, long-wearing material for artificial joints. PCD is formed from polycrystalline diamond compact (PDC) through a process involving high pressures and temperatures. When compared with other ceramic materials such as cubic boron nitride, silicon nitride, and aluminum oxide, PCD shows many better characteristics, including a high level of hardness and a relatively low coefficient of friction. For the application of artificial joints it will likely be combined with certain metals and metal alloys like cobalt, chrome, titanium, vanadium, stainless steel, aluminum, nickel, hafnium, silicon, cobalt-chrome, tungsten, zirconium, etc. This means that people with nickel allergy or sensitivities to other metals are at risk for complications due to the chemicals in the device.

In knee replacements there are two parts that are ceramic and they can be made of either the same ceramic or a different one. If they are made of the same ceramic, however, they have different weight ratios. These ceramic parts are configured so that should shards break off of the implant, the particles are benign and not sharp. They are also made so that if a shard were to break off of one of the two ceramic components, they would be noticeable through x-rays during a check-up or inspection of the implant. With implants such as hip implants, the ball of the implant could be made of ceramic, and between the ceramic layer and where it attaches to the rest of the implant, there is usually a membrane to help hold the ceramic. The membrane can help prevent cracks, but if cracks should occur at two points which create a separate piece, the membrane

can hold the shard in place so that it doesn't leave the implant and cause further injury. Because these cracks and separations can occur, the material of the membrane is a biocompatible polymer that has a high fracture toughness and a high shear toughness.

Завдання 4. Знайдіть у тексті англійські еквіваленти словосполучень:

перед проведенням серйозної операції; попередня анестезія; перехресний збіг крові; зіставлення розмірів; повільне поліпшення сили та витривалості; ймовірність ускладнення; вправи для амплітуди рухів; загоєння м'язів; завдяки вражаючого ступеня міцності та в'язкості; сумісність з медичним зображенням; у разі відколу імпланта; не гостра частка; кулька імпланта; місце його прикріплення; допомогти запобігти тріщини; висока в'язкість руйнування; висока в'язкість при зсуві.

Завдання 5. Дайте відповіді на запитання.

1. What is performed before major surgery?
2. What does preoperative planning require?
3. What is thought to be the key to reducing the chances of complications?
4. How can the time of hospitalization vary?
5. How is physiotherapy used to help patients recover function after joint replacement surgery?
6. What materials is commonly used in joint replacement?
7. What ceramic parts are used in knee or hip replacements?

Завдання 6. Розкажіть, що ви знаєте про заміну суглобів.

Практичне заняття №4

Модуль 1.

Тема: Traumatic dislocations. Injuries of ligaments, tendons and muscles.

Мета: формування навичок самостійної діяльності студентів на занятті, розвивати вміння самостійно застосовувати правила, викликати почуття інтересу до вивчення іноземної мови.

План:

1. Traumatic dislocations. Injuries of ligaments, tendons and muscles.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми : Traumatic dislocations. Injuries of ligaments, tendons and muscles варто зосередити увагу на засвоєнні лексико-граматичного матеріалу.

Необхідно з'ясувати функціонування лексичних одиниць у тексті за фахом.

Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 4

Тема: Traumatic dislocations. Injuries of ligaments, tendons and muscles.

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

a joint dislocation

a partial dislocation

to be referred to

to be often caused by

skilled manipulation

closed reduction

deformity of the joint area

stiffness

bruising

a subluxation

Завдання 2. Знайдіть еквівалентні пари словосполучень:

a subluxation

забій

to be often caused

підвивих

a joint dislocation

закрите скорочення

to be referred to

нерухомість

skilled manipulation

частковий вивих

closed reduction

деформація суглобової області

stiffness	ВИВИХ
bruising	бути викликаним
a partial dislocation	бути згаданим
deformity of the joint area	вміла маніпуляція

Завдання 3. Прочитайте текст і знайдіть нову лексику.

A joint dislocation

A joint dislocation, also called luxation, occurs when there is an abnormal separation in the joint, where two or more bones meet. A partial dislocation is referred to as a subluxation. Dislocations are often caused by sudden trauma on the joint like an impact or fall. A joint dislocation can cause damage to the surrounding ligaments, tendons, muscles, and nerves. Dislocations can occur in any joint major (shoulder, knees, etc.) or minor (toes, fingers, etc.). The most common joint dislocation is a shoulder dislocation.

Treatment for joint dislocation is usually by closed reduction, that is, skilled manipulation to return the bones to their normal position. Reduction should only be performed by trained medical professionals, because it can cause injury to soft tissue and/or the nerves and vascular structures around the dislocation.

The following symptoms are common with any type of dislocation.

- Intense pain
- Joint instability
- Deformity of the joint area
- Reduced muscle strength
- Bruising or redness of joint area
- Difficulty moving joint
- Stiffness

Завдання 4. Дайте відповіді на запитання.

- 1 Why does a joint dislocation occur ?
2. What is the name of a joint dislocation ?
3. What joint dislocations do you get to know ?
4. What is the treatment for joint dislocation ?
5. What are the following symptoms for any type of dislocation ?

Завдання 5. Напишіть план тексту та розкажіть текст.

Завдання 6. Прочитайте текст самостійно та выпишіть 10 слів або словосполучень до теми.

Treatment and Care of Joint Dislocations

A dislocated joint usually can be successfully reduced into its normal position only by a trained medical professional. Trying to reduce a joint without any training could substantially worsen the injury.

X-rays are usually taken to confirm a diagnosis and detect any fractures which may also have occurred at the time of dislocation. A dislocation is easily seen on an X-ray.

Once a diagnosis is confirmed, the joint is usually manipulated back into position. This can be a very painful process, therefore this is typically done either in the emergency department under sedation or in an operating room under a general anaesthetic.

It is important the joint is reduced as soon as possible, as in the state of dislocation, the blood supply to the joint (or distal anatomy) may be compromised. This is especially true in the case of a dislocated ankle, due to the anatomy of the blood supply to the foot.

Shoulder injuries can also be surgically stabilized, depending on the severity, using arthroscopic surgery. The most common treatment method for a dislocation of the Glenohumeral Joint (GH Joint/Shoulder Joint) is exercise based management. Another method of treatment is to place the injured arm in a sling or in another immobilizing device in order to keep the joint stable.

Some joints are more at risk of becoming dislocated again after an initial injury. This is due to the weakening of the muscles and ligaments which hold the joint in place. The shoulder is a prime example of this. Any shoulder dislocation should be followed up with thorough physiotherapy.

On field reduction is crucial for joint dislocations. As they are extremely common in sports events, managing them correctly at the game at the time of injury, can reduce long term issues. They require prompt evaluation, diagnosis, reduction, and postreduction management before the person can be evaluated at a medical facility.

After a dislocation, injured joints are usually held in place by a splint (for straight joints like fingers and toes) or a bandage (for complex joints like shoulders). Additionally, the joint muscles, tendons and ligaments must also be strengthened. This is usually done through a course of physiotherapy, which will also help reduce the chances of repeated dislocations of the same joint.

For glenohumeral instability, the therapeutic program depends on specific characteristics of the instability pattern, severity, recurrence and direction with adaptations made based on the needs of the patient. In general, the therapeutic program should focus on restoration of strength, normalization of range of motion and optimization of flexibility and muscular performance. Throughout all stages of the rehabilitation program, it is important to take all related joints and structures into consideration.

- Each joint in the body can be dislocated, however, there are common sites where most dislocations occur. The following structures are the most common sites of joint dislocations:
- Dislocated shoulder

- Shoulder dislocations account for 45% of all dislocation visits to the emergency room. Anterior shoulder dislocation, the most common type of shoulder dislocation (96-98% of the time) occurs when the arm is in external rotation and abduction (away from the body) produces a force that displaces the humeral head anteriorly and downwardly. Vessel and nerve injuries during a shoulder dislocation is rare, but can cause many impairments and requires a longer recovery process. There is a 39% average rate of recurrence of anterior shoulder dislocation, with age, sex, hyperlaxity and greater tuberosity fractures being the key risk factors.
- Knee: Patellar dislocation
 - Many different knee injuries can happen. Three percent of knee injuries are acute traumatic patellar dislocations. Because dislocations make the knee unstable, 15% of patellas will re-dislocate.
 - Patellar dislocations occur when the knee is in full extension and sustains a trauma from the lateral to medial side.
- Elbow: Posterior dislocation, 90% of all elbow dislocations
- Wrist: Lunate and Perilunate dislocation most common
- Finger: Interphalangeal (IP) or metacarpophalangeal (MCP) joint dislocations
 - In the United States, men are most likely to sustain a finger dislocation with an incidence rate of 17.8 per 100,000 person-years. Women have an incidence rate of 4.65 per 100,000 person-years. The average age group that sustain a finger dislocation are between 15 and 19 years old.
- Hip: Posterior and anterior dislocation of hip
 - Anterior dislocations are less common than posterior dislocations. 10% of all dislocations are anterior and this is broken down into superior and inferior types. Superior dislocations account for 10% of all anterior dislocations, and inferior dislocations account for

90%. 16–40-year-old males are more likely to receive dislocations due to a car accident. When an individual receives a hip dislocation, there is an incidence rate of 95% that they will receive an injury to another part of their body as well. 46–84% of hip dislocations occur secondary to traffic accidents, the remaining percentage is due based on falls, industrial accidents or sporting injury.

- Foot and Ankle:
- Lisfranc injury is a dislocation or fracture-dislocation injury at the tarsometatarsal joints
- Subtalar dislocation, or talocalcaneonavicular dislocation, is a simultaneous dislocation of the talar joints at the talocalcaneal and talonavicular levels. Subtalar dislocations without associated fractures represent about 1% of all traumatic injuries of the foot and 1-2 % of all dislocations, and they are associated with high energy trauma. Early closed reduction is recommended, otherwise open reduction without further delay.
- Total talar dislocation is very rare and has very high rates of complications.
- Ankle Sprains primarily occur as a result of tearing the ATFL (anterior talofibular ligament) in the Talocrural Joint. The ATFL tears most easily when the foot is in plantarflexion and inversion.
- Ankle dislocation without fracture is rare.

Завдання 7. Знайдіть англійські еквіваленти в тексті:

спроба зменшити суглоб; підтвердження діагнозу; вихідне положення; хворобливий процес; кровопостачання суглоба; під загальним наркозом; залежно від тяжкості; повинен супроводжуватися фізіотерапією; утримуватися на місці шиною або пов'язкою; зменшити ймовірність повторних вивихів; відновлення

сили; найбільш поширені ділянки вивихів; страждати від вивихів;
захворюваність жінок; розтягнення зв'язок.

Завдання 8. Напишіть 10 питань до тексту.

Практичне заняття № 5

Модуль 1.

Тема: Amputation of extremities.

Мета: формування вміння ставити проблемні питання та відповідати на них, розвивати творче мислення студентів з теми заняття, формувати відповідальне ставлення до вивчення іноземної мови.

План:

1. Amputation of extremities.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ , морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми : Amputation of extremities.

варто зосередити увагу на засвоєнні лексико-граматичного матеріалу. Необхідно з'ясувати функціонування лексичних одиниць у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 5

Тема: Amputation of extremities.

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

the removal of a limb

limb ulcers

congenital amputation

the stump

fetal limbs

phantom limbs

mutilations

to itch

a ritual accomplishment

an adaptation to a prosthesis

minor amputations

digit

major amputations

ankle disarticulation

partial foot amputation

to be pinned by a boulder

body integrity identity disorder

to be compelled to remove

irreparable damage to the limb

limb-sparing techniques

decubitus ulcers

bedridden patients

impaired circulation

Завдання 2. Знайдіть еквівалентні пари словосполучень:

ankle disarticulation	свербіти
digit	пролежні
decubitus ulcers	кукса
limb ulcers	каліцтво
impaired circulation	вивих щиколотки
the stump	лежачі хворі
to itch	порушення кровообігу
mutilations	палець
bedridden patients	вроджена ампутація
to be compelled to remove	техніка збереження кінцівок
limb-sparing techniques	видалення кінцівок
congenital amputation	бути змушений видалити
the removal of a limb	виразки кінцівки

Завдання 3. Прочитайте текст і знайдіть нову лексику.

Amputation of extremities.

The word amputation is derived from the Latin *amputare*, "to cut away", from *ambi-* ("about", "around") and *putare* ("to prune"). The English word "Poes" was first applied to surgery in the 17th century, possibly first in Peter Lowe's *A discourse of the*

Whole Art of Chirurgie (published in either 1597 or 1612); his work was derived from 16th-century French texts and early English writers also used the words "extirpation" (16th-century French texts tended to use *extirper*), "disarticulation", and "dismemberment" (from the Old French *desmembrer* and a more common term before the 17th century for limb loss or removal), or simply "cutting", but by the end of the 17th century "amputation" had come to dominate as the accepted medical term.

Amputation is the removal of a limb by trauma, medical illness, or surgery. As a surgical measure, it is used to control pain or a disease process in the affected limb, such as malignancy or gangrene. In some cases, it is carried out on individuals as a preventative surgery for such problems. A special case is that of congenital amputation, a congenital disorder, where fetal limbs have been cut off by constrictive bands. In some countries, amputation of the hands, feet or other body parts is or was used as a form of punishment for people who committed crimes. Amputation has also been used as a tactic in war and acts of terrorism; it may also occur as a war injury. In some cultures and religions, minor amputations or mutilations are considered a ritual accomplishment.

When done by a person, when the person executing the amputation, he is an amputator. The amputated person is called an amputee.

In the US, the majority of new amputations occur due to complications of the vascular system (the blood vessels), especially from diabetes. Between 1988 and 1996, there were an average of 133,735 hospital discharges for amputation per year in the US. In 2005, just in the US, there were 1.6 million amputees. In 2013, the US has 2.1 million amputees. Approximately 185,000 amputations occur in the United States each year. In 2009, hospital costs associated with amputation totaled more than \$8.3 billion. There will be an estimated 3.6 million people in the US living with limb loss by 2050. African-Americans are up to four times more likely to have an amputation than white Americans.

Lower limb, or leg, amputations can be divided into two broad categories – minor amputations and major amputations, Minor amputations generally refers to the amputation of digits. Major amputations are commonly referred to as below-knee amputation, above-knee amputation and so forth.

Types of amputations include:

- partial foot amputation – amputation of the *lower limb* distal to the *ankle joint*.
- ankle disarticulation – amputation of the *lower limb* at the *ankle joint*.
- trans-tibial amputation – amputation of the *lower limb* between the *knee joint* and the *ankle joint*, commonly referred to as a below-knee amputation.
- knee disarticulation – amputation of the *lower limb* at the *knee joint*.
- trans-femoral amputation – amputation of the *lower limb* between the *hip joint* and the *knee joint*, commonly referred to an above-knee amputation.
- hip disarticulation – amputation of the *lower limb* at the *hip joint*.
- trans-pelvic disarticulation – amputation of the whole *lower limb* together with all or part of the pelvis. This is also known as a hemipelvectomy or hindquarter amputation.

Types of upper extremity amputations include:

- partial hand amputation
- wrist disarticulation
- trans-radial amputation, commonly referred to as below-elbow or forearm amputation
- elbow disarticulation
- trans-humeral amputation, commonly referred to as above-elbow amputation
- shoulder disarticulation

In some rare cases when a person has become trapped in a deserted place, with no means of communication or hope of rescue, the victim has amputated his or her own limb. The most notable case of this is Aron Ralston, a hiker who amputated his own

right forearm after it was pinned by a boulder in a hiking accident and he was unable to free himself for over five days.

Body integrity identity disorder is a psychological condition in which an individual feels compelled to remove one or more of their body parts, usually a limb. In some cases, that individual may take drastic measures to remove the offending appendages, either by causing irreparable damage to the limb so that medical intervention cannot save the limb, or by causing the limb to be severed.

Traumatic amputation is uncommon in humans (1 per 20,804 population per year). Loss of limb usually happens immediately during the accident, but sometimes a few days later after medical complications. Statistically the most common causes of traumatic amputations are:

- Traffic accidents (cars, motorcycles, bicycles, trains, etc.)
- Labor accidents (equipment, instruments, cylinders, chainsaws, press machines, meat machines, wood machines, etc.)
- Agricultural accidents, with machines and mower equipment
- Electric shock hazards
- Firearms, bladed weapons, explosives
- Building doors and car doors
- Gas cylinder explosions
- Other rare accidents

The development of the science of microsurgery over last 40 years has provided several treatment options for a traumatic amputation, depending on the patient's specific trauma and clinical situation:

- 1st choice: Surgical amputation - break - prosthesis
- 2nd choice: Surgical amputation - transplantation of other tissue - plastic reconstruction.
- 3rd choice: Replantation - reconnection - revascularization of amputated limb, by microscope (after 1969)
- 4th choice: Transplantation of cadaveric hand (after 2000).

Methods in preventing amputation, limb-sparing techniques, depend on the problems that might cause amputations to be necessary. Chronic infections, often caused by diabetes or decubitus ulcers in bedridden patients, are common causes of infections that lead to gangrene, which would then necessitate amputation.

There are two key challenges: first, many patients have impaired circulation in their extremities, and second, they have difficulty curing infections in limbs with poor vasculature (blood circulation).

Crush injuries where there is extensive tissue damage and poor circulation also benefit from hyperbaric oxygen therapy (HBOT). The high level of oxygenation and revascularization speed up recovery times and prevent infections.

A study found that the patented method called Circulator Boot achieved significant results in prevention of amputation in patients with diabetes and arteriosclerosis. Another study found it also effective for healing limb ulcers caused by peripheral vascular disease. The boot checks the heart rhythm and compresses the limb between heartbeats; the compression helps cure the wounds in the walls of veins and arteries, and helps to push the blood back to the heart. For victims of trauma, advances in microsurgery in the 1970s have made replantations of severed body parts possible.

The establishment of laws, rules, and guidelines, and employment of modern equipment help protect people from traumatic amputations.

The individual may experience psychological trauma and emotional discomfort. The stump will remain an area of reduced mechanical stability. Limb loss can present significant or even drastic practical limitations.

A large proportion of amputees (50–80%) experience the phenomenon of phantom limbs; they feel body parts that are no longer there. These limbs can itch, ache, burn, feel tense, dry or wet, locked in or trapped or they can feel as if they are moving. Some scientists believe it has to do with a kind of neural map that the brain has of the body, which sends information to the rest of the brain about limbs regardless of their existence. Phantom sensations and phantom pain may also occur after the

removal of body parts other than the limbs, e.g. after amputation of the breast, extraction of a tooth (phantom tooth pain) or removal of an eye (phantom eye syndrome).

A similar phenomenon is unexplained sensation in a body part unrelated to the amputated limb. It has been hypothesized that the portion of the brain responsible for processing stimulation from amputated limbs, being deprived of input, expands into the surrounding brain, (*Phantoms in the Brain*: V.S. Ramachandran and Sandra Blakeslee) such that an individual who has had an arm amputated will experience unexplained pressure or movement on his face or head.

In many cases, the phantom limb aids in adaptation to a prosthesis, as it permits the person to experience proprioception of the prosthetic limb. To support improved resistance or usability, comfort or healing, some type of stump socks may be worn instead of or as part of wearing a prosthesis.

Another side effect can be heterotopic ossification, especially when a bone injury is combined with a head injury. The brain signals the bone to grow instead of scar tissue to form, and nodules and other growth can interfere with prosthetics and sometimes require further operations. This type of injury has been especially common among soldiers wounded by improvised explosive devices in the war.

Due to technological advances in prosthetics, many amputees live active lives with little restriction. Organizations such as the Challenged Athletes Foundation have been developed to give amputees the opportunity to be involved in athletics and adaptive sports such as Amputee Soccer.

Nearly half of the individuals who have an amputation due to vascular disease will die within 5 years, usually secondary to the extensive co-morbidities rather than due to direct consequences of amputation. This is higher than the five year mortality rates for breast cancer, colon cancer, and prostate cancer. Of persons with diabetes who have a lower extremity amputation, up to 55% will require amputation of the second leg within two to three years.

Завдання 4. Дайте відповіді на запитання.

1. What do you know about the history of the word amputation?
2. What is amputation?
3. What types of amputations do you know?
4. What are the methods in preventing amputation?
5. What do you know about the phantom limb aids?
6. What is the prognosis of the amputation?

Завдання 5. Напишіть план тексту.

МЕТОДИЧНА РОЗРОБКА № 6

для проведення практичного заняття

Тема: Rules for writing a scientific article, course project, diploma. Basic laws of communication.

Мета: розширити знання з теми заняття, навчити студентів застосовувати набуті знання на практиці, розвивати вміння узагальнювати і систематизувати знання, виховувати зацікавленість дисципліною, прагнення отримувати нові знання самостійно.

План:

1. Розглянути і виконати практичний матеріал з теми: Ten steps for writing a successful scientific article. - 45 хв.

2. Виконати практичні завдання з вживання професійної лексики, та граматики. - 45 хв.

Методичні рекомендації:

Вивчаючи цю тему, необхідно дослідити правила вживання професійної лексики, проаналізувати правила вживання дієслівних конструкцій, розглянути різні лексичні форми.

Практичне заняття 6

Тема: Rules for writing a scientific article, course project, diploma. Basic laws of communication.

Exercise 1. Read and translate the text.

One of the ways that researchers can disseminate the results of their investigations and observations is publishing scientific articles. In order to publish an article in a scientific journal, some qualities are required. The subject should be relevant, the research should have quality and the report should be well written. The present article presents practical concepts that may help researchers in the preparation of good scientific reports.

- Step 1 Decide the article's objective.

Writing becomes easier when the objective is clear and well-focused. Poorly defined objectives or many objectives hamper the writing process, because they make it harder to achieve the qualities of a good text, such as clarity, concision and logical sequence. The objective of a research may become clearer if it is drafted as a question.

- Step 2 Choose the journal to which you will submit your article.

There are plenty of scientific journals in several knowledge areas. There is also some hierarchy between them, based on the influence they have over the scientific community. There are many criteria that influence this hierarchy, such as the indexation of the journal in prestigious bibliographic databases, the number of citations received by the journal and the publication language. Being aware of these criteria enables better choices. However, in highly prestigious journals, which are the most searched by authors, the proportion of refusals is higher. It is important to take this difficulty in consideration when choosing the journal. An average prestigious journal can reach the desired target audience as well.

- Step 3 Provide yourself with guides that help writing.

After selecting the journal to which you will submit your article, the next step is to read its instructions to authors. It is a good practice to verify recent issues of the chosen journal to understand the profile of articles that have been published. Moreover, there

are many reporting guidelines that can be used as reference, as well as several resources, such as articles or books, which can be useful to clarify doubts and avoid unnecessary improvisation.

- Step 4 Write the article's structure.

Any type of communication, oral or written, has a logical sequence. It can be formed by an introduction, development of the subject and conclusion. The conclusion represents the author's answer to the research question to be answered. Editors and many readers defend that a four-part standardization is more useful, because it enables a better understanding and text analysis. Each part of the manuscript must contain information required so the reader can understand what has been done and be convinced of the adequacy and credibility of the authors' conclusion.

- Step 5 Complete the other parts of the text. Besides preparing the article, in the IMRD format, there are other demands from the journals' editors. Among them, make a list of references of all the material cited in the texts, an abstract, the title of the article and the authors' names. For each of these aspects, there are guidelines to be followed. For example, the list cannot exceed thirty references and the abstract should have a maximum of 150 words. It is important to verify these and other limits in the instructions to authors of the chosen journal and, if it is not available, search on scientific writing guides.

- Step 6 Review the text over and over.

The objective of proofreading is to ensure that the words used reflect correctly what the authors intended to report. It is usually necessary to perform many reviews. Other objectives of proofreading are: confirm numbers, eliminate grammar mistakes, exclude repetitions and remove whatever is unnecessary. The American writer Mark Twain (1835-1910) affirmed that there are three rules to write well: "The first is to review; the second is to review; and the third is to review."

- Step 7 Make sure the article is methodologically right.

The author who intends to submit an article to a journal must know that the text will be assessed and that it will compete for space in scientific journals. Therefore, it is important to produce a high quality text, so the chances of success are greater. It means

that, among other things, authors have to produce a text which contains answers to possible methodological questioning. The article will be assessed by strict experts who, not rarely, will demand perfection in situations which not even themselves are capable of achieving. It is fundamental to have the text ready for this type of evaluation. Taking into account the high number of articles that the readers are supposed to read to keep themselves updated, they would be glad if they found only clear and concise texts. The proofreaders and editors act like readers' representatives and, in a broader way, representatives of the scientific community, having the duty of only allowing the publication of quality articles.

- Step 8 Make sure there are no flaws in writing.

Readability is the authors' responsibility. After revising the text and asking for suggestions to co-workers and experts in the subject, a good possibility to make sure the text is free of flaws is to send it to a language professional. Choose someone who assists you on grammar and writing matters, but without changing your style. If this person has substantially contributed, we recommend the authors to recognize it at the acknowledgments section. The person must agree to have his or her name cited in the acknowledgments.

- Step 9 Submit the article for publication.

We suggest the authors to read one more time the instructions to authors and to verify the most recent issue of the chosen journal before submitting the article. Follow strictly what is asked in the instructions, even if you do not understand the reasons for the request. This way, you will be cooperating with the journal's staff. The submission of the manuscript that does not comply with the journal's rules delays the process, being, many times, reason for refusal. The journal's website contains instructions on how to send the files and what documents should be attached during manuscript submission. When the editor receives the article, he or she will send it to expert professionals, including themselves, so it can be evaluated. The text will be evaluated by specialists who are experts in the research subject and the method. As those two conditions are not usually found in the same person, and aiming to reduce subjectivity in evaluation,

more people will assess the text in order to provide recommendations to the editor. If possible, the manuscript should be further improved.

- Step 10 Cope well with the editors and reviewers. After the article is submitted, the author must wait for the journal's decision, of whether it will be accepted or refused. It can come shortly, or take weeks, even months. In cases of long delay, the author could write a message to the editor, inquiring about the progress of the evaluation. In the case of acceptance, the author will need to fit the material into the reviewers' suggestions. If the article is refused, the author should stay calm. Editors and reviewers are human beings, who are very attentive to the role they play when deciding the future of an article they evaluate. They may make mistakes, but rarely admit it. The problem is that there is no room in a journal for all submitted articles. The refusal may not always be due to value judgment on the text quality. Avoid asking extra information to the editor, because they are rarely given. What should you do? Maybe another journal can accept it. Experienced authors have been through similar problems. Try, the sooner you can, another journal. Before that, review the text and include all the relevant suggestions that the editor have sent. And good luck.

Exercise 2. Read and write answers.

Ten steps for writing a successful scientific article

1. Decide the article's objective.
2. Choose the journal to which you will submit your article.
3. Provide yourself with guides that help writing.
4. Write the article's structure.
5. Complete the other parts of the text.
6. Revise the text over and over.
7. Make sure that the article is methodologically right.
8. Make sure there are no flaws in writing.
9. Submit the article for publication.
10. Cope well with the editors and reviewers.

Практичне заняття №7

Модуль 1.

Тема: Injuries of pelvis. Injuries of bones and joints of lower extremity.

Мета: формувати вміння монологічного мовлення з теми заняття, розвивати вміння узагальнювати і систематизувати знання, викликати почуття інтересу до вивчення іноземної мови.

План:

1. Injuries of pelvis. Injuries of bones and joints of lower extremity.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми : Injuries of pelvis. Injuries of bones and joints of lower extremity необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 7

Тема: Injuries of pelvis. Injuries of bones and joints of lower extremity

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

pelvic joint injuries

to be attached to the sacrum

to be flat with ridged surfaces

to bend forwards with a twist

the cartilage labrum

the groin

to feel lopsided

rotation displacement of the pelvis

to adopt a protective posture

to lean away from the painful side

to wear down

the belly button

inflammation

fracture to the hips

the hernia

the lump

Завдання 2. Знайдіть еквівалентні пари словосполучень:

inflammation	пупок
fracture to the hips	почувати себе однобоким
the hernia	зноситися
to adopt a protective posture	нахилитися вперед з поворотом
to lean away from the painful side	пах
the belly button	перелом стегна
the groin	зайняти захисну позу
to feel lopsided	грижа
to bend forwards with a twist	відхилятися від хворої сторони
the lump	запалення
to wear down	комок

Завдання 3. Прочитайте текст і знайдіть нову лексику.

Injuries of pelvis.

We see patients who have injured their backs every day and probably more than half of these are pelvic joint injuries.

The pelvis lies between the hips and the bottom of the spine and is made up of the triangular sacrum in the middle with the last lumbar vertebra sitting on top and the tailbone or coccyx hanging from the bottom of the sacrum. The broad bones of the pelvis are attached to the sacrum on either side by the sacroiliac joints. They are joined to each other at the front by the pubic symphysis and the

deep ball and socket joints of the hips are located on either side. The sacroiliac joint is the one which is most commonly strained. The sacroiliac joints are flat with ridged surfaces angled obliquely and supported by tough ligaments. The SI ligaments can be strained or overstretched and this usually occurs when we bend forwards with a twist.

The symphysis pubis at the front of the pelvis can also be strained during pregnancy when hormones soften the supporting soft tissues that hold the joint together. Otherwise it is less common to strain the pubic symphysis.

The coccyx or the sacrococcygeal joint can also be strained. Most often this happens when someone falls heavily onto their bottom.

The ball and socket joint of the hip can also be strained but it usually requires considerable force to damage this strong joint. Some sporting injuries can dislocate the hip and other forceful falls and injuries can damage the cartilage labrum (the rim which deepens the hip socket).

Pain is the most common symptom. For SI strains the pain is usually felt at the bottom of the back to one side or the other. The sacroiliac joint can refer pain into the groin on the same side and in some men also into the testicle.

As osteopaths we often see patients who have strained their sacroiliac joint and feel lopsided: 'It feels like I have one leg longer than the other'. The lopsidedness can occur for a variety of reasons so it is important to do a careful examination to find out what has happened in each case. For example:

- There may have been some rotation displacement of the pelvis – a forward rotation gives the effect of the leg on that side appearing longer, a backward rotation gives the effect of a shorter leg;
- Some patients adopt a protective posture – they usually lean away from the painful side: 'my back feels like a banana'. This may or may not be accompanied by a pelvic rotation;
- One leg may in fact be longer. While we are growing our bones don't always grow symmetrically and when we finish growing there can be some

unevenness. Similarly, our feet and hence shoes sizes are not always exactly the same;

- A flat foot on one side, a one-sided bow-leg or knock-knee can also give an impression of lopsidedness;
- An arthritic hip or knee where the articular cartilage has worn down on one side can also give the effect of one leg being longer than the other.

When the sacroiliac joints have been strained it is common for patients to mention that they can bend forward but coming up straight again or bending backwards is quite painful.

If the symphysis joint has been strained there will usually be pain at the front of the pelvis a couple of inches below the belly button. Also walking can be very painful.

Coccyx pain is usually felt over the coccyx. Be aware that coccyx pain does not always come from the coccyx – for example a strain of the bottom lumbar joint can send referred pain to the coccyx.

Hip pain can be felt at the side, at the widest part of the hip where the knobble of the greater trochanter can be felt just under the skin. It can also be experienced as referred pain in the groin, front of the thigh and or front of the knee. Hip strains are also usually associated with pain on movement ‘It is painful reach my foot and I am struggling to put my socks on’.

For pelvic joint strains the advice is to rest (a day or 2 in bed if it is really severe) otherwise it is best to keep it gently moving – sit a bit, move a bit, stand a bit, move a bit. Use heat and ice as needed. Heat for muscle spasm, ice for inflammation. Use medication – painkillers and anti-inflammatory drugs can help.

If your pain is persisting we would need to do a proper examination to find out what has been damaged and work out a management and treatment plan. Treatment can involve a range of techniques including traction (stretching), soft tissue massage to relax muscles, passive joint stretching, manipulation.

Corrective positional manipulation is often helpful. Other techniques include muscle energy and cranial techniques which can be used in certain circumstances.

Fractures to the hips and pelvis are normally associated with serious trauma.

The bladder, uterus, bowel and other pelvic organs can all give pain in the back, or groin (as with pelvic joint strains) so it is important to bear these in mind. When we see patients with a fresh injury we will always ask questions to check the organs are working correctly and if there is any suspicion of a problem which is not from the muscles and joints we will ask patients to speak to their doctor.

A hernia occurs most commonly where there is a weakness in the muscles of the abdomen, this can be caused by physical strain (eg heavy lifting) or from excessive straining or at sites of old wounds (eg surgical scars.) So, while a hernia may give pain in the groin, like referred pain from the sacroiliac joint, there will usually also be a lump. If present this will also need to be discussed with your doctor.

Завдання 4. Знайдіть у тексті англійські еквіваленти словосполучень:

травмувати спину; таз лежить між стегнами; плоскі з ребристими поверхнями;
шарнірне з'єднання суглоба; відчувати себе однобоким; ретельне обстеження;
зсув обертання тазу; захисна поза; перевірити вірність роботи органів; слабкість
в м'язах живота.

Завдання 5. Напишіть план тексту.

Практичне заняття №8

Модуль 1.

Тема: Polytrauma. Traumatic shock. Gunshot wounds of bones and joints.

Мета: поглибити знання з теми заняття, розвивати творче мислення студентів з теми заняття, формувати відповідальне ставлення до вивчення іноземної мови.

План:

1. Polytrauma. Traumatic shock. Gunshot wounds of bones and joints.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми : Polytrauma. Traumatic shock. Gunshot wounds of bones and joints необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 8

Тема: Polytrauma. Traumatic shock. Gunshot wounds of bones and joints.

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

to be exceeded

the polytraumatized patient

the orthopedic surgeon

trauma resuscitations

assessment of the polytraumatized
patient

a stepwise longitudinal approach

the obstructed airway

to handle

edema

causes of blockage

the jaw-thrust

rule out

snoring or gurgling

a hoarse voice

the gag reflex

Завдання 2. Знайдіть еквівалентні пари словосполучень:

the jaw-thrust	перешкоджанні дихальні шляхи
edema	хрипкий голос
causes of blockage	поштовх щелепи
rule out	рвотний рефлекс
a hoarse voice	набряк
the gag reflex	оброблятися
trauma resuscitations	травматична реанімація
to handle	виключити можливість
the obstructed airway	випадок закупорки

Завдання 3. Прочитайте текст і знайдіть нову лексику.

Polytrauma. Traumatic shock.

Trauma is the leading cause of death for people aged 1-44 years and is exceeded only by cancer and atherosclerotic disease in all age groups. Orthopedic surgery plays a key role in the treatment of the polytraumatized patient. In a study at Brown University, gunshot wounds required more orthopedic trauma resources than other surgical areas. The orthopedic surgeon is a member of a team consisting of many specialists, including emergency medicine physicians, trauma surgeons, neurosurgeons, and other surgical subspecialists. Each person on that team should be familiar with the basics of trauma resuscitations.

All resuscitations should be performed using Advanced Trauma Life Support (ATLS) guidelines. For the individual physician, assessment of the polytraumatized patient is performed using a stepwise longitudinal approach, in which the airway is handled first and no procedures are initiated until the airway is secured. Then, breathing and circulation are addressed. In the trauma team approach, each team member should be assigned a specific task or tasks so that each of these can be performed simultaneously to ensure the most rapid treatment possible.

An obstructed airway is one of the most immediate and deadliest threats to life. The goals are to provide a patent airway while maintaining inline cervical stabilization and to protect the airway from future obstruction by blood, edema, vomitus, or other possible causes of blockage.

Diagnosis

- Ask the patient a question; for example, ask how he or she is feeling. If the patient responds verbally, he or she has an intact airway, is breathing, is thinking, and, therefore, has a pulse. Also, the patient's level of consciousness can be briefly assessed.
- If the patient is unresponsive, check airway patency by looking at the patient's chest while leaning the ear toward the patient's mouth. Look for chest expansion, listen, and feel for air movement. This may be performed while using the jaw-thrust (or head-tilt/chin-lift maneuver if cervical injury has been ruled out).
- Anticipate potential problems. If the patient is breathing spontaneously, listen to the quality of the breathing. Snoring or gurgling suggests partial airway obstruction. A hoarse voice, subcutaneous emphysema of the anterior part of the neck, or a palpable thyroid cartilage crepitus may indicate laryngeal trauma.

- Assess the ability of an unconscious victim to protect the airway by checking the gag reflex. Touch the posterior pharynx with a tongue blade to initiate the gag response. If the patient is alert, the best way to check for the ability to protect the airway is to witness swallowing. Patients without a gag reflex cannot protect themselves from aspirating secretions into the lungs; these patients should be intubated.

Завдання 4. Знайдіть у тексті англійські еквіваленти словосполучень:

бути знайомим з основами реанімації; обробка дихальних шляхів; вогнепальне поранення; забиті дихальні шляхи; розширення грудної клітини; нахил голови; підтяжка підборіддя; оцінювання здатності дихання.

Завдання 5. Дайте відповіді на запитання.

1. What is the leading cause of death for people aged 1-44 years ?
2. What science plays a key role in the treatment of the polytraumatized patient ?
3. What wounds required more orthopedic trauma resources than other surgical areas ?
4. What is handled by the orthopedic surgeon first and no procedures are initiated without it ?
5. What should you do to make true diagnosis of polytrauma ?

Завдання 6. Розкажіть, що ви знаєте про допомогу при травмі.

Завдання 7. Прочитайте текст та дайте йому назву.

A gunshot wound (GSW), also known as ballistic trauma, is a form of physical trauma sustained from the discharge of arms or munitions. The most common forms of ballistic trauma stem from firearms used in armed conflicts, civilian sporting, recreational pursuits and criminal activity. Damage is dependent on the firearm, bullet, velocity, entry point, and trajectory. Management can range from observation and local wound care to urgent surgical intervention. Trauma from a gunshot wound varies widely based on the bullet, velocity, entry point, trajectory, and affected anatomy. Gunshot wounds can be particularly devastating compared to other penetrating injuries because the trajectory and fragmentation of bullets can be unpredictable after entry. Additionally, gunshot wounds typically involve a large degree of nearby tissue disruption and destruction due to the physical effects of the projectile correlated with the bullet velocity classification.

The immediate damaging effect of a gunshot wound is typically severe bleeding, and with it the potential for hypovolemic shock, a condition characterized by inadequate delivery of oxygen to vital organs. In the case of traumatic hypovolemic shock, this failure of adequate oxygen delivery is due to blood loss, as blood is the means of delivering oxygen to the body's constituent parts. Devastating effects can result when a bullet strikes a vital organ such as the heart, lungs or liver, or damages a component of the central nervous system such as the spinal cord or brain.

Common causes of death following gunshot injury include arterial bleeding, hypoxia caused by pneumothorax, catastrophic injury to the heart and major blood vessels, and damage to the brain or central nervous system. Non-fatal gunshot wounds frequently have mild to severe long-lasting effects, typically some form of major disfigurement such as amputation due to a severe bone fracture, and may cause permanent disability. Gunshot wounds can thus cause severe bleeding, fractures, nerve deficits, and soft tissue damage. The

Mangled Extremity Severity Score (MESS) is used to classify the severity of injury and evaluates for severity of skeletal and/or soft tissue injury, limb ischemia, shock, and age. Depending on the extent of injury, management can range from superficial wound care to limb amputation.

Vital sign stability and vascular assessment are the most important determinants of management in extremity injuries. As with other traumatic cases, those with uncontrolled bleeding require immediate surgical intervention. If surgical intervention is not readily available and direct pressure is insufficient to control bleeding, tourniquets or direct clamping of visible vessels may be used temporarily to slow active bleeding. People with hard signs of vascular injury also require immediate surgical intervention. Hard signs include active bleeding, expanding or pulsatile hematoma, bruit/thrill, absent distal pulses and signs of extremity ischemia.

For stable people without hard signs of vascular injury, an injured extremity index (IEI) should be calculated by comparing the blood pressure in the injured limb compared to an uninjured limb in order to further evaluate for potential vascular injury. If the IEI or clinical signs are suggestive of vascular injury, the person may undergo surgery or receive further imaging including CT angiography or conventional arteriography.

In addition to vascular management, people must be evaluated for bone, soft tissue, and nerve injury. Plain films can be used for fractures alongside CTs for soft tissue assessment. Fractures must be debrided and stabilized, nerves repaired when possible, and soft tissue debrided and covered. This process can often require multiple procedures over time depending on the severity of injury.

Завдання 8. Напишіть реферат тексту.

Практичне заняття № 9

Модуль 1.

Тема: Degenerative dystrophic diseases of spine and joints.

Мета: систематизувати та поглибити знання за темою, розвивати вміння узагальнювати і систематизувати знання, виховувати зацікавленість дисципліною, прагнення отримувати нові знання самостійно.

План:

1. Degenerative dystrophic diseases of spine and joints.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми : Degenerative dystrophic diseases of spine and joints необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 9

Тема: Degenerative dystrophic diseases of spine and joints.

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

a loss of function

intervertebral discs

loss of soluble proteins

the rigid outer shell

shifting of the vertebral bodies

impingement of a spinal nerve

to cause mild to severe pain

an adjacent spinal nerve root

fusion of adjacent vertebral bodies

correcting abnormal posture

a sudden worsening of symptoms

elective surgery

Завдання 2. Знайдіть еквівалентні пари словосполучень:

shifting of the vertebral bodies втрата функцій

elective surgery корекція неправильної постави

to cause mild to severe pain міжхребетні диски

intervertebral discs бути причиною невеликої та сильної білі

the rigid outer shell сусідній корінець спинного нерва

an adjacent spinal nerve root	зсув тіла хребця
correction abnormal posture	жорстка зовнішня оболонка диска
a loss of function	планова операція

Завдання 3. Прочитайте текст і знайдіть нову лексику.

Degenerative disc disease

Degenerative disc disease (DDD) is a medical condition (ICD-10-CMM51.35-37) in which there are anatomic changes and a loss of function of varying degrees of one or more intervertebral discs of the spine of sufficient magnitude as to cause symptoms. The root cause is thought to be loss of soluble proteins within the fluid contained in the disc with resultant reduction of the oncotic pressure, which in turn causes loss of fluid volume. Normal downward forces cause the affected disc to lose height, and the distance between vertebrae is reduced. The annulus fibrosus, the rigid outer shell of a disc, also weakens. This loss of height causes laxity of the longitudinal ligaments, which may allow anterior, posterior, or lateral shifting of the vertebral bodies, causing facet joint malalignment and arthritis; scoliosis; cervical hyperlordosis; thoracic hyperkyphosis; lumbar hyperlordosis; narrowing of the space available for the spinal tract within the vertebra (spinal stenosis); and/or narrowing of the space through which a spinal nerve exits (vertebral foramen stenosis) with resultant inflammation and impingement of a spinal nerve, causing a radiculopathy.

DDD can cause mild to severe pain, either acute or chronic, near the involved disc, as well as neuropathic pain if an adjacent spinal nerve root involved. Diagnosis is suspected when typical symptoms and physical findings are present; and confirmed by x-rays of the vertebral column. Occasionally the

radiologic diagnosis of disc degeneration is made incidentally when a cervical x-ray, chest x-ray, or abdominal x-ray is taken for other reasons, and the abnormalities of the vertebral column are recognized. The diagnosis of DDD is not a radiologic diagnosis, since the interpreting radiologist is not aware whether there are symptoms present or not. Typical radiographic findings include disc space narrowing, displacement of vertebral bodies, fusion of adjacent vertebral bodies, and development of bone in adjacent soft tissue (osteophyte formation). An MRI is typically reserved for those with symptoms, signs, and x-ray findings suggesting the need for surgical intervention.

Treatment may include physical therapy to reduce pain and increase any reduced range of motion of the spine; strength training with emphasis on correcting abnormal posture, assisting the paravertebral (paraspinous) muscles in stabilizing the spine, and core muscle strengthening; stretching exercises; massage therapy; oral analgesia with non-steroidal anti-inflammatory agents (NSAIDS); and topical analgesia with lidocaine, ice and/or heat. Immediate surgery may be indicated if the symptoms are severe or sudden in onset, or there is a sudden worsening of symptoms. Elective surgery may be indicated after six months of conservative therapy with unsatisfactory relief of symptoms.

Завдання 4. Знайдіть у тексті англійські еквіваленти словосполучень:

втрата розчинних білків в рідині; втрата об'єму рідини; вражений диск втрачає висоту; зміщення суглоба; ослаблення зв'язок; корінець спинного нерва; звуження дискового простору; злиття суміжних тіл хребців; силові тренування на корекцію неправильної постави; зміцнення основних м'язів; негайне хірургічне втручання.

Завдання 5. Дайте відповіді на запитання.

1. What is degenerative disc disease ?
2. What is the root cause of degenerative disc disease ?
3. What causes the affected disc to lose height ?
4. What are typical symptoms of degenerative disc disease ?
5. What may treatment of degenerative disc disease include ?

Завдання 6. Розкажіть, що ви знаєте про допомогу при травмі.

Завдання 7. Напишіть анотацію до тексту.

Завдання 8. Прочитайте текст та знайдіть нову лексику.

Signs and symptoms of degenerative disc disease

Degenerative disc disease can result in lower back or upper neck pain. In fact, the amount of degeneration does not correlate well with the amount of pain patients experience. Many people experience no pain while others, with exactly the same amount of damage have severe, chronic pain. Whether a patient experiences pain or not largely depends on the location of the affected disc and the amount of pressure that is being put on the spinal column and surrounding nerve roots.

Nevertheless, degenerative disc disease is one of the most common sources of back pain and affects approximately 30 million people every year. With symptomatic degenerative disc disease, the pain can vary depending on the location of the affected disc. A degenerated disc in the lower back can result in lower back pain, sometimes radiating to the hips, as well as pain in the buttocks, thighs or legs. If pressure is being placed on the nerves by exposed nucleus

pulposus, sporadic tingling or weakness through the knees and legs can also occur.

A degenerated disc in the upper neck will often result in pain to the neck, arm, shoulders and hands; tingling in the fingers may also be evident if nerve impingement is occurring.

Pain is most commonly felt or worsened by movements such as sitting, bending, lifting and twisting.

After an injury, some discs become painful because of inflammation and the pain comes and goes. Some people have nerve endings that penetrate more deeply into the annulus fibrosus (outer layer of the disc) than others, making discs more likely to generate pain. In the alternative, the healing of trauma to the outer annulus fibrosus may result in the innervation of the scar tissue and pain impulses from the disc, as these nerves become inflamed by nucleus pulposus material. Degenerative disc disease can lead to a chronic debilitating condition and can have a serious negative impact on a person's quality of life. When pain from degenerative disc disease is severe, traditional nonoperative treatment may be ineffective.

Завдання 9. Напишіть реферат тексту.

Модуль 2. Професіоналізми й терміни

Практичне заняття № 10

Тема: Traumas of musculoskeletal system of athletes.

Мета: систематизувати та поглибити знання за темою, розвивати вміння узагальнювати і систематизувати знання, створити атмосферу емоційного підйому.

План:

1. Traumas of musculoskeletal system of athletes.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ , морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми : Traumas of musculoskeletal system of athletes, варто зосередити увагу на засвоєнні лексико-граматичного матеріалу. Необхідно з'ясувати функціонування лексичних одиниць у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 10

Тема: Traumas of musculoskeletal system of athletes

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

children and adolescents
to contribute to the patterns of injuries
injuries previously seen in mature athletes
sport-related musculoskeletal injuries
repetitive overuse and acute macrotrauma
to define sports injuries
on athlete-exposure time

Завдання 2. Знайдіть еквівалентні пари словосполучень:

-sport-related musculoskeletal injuries	-діти та підлітки
-to define sports injuries	-травми, які раніше спостерігалися у зрілих спортсменів
-children and adolescents	-повторювані надмірні та гострі макротравми
-repetitive overuse and acute macrotrauma	-сприяти появі травм
-to contribute to the patterns of injuries	-визначити спортивну травму
-on athlete-exposure time	-травми, які зв'язані з опорно-руховим апаратом
-injuries previously seen in mature athletes	-час впливу на спортсмена

Завдання 3.

to contribute - contributing

to modulate

to provide

to relate

to define

to increase

Завдання 4. Прочитайте текст і знайдіть нову лексику.

Sports-related musculoskeletal injuries in young athletes in United States

Over the past several decades there has been increased participation in sports by children and adolescents at earlier ages in the United States, as well as more intense participation and specialization in sports at very early ages. This trend has also partly contributed to the patterns of injuries seen in young athletes, and especially in recent years, injuries previously seen in mature athletes are being seen in young athletes. Overall, the vast majority of sport-related musculoskeletal injuries in children and adolescents are due to repetitive overuse and acute macrotrauma is less frequently seen in young athletes. Epidemiological data on sports injuries are provided by several national surveys. Investigators have used different methods to define sports injuries and the most widely used definition is based on athlete-exposure time. Certain aspects related to adolescent growth and development modulate the pattern of injuries.

Завдання 5. Дайте відповіді на запитання.

1. What has been there increased over the past several decades?

2. What trend has also partly contributed to the patterns of injuries seen in young athletes?
3. What injuries are due to repetitive overuse and acute macrotrauma ?
4. What are provided by several national surveys?
5. What the most widely used definition is based on?

Завдання 6. Прочитайте текст самостійно та дайте йому назву.

The musculoskeletal system is divided into three components; the trunk, the upper extremity and the lower extremity. Each component is further classified into bones, joints, ligaments, tendons and muscles. Thus, the musculoskeletal system consists of three general components that rely on each other in order to function properly. Injury to one component may lead to dysfunction and ultimately to the deterioration of the other two components. In addition, the musculoskeletal system relies on and supports the circulatory system and the nervous system. Musculoskeletal injuries can result in damage to either of these two systems, and damage to the circulatory and/or nervous system can result in dysfunction or deterioration of the musculoskeletal system. The skeletal system is mostly made of bones and cartilage. The bones are connected together by a number of joints to form the skeleton of the body. The bone is a hard connective tissue. This is due to its high content of calcium salts.

Generally, participation in sports activities promotes health and reduces the risks of developing chronic diseases such as hypertension, heart disease, cancer and diabetes; however, it also carries the risk of injuries. Soft tissue, bone, ligament, tendon and nerve injury can occur in athletes of all ages. Among children, there is a risk of injury at the epiphysis, the growth plate of the bone, because the musculoskeletal system is not fully developed. Moreover, injury may occur in children with an immature musculoskeletal structure due to an imbalance between muscle strength and flexibility. Sports injuries and disabilities

generally occur at the knee, ankle, hip, shoulder, elbow and wrist joints, or the vertebrae. Sports injuries are common at the ankle and knee. Age, gender and the type of sports activity affect the incidence of injury.

To prevent injuries among athletes, it is necessary to examine the history of injuries in athletes and to perform a physical evaluation before they participate in sports. The foot-ankle region showed the highest incidence of injury, whilst the hip-femur region had the lowest. Participation in sports has been linked to many health benefits including improved cardiovascular, musculoskeletal, and psychosocial health but participation is also associated with a potential risk of injury. The shoulder has been reported as the joint most frequently injured, followed by the elbow. Adolescent athletes present a particular challenge when injured, as they are most often during or just after periods of rapid growth. Musculoskeletal injuries account for most sports-related injuries.

Overuse-musculoskeletal injuries account for more than half of all sport-related injuries in adolescents and young adults. Overuse injuries can result in chronic or intermittent symptoms, depending on the athlete's level of activity. Acute muscle injuries (sprains, contusions, and lacerations) can bring significant structural or functional damage to the muscle. Studies of gender-specific rates showed that males aged 5 - 24 years were managed for a musculoskeletal injury more than twice as often as females from the same age group.

Завдання 7. Напишіть план тексту.

МЕТОДИЧНА РОЗРОБКА № 11

для проведення практичного заняття з навчальної дисципліни

Модуль 2.

Тема: Remedial gymnastics after combat damage and musculoskeletal system.

Мета: активізація та закріплення знань з правопису, синтаксису та граматики за темою заняття. Формування навичок перекладу речень з англійської мови на українську. Виховання любові до мови.

План:

1. Remedial gymnastics after combat damage and musculoskeletal system.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правил утворення та вживання англійського речення за фахом.
4. Виконання вправ , морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми: Remedial gymnastics after combat damage and musculoskeletal system необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 11

Тема: Remedial gymnastics after combat damage and musculoskeletal system

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

to improve a weightlifter's health and lifestyle, alleviating pain and reducing potential for injury, ultimate impact of sports massage therapy, the body's internal tissues, long stroking movements, to help repair damaged muscles, increasing a fresh blood and oxygen supply and removing toxins, to regulate the pores in the fibrous tissues, new oxygen and nutrients are supplied, release tension and pressure build up, stretch muscles lengthwise and sideways, to exhibit a high degree of flexibility, disturbances of collagen scar tissue, development of various adhesions, tissues stubbornly stick together, opposing muscles, to increase muscle relaxation levels, to identify potential trouble spots.

Завдання 2. Прочитайте текст і дайте йому назву. Знайдіть нову лексику.

The physical effects of massage therapy can greatly improve a weightlifter's health and lifestyle by alleviating pain and reducing potential for injury in several ways. The ultimate impact of sports massage therapy is to increase the health of the body's internal tissues by improving circulation of blood and nutrients, while simultaneously removing toxins. This is accomplished by varying type of stroke use.

Long stroking movements are used to move fluid through the circulatory system. How this works is interesting. As pressure increases in front of the masseur's stroke, suction is created behind the stroke. This helps repair damaged muscles by increasing a fresh blood and oxygen supply and removing toxins that have built up in the tissue. Deep massages help to regulate the pores in the fibrous tissues, which increases permeability. This allows for more fluids and nutrients to flow through the tissue. Waste products are removed and new oxygen and nutrients are supplied.

Stretching of the tissues during a massage helps muscle fibers release tension and pressure build up. The massage helps stretch muscles lengthwise and sideways along the natural flow of circulation and the muscle tissues. Some of the following claimed benefits should result from basic massage techniques, whereas others will tend to come from more advanced and focused techniques.

Massage therapy can improve flexibility. For a lifter to achieve optimal performance, he or she must exhibit a high degree of flexibility. Since massage therapy stretches the muscle fibers, flexibility is promoted and maintained. High volume or intensity training cycles and competition usually lead to increased muscle tension. The effects here may include disturbances of collagen scar tissue and development of various adhesions where the muscle, fascia, and other tissues stubbornly stick together. If this happens you will experience a reduction in overall flexibility and an increased chance of injury.

It should also be remembered that all muscles even when they do become overly tight, do not become so to the same extent all over the body. Tightness in one muscle group may not be balanced off by a similar degree of tightness in the opposing muscles. If not attended to, this can cause a permanent imbalance in the muscles. We see the best example of this occurring with bench pressers. They have well-developed pecs that are often in a permanently tight condition. The opposing muscles in their back are not always as well developed or as highly

maintained. The result is the bench presser's hunched-over posture, familiar to anyone who has spent time in an elite power gym.

Massage therapy improves circulation, and with better circulation the lifter can breathe easier and move more smoothly. Heavy training cycles causes microscopic damage (micro-trauma) to the muscle and fascial tissue. That damage must be repaired via increased blood flow (i.e., nourishment). Since massage helps the blood flow, the circulation of the lifter will be improved and this will enhance his or her performance levels. This will have a great impact on lymphatic and blood circulation, influencing waste removal from these areas, as well as food and oxygen supply to these areas. All of this leads to faster recovery and an earlier return to effective training.

Tight muscles are also problematic in the opposite direction of blood flow. If tight muscles slow down blood flow to the muscles, then they also slow down the removal of metabolites. Remember it is in the recovery phase of training that strength adaptation occurs. Nutrients gained via adequate nutrition are transported in the blood to rebuild broken-down tissues and make them stronger. If the muscles are tight, then that will reduce that blood flow during the recovery phase. The result will be less than adequate progress.

Massage alleviates muscular pain, whether caused by overwork or injury. If an athlete is in pain, he or she will not be able to approach maximum poundages. Chronic or acute pain unavoidably psyches out the lifter. The less pain that is felt, the better the lifter will perform. Pain is a signal that something is wrong, so that will have to be dealt with. Massage will often be part of the required therapy. As we already know, sleep is another big part of the recovery process.

Massage therapy promotes better sleep patterns. Massage can actually improve the quantity and quality of sleep. By getting more and deeper sleep, the

athlete will be better able to perform at his or her best. The lifter who goes to bed in a high-tension state will have difficulty getting to sleep and may often wake during the night or wake too early. All of this compromises recovery. Massage will reduce some of that tension and promote deeper and longer sleep. Volume and intensity are not just important in your training. They apply to sleep parameters as well.

Massage therapy increases muscle relaxation levels. Many lifters exhibit that hard driving type-A personality where relaxing is difficult. In those situations stress can get the better of the lifter. With regular massage, such a lifter can learn to relax body and mind and perhaps improve his performances.

By having a deep tissue massage at least once per week, lifters can keep their muscles healthy, improve their flexibility, maintain a state of relaxation and thus have a better sleep cycle. It is worth considering if you are having problems recovering from workouts. Massage therapy can also help to identify potential trouble spots before they progress into something more serious. A skilled touch may reveal those soft tissue micro-injuries. So, treat yourself to a massage and your body and your performance may thank you for it.

Завдання 4. Знайдіть у тексті англійські еквіваленти словосполучень:

фізичні ефекти масажною терапією, ймовірність травми, поліпшення здоров'я внутрішніх тканин, поліпшення циркуляції крові і поживних речовин, довгі погладжуючі рухи, збільшувати приплив свіжої крові і кисню, збільшувати проникність, розтягування тканин під час масажу, тренувальні цикли великого обсягу або інтенсивності, змагання зазвичай призводять до збільшення м'язової напруги, підвищення ймовірності отримання травми, герметичність в одній групі м'язів, згорблена поза жиму лежачи, важкі

тренувальні цикли, мікроскопічне ушкодження (мікротравма) м'язів, масаж знімає м'язовий біль, викликати перевтомою або травмою, рівень м'язової релаксації, глибокий масаж тканин, визначити потенційні проблемні місця.

Завдання 5. Дайте відповіді на запитання.

1. What can greatly improve a weightlifter's health and lifestyle?
2. Wherein lies the ultimate impact of sports massage therapy?
3. What for are the long stroking movements in massage?
4. What do deep massages help?
5. What does stretching of the tissues help during a massage?
6. What can improve massage therapy?
7. Why will massage can often be part of the required therapy?
8. What does massage therapy promote?
9. Why does massage therapy increase muscle relaxation levels?
10. What may reveal skilled touch?

Завдання 6. Напишіть план тексту.

Завдання 7. Розкажіть, що ви знаєте про терапевтичну користь масажу.

Практичне заняття № 12

Модуль 2.

Тема: Kinesiotherapy. Kinds of kinesiotherapy.

Мета: формування навичок самостійної діяльності студентів на занятті, розвивати творче мислення студентів з теми заняття, сприяти формуванню пізнавального інтересу в процесі навчання.

План:

1. Kinesiotherapy. Kinds of kinesiotherapy.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми: Kinesiotherapy. Kinds of kinesiotherapy необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 12

Тема: Kinesiotherapy. Kinds of kinesiotherapy

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

physical activity; exercise goals; to recover from injury; to improve their overall well-being; to involve exercises; to use ultrasounds, medical tools, and massages; a healthcare professional; to use hands-on therapy; to be evident in job duties; canes, wheelchairs, and walkers; geriatrics or orthopedics; advanced rehabilitation.

Завдання 2. Знайдіть еквівалентні пари словосполучень:

to apply exercise principles - оцінка фітнес рівня пацієнта

to improve their mobility, strength, and endurance - клінічні години

a healthcare professional - виконувати основні реабілітаційні техніки

clinical hours - медичний робітник

to perform more basic rehabilitation techniques - вправи на запобігання травм

planning fitness and exercise programs - бути спрямованим на те, що

evaluating patients' fitness level - поліпшувати рухливість, силу і витривалість

preventing injury through exercise - планування програм з фітнесу і вправ

Завдання 3. Прочитайте текст і знайдіть нову лексику.

Kinesiology vs. Physical Therapy

Kinesiology is the science of physical activity. Kinesiotherapy uses kinesiology principles to help patients meet exercise goals or recover from injury. Students wondering 'what is kinesiotherapy?' and 'how is it different than physical therapy?' should know that although both kinesiotherapy and physical therapy aim to help people improve their overall well-being, the techniques used are often different. Kinesiotherapy applies exercise principles to help patients improve their mobility, strength, and endurance, while physical therapy involves exercises and other techniques, such as using ultrasounds, medical tools, and massages.

Kinesiotherapist vs. Physical Therapist

A kinesiotherapist is a healthcare professional who uses exercises and movement education to help patients, while a physical therapist is a healthcare professional who uses hands-on therapy, exercises, stretches, and more to help patients. Both professionals may work with patients who have lost mobility and/or strength in their body due to injuries or illnesses. However, one of the biggest differences between the two careers is the education requirements.

Kinesiotherapists, or exercise physiologists, must have at least a bachelor's degree in kinesiology, exercise science, or another related field. Bachelor of Science (BS) in Kinesiotherapy programs or a concentration in the field are also available and usually require around 1,000 clinical hours of hands-on experience. Graduates may then pursue the American Kinesiotherapy Association's Registered Kinesiotherapist (RKT) credential, or graduates of these bachelor's degree programs may pursue other optional certifications to demonstrate proficiency in the field, such as the Exercise Physiologist Certified (EPC)

certification, the Certified Exercise Physiologist (EP-C), or the Certified Clinical Exercise Physiologist (CEP).

Physical therapists, on the other hand, must have a Doctor of Physical Therapy (DPT) degree. Physical therapy schools are available across the country, including physical therapy schools in New Jersey and physical therapy schools in Texas. These programs require 1-year residencies after completing coursework and help prepare students to take the National Physical Therapy Examination. Graduates may also pursue physical therapy certification programs in different areas of specialization.

What Does a Kinesiotherapist Do?

Other differences between a kinesiotherapist and a physical therapist are evident in their job duties. While some of these duties may be similar, kinesiotherapists usually perform more basic rehabilitation techniques than a physical therapist. Some specific job duties for kinesiotherapists may include:

- Planning fitness and exercise programs
- Analyzing patients' medical histories
- Evaluating patients' fitness level
- Taking patients' heart rate, blood pressure, etc.
- Creating individualized exercise plans for each patient

What Does a Physical Therapist Do?

Physical therapists tend to perform more advanced rehabilitation and treatment plans for their patients. They may incorporate the use of medical equipment, such as canes, wheelchairs, and walkers, and some physical therapists may specialize in a particular type of care, like geriatrics or orthopedics. Other specific job duties may include:

- Diagnosing patients' movements through observation and medical histories
- Educating patients about the recovery process
- Creating an individualized treatment plan for each patient
- Increasing mobility and/or preventing injury through exercise, equipment use, hands-on therapy, etc.
- Monitoring patients' progress and adjusting treatment as needed

Kinesiotherapist Salary vs. Physical Therapist Salary

In September of 2019, *PayScale.com* reported that the average annual salary for a registered kinesiotherapist (RKT) was \$67,000. The website also reported that the average annual salary for a physical therapist was \$70,699, as of November 2019.

The U.S. Bureau of Labor Statistics (BLS) also reported the average salaries for these professions in 2018. The BLS stated that exercise physiologists made an average annual salary of \$54,760, while physical therapists made an average annual salary of \$88,880.

Завдання 4. Дайте відповіді на запитання.

1. What is kinesiology?
2. What principles do kinesiology use?
3. Who is a kinesiotherapist?
4. Where are physical therapy schools available?
5. What is the difference between a kinesiotherapist and a physical therapist?

Завдання 5. Напишіть план тексту.

МЕТОДИЧНА РОЗРОБКА № 13

для проведення практичного заняття з навчальної дисципліни

Модуль 2.

Тема: Remedial gymnastics after amputation, endoprosthetics and fractures.

Мета: активізація та закріплення знань з правопису, синтаксису та граматики за темою заняття. Формування навичок перекладу речень з англійської мови на українську. Виховання любові до мови.

План:

1. Remedial gymnastics after amputation, endoprosthetics and fractures.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правил утворення та вживання англійського речення за фахом.
4. Виконання вправ, морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми: Remedial gymnastics after amputation, endoprosthetics and fractures необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 13

Тема: Remedial gymnastics after amputation, endoprosthetics and fractures

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

to limit a person's abilities; to arrive at a diagnosis; to establish a management plan; manual therapy; mechanical devices; assistive devices; intervention; wellness-oriented programs; functional movement; private-owned physical therapy clinics; outpatient clinics; the non-patient care roles.

Завдання 2. Знайдіть еквівалентні пари словосполучень:

to address the illnesses	медичні працівники
to perform functional activities	тривалість життя
to incorporate the results	втрата руху
traction	зустрітися з хворобами
the loss of mobility	виконувати функціональні дії
lifespan	зібрати результати
health care executives	контроль під навантаженням

Завдання 3. Прочитайте текст, дайте йому назву і знайдіть нову лексику:

Physical therapy attempts to address the illnesses, or injuries that limit a person's abilities to move and perform functional activities in their daily lives. PTs use an individual's history and physical examination to arrive at a diagnosis and establish a management plan and, when necessary, incorporate the results of laboratory and imaging studies like X-rays, CT-scan, or MRI findings. Electrodiagnostic testing (e.g., electromyograms and nerve conduction velocity testing) may also be used. PT management commonly includes prescription of or assistance with specific exercises, manual therapy and manipulation, mechanical devices such as traction, education, electrophysical modalities which include heat, cold, electricity, sound waves, radiation, assistive devices, prostheses, orthoses and other interventions. In addition, PTs work with individuals to prevent the loss of mobility before it occurs by developing fitness and wellness-oriented programs for healthier and more active lifestyles, providing services to individuals and populations to develop, maintain and restore maximum movement and functional ability throughout the lifespan. This includes providing therapeutic treatment in circumstances where movement and function are threatened by aging, injury, disease or environmental factors. Functional movement is central to what it means to be healthy. Physical therapy is a professional career which has many specialties including musculoskeletal, orthopedics, cardiopulmonary, neurology, endocrinology, sports medicine, geriatrics, pediatrics, women's health, wound care and electromyography. Neurological rehabilitation is in particular a rapidly emerging field. PTs practice in many settings, such as private-owned physical therapy clinics, outpatient clinics or offices, health and wellness clinics, rehabilitation hospitals facilities, skilled nursing facilities, extended care facilities, private homes, education and research centers, schools, hospices, industrial and this workplaces or other occupational environments, fitness centers and sports training facilities.

Physical therapists also practice in the non-patient care roles such as health policy, health insurance, health care administration and as health care executives. Physical therapists are involved in the medical-legal field serving as experts, performing peer review and independent medical examinations.

Education varies greatly by country. The span of education ranges from some countries having little formal education to others having doctoral degrees and post-doctoral residencies and fellowships.

Завдання 4. Дайте відповіді на запитання.

1. What does physical therapy attempt?
2. What does physical therapy use?
3. What does physical therapy management commonly include?
4. Whom does physical therapy work with?
5. What specialties does physical therapy include?
6. What is neurological rehabilitation?
7. Where does physical therapy practice?

Завдання 5. Напишіть план тексту.

Завдання 6. Напишіть реферат цього тексту.

Завдання 7. Прочитайте і перекладіть текст. Дайте йому назву.

Low rates of exercise among people with post-traumatic stress disorder (PTSD) may explain why many people with PTSD have been found to be at high risk for a number of physical health problems, such as obesity, heart disease, pain, and diabetes. There may be several reasons why people with PTSD are less likely to exercise.

Why People with PTSD Exercise Less

First, exercise can increase bodily arousal. Your heart might race. You may experience shortness of breath. Although most people don't think twice about these symptoms, if you have PTSD, you may be particularly hesitant to experience this arousal.

Many people with PTSD fear bodily symptoms that are associated with anxiety, such as increased heart rate and shortness of breath. They also may fear that bodily arousal from exercise might cause their hyperarousal symptoms to worsen. As a result, they may try to avoid exercise or any other activity that increases bodily arousal. In addition, PTSD is associated with a higher risk of experiencing depression. When you're depressed, you may experience low motivation, low energy, and tend to isolate yourself. Given this, it's possible that if you have symptoms of depression along with your PTSD, this might prevent you from exercising.

Finally, people with PTSD engage in more unhealthy behaviors, such as smoking and alcohol use. These behaviors may make it more difficult for someone with PTSD to start an exercise program.

Exercise Benefits With PTSD

Whether or not you have PTSD, regular exercise has a number of benefits. It can contribute to many positive physical health outcomes, such as improved cardiovascular health, weight loss, and greater flexibility and mobility. In addition to these physical health outcomes, regular exercise can also have a positive

impact on your mental health by reducing anxiety and depression. Given the benefits of exercise, as well as the numerous mental and physical health problems experienced by people with PTSD, a regular exercise regimen may have a number of advantages for you if you have PTSD.

The Effect of Regular Exercise on Symptoms

Several studies have looked at the effect of a regular exercise program on PTSD symptoms. In one study of adults with PTSD, a 12-week exercise program that included three 30-minute resistance training sessions a week, as well as walking, was found to lead to a significant decrease in PTSD symptoms, depression, and better sleep quality after the program ended. A review of four randomized controlled trials (RCTs) on the effect of regular exercise on PTSD also found that physical activity significantly reduced depressive and PTSD symptoms. It suggested that more studies should be done on this relationship and concluded that including physical activity in the treatment of PTSD appears to be helpful.

Starting an Exercise Program

Before embarking on any exercise program, it's important to first check with your doctor to make sure that you do it safely. Your doctor may also be able to help you identify the best exercises given your goals, age, weight, or other physical health problems that you're experiencing. If you're currently working with a mental health provider, it may also be important to let him or her know that you're interested in starting an exercise program. Exercise can be an excellent form of behavioral activation, and your exercise goals may be able to be incorporated into the work that you're already doing with your therapist.

Завдання 8. Напишіть план цього тексту.

Практичне заняття № 14

Модуль 2.

Тема: Rehabilitation of invalids with defects of extremities and with artificial knee joint.

Мета: активізація та закріплення знань з правопису, синтаксису та граматики за темою заняття. Формування навичок перекладу речень з англійської мови на українську. Виховання любові до мови.

План:

1. Rehabilitation of invalids with defects of extremities and with artificial knee joint.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми: Rehabilitation of invalids with defects of extremities and with artificial knee joint необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 14

Тема: **Rehabilitation of invalids with defects of extremities and with artificial knee joint**

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

locomotor disabilities; a medical community; to put in our best efforts to rehabilitate; the major cause for amputations; to have a potential to become contributing, happy members of our society; to present best possible solutions; artificial limbs for the lower extremity; the first established example of a prosthesis; the wooden toe; metal hooks and wooden pegs; an amputation surgery; to reduce mortality; to eliminate the need to handcraft individual components, reducing rehabilitation time; the new devastating weaponry; pneumatically powered hand; to introduce improved prosthetic designs; several assessment scores; a residual limb length; a transfemoral amputee; the available clearance; a knee disarticulation amputee.

Завдання 2. Прочитайте текст і знайдіть нову лексику:

Prosthetic Rehabilitation in the Lower Limb

Data from Census 2011 state that there are 5,436,000 people with locomotor disabilities in India. Unfortunately, there is little data available on the number of amputees in India. Nevertheless, as a medical community, it is extremely important to put in our best efforts to rehabilitate this subset of patients

for social reasons. The major cause for amputations in India is trauma. It is known that trauma disproportionately affects young, economically active, male individuals who have a significant lifespan ahead of them. Successfully rehabilitated, these young amputees have a potential to become contributing, happy members of our society.

This article is our effort to present best possible solutions currently available for lower limb amputees and highlight how incorporating these solutions in the rehabilitation plan can help enhance quality of life for these amputees and, effectively, those of the families dependent on them.

History of artificial limbs for the lower extremity is extremely interesting and often intertwined with the history of war and of surgery.

The first established example of a prosthesis is the Egyptian noblewoman's toe dating back to 950–710 BC. Although the wooden toe offered no function, it possibly made the noblewoman “complete,” by allowing her to wear an Egyptian sandal. Metal hooks and wooden pegs crafted by artisans—which seem as mere exaggerations today—were a reality for many centuries later.

The major advances in amputation surgery as well as prosthetic technology came during or after the American Civil War (1861–1865). Use of ether or chloroform for anesthesia, use of bromine to prevent gangrene, allowing only experienced surgeons to perform amputations, mass casualty management systems—these and many more techniques reduced mortality. However, soldiers who survived—many of them amputated—had to be rehabilitated. In Europe and in USA, many entrepreneurs designed newer types of prosthetic components as well as suspension techniques benefitting amputees.

The World War we saw the need for providing prostheses to war amputees quickly, especially in Germany. German technician Otto Bock started serial production of prosthetic components, eliminating the need to handcraft individual

components, reducing rehabilitation time. As wood was beginning to become scarce, newer materials such as plastics were now used as substitutes.

In 1915, the first pneumatically powered hand was introduced in Germany. Pneumatics and, eventually, hydraulics found their way into lower limb prosthetics as well. However, the key milestone in the history of leg prosthetics was introduction of the C-leg in 1999—the first fully microprocessor-controlled prosthetic knee. Clinically proven to reduce falls, C-leg today has become a standard of care for above-knee amputees and can be seen being used by several Indian amputees as well.

Iraq and Afghanistan conflicts also saw a large number of young soldiers being severely injured due to the new devastating weaponry, yet surviving due to advanced evacuation techniques. These amputees did not want to be pushed back to “desk jobs” but wanted to get back to service, even to active combat. The Genium X3 was a result of R&D from the U.S. Army, which allowed these veterans to run, climb stairs one over one, perform activities in or even under water, and go back to active service.

The first Paralympic games were held at Rome in 1960. Since then, Paralympic movement has inspired thousands of disabled athletes and other amputees to participate in sports and has introduced improved prosthetic designs exclusively for sport use.

Currently for prosthetic rehabilitation, advanced components and techniques are available and accessible. Correct, usable information about the available choices and processes can help the teams guide the patient and family appropriately. Great outcomes could be achieved if the surgical team intervenes and helps the patient and family make a reliable choice of a skilled and experienced service provider as well as an appropriate prosthetic solution.

This is just to reiterate the African proverb that says, “If you want to go faster, go alone. If you want to go longer, go together!”

Several assessment scores are available to help surgeons make “salvage or amputation” decision. Hence, we will not elaborate on tools to make this decision.

However, with 20 years of experience in treating Indian amputees, they wish to outline certain insights that can assist during amputation decision.

The obvious principles here include preserve as many joints as possible and preserve maximum possible bone length.

A study evaluating 28 transtibial amputees for their functional mobility concluded that the amputation technique and resulting residual-limb factors may be important for patients to achieve functional prosthetic use.

Ideally, a residual limb length of less than 5 cm in transfemoral or TT is not viable for a prosthesis. However, we recommend that the decision to choose the next higher amputation level be made in consultation with an experienced prosthetist. For example, in a TT residual limb, length less than 5 cm is short per say, but if reasonable range of motion (ROM) is available at the knee, it is preferred over a transfemoral amputation. With advanced prosthetic suspension techniques, the patient can still achieve an outcome that may be considered suboptimal for a TT amputee but still will be better than that for a transfemoral amputee!

Another perspective to take note of is that longest possible may not always be ideal. If the available clearance (distance between the end of residual limb from ground or from the next higher joint) is very limited, special components built to be of low height need to be used. This may compromise function and add unnecessary costs. We will like to share an example of a knee disarticulation amputee for whom kneeling in prayer is crucial to follow his religious beliefs. In his case, the prosthetist will not be able to use a “rotation joint”—an accessory

that allows the lower segment to rotate and clear way for kneeling—as it makes the prosthetic thigh longer than the normal thigh. This may keep the person away from achieving “complete” rehabilitation. Therefore, in this case, a transfemoral amputation could have been considered.

Pain on weight-bearing, limited, or no ROM at the proximal joint and very short bony and muscular lever arms are the indicators to consider a proximal level of amputation.

Transfemoral versus knee disarticulation has been a long-standing debate. Once again, the decision must be made based on individual patient situation and, preferably, in consultation with an experienced prosthetist.

Завдання 4. Дайте відповіді на запитання.

1. How many people with locomotor disabilities are there in India?
2. What is the major cause for amputations in India?
3. Whom does trauma disproportionately affect?
4. What is this article about?
5. What do you know about the history of artificial limbs for the lower extremity?
6. What did German technician Otto Bock start?
7. What was introduced in Germany in 1915?
8. What has become a standard of care for above-knee amputees today?
9. When were the first Paralympic games held?
10. Why the amputation technique and resulting residual-limb factors may be important for patients to achieve functional prosthetic use?

11. What is the available clearance?

12. Why is the longest possible segment may not always be ideal?

Завдання 5. Напишіть план тексту.

Практичне заняття № 15

Модуль 2.

Тема: Physical therapy after dislocations of different localization. Physical therapy after thermic injuries.

Мета: систематизувати та поглибити знання за темою, розвивати вміння самостійно застосовувати правила, створити атмосферу емоційного підйому.

План:

1. Physical therapy after dislocations of different localization. Physical therapy after thermic injuries.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правила утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми :Physical therapy after dislocations of different localization. Physical therapy after thermal injuries необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 15

Тема: Physical therapy after dislocations of different localization. Physical therapy after thermic injuries

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

patellar dislocations; immobilization techniques; patient-reported outcomes; redislocation rates; to advocate the use; a debilitating injury; acute dislocations; noncontact twisting injuries; the best treatment modality; the patellofemoral joint; the medial patellofemoral ligament; an initial traumatic dislocation; the predisposing anatomic abnormalities; robust evidence; the first-time and recurrent patellar dislocations; to explore the variability in practice.

Завдання 2. Прочитайте текст і знайдіть нову лексику:

Clinical Outcomes After the Nonoperative Management of Lateral Patellar Dislocations

The first-line treatment for patellar dislocations is often nonoperative and consists of physical therapy and immobilization techniques, with various adjuncts employed. However, the outcomes of nonoperative therapy are poorly described, and there is a lack of quality evidence to define the optimal intervention.

Patient-reported outcomes consistently improved after all methods of treatment but did not return to normal. Redislocation rates were high and close to

the redislocation rates reported in natural history studies. There is a lack of quality evidence to advocate the use of any particular nonoperative technique for the treatment of patellar dislocations.

A patellar dislocation is a debilitating injury typically associated with the younger population, with incidence rates of primary dislocations varying from 29 to 43 per 100,000 in adolescents. Acute dislocations often occur as a result of noncontact twisting injuries and frequently result in a loss of activity. Recurrent dislocations may occur in a high proportion of patients (estimated as up to 50%), and current evidence for the best treatment modality (operative vs conservative [nonoperative] management) remains controversial, with a recent Cochrane review suggesting the need for more high-quality trials.

Management principles for patellar dislocations are based around strengthening or reconstructing the stabilizing elements of the patellofemoral joint. In a patellar dislocation, the medial patellofemoral ligament (MPFL) is often disrupted. This ligament is the primary medial static stabilizer of the patella, with in vitro lateral translation increasing by 50% when deficient. This may explain why recurrent instability often presents after an initial traumatic dislocation. A high proportion of patients also have predisposing anatomic abnormalities, such as patella alta, trochlea dysplasia, and quadriceps dysplasia, which may increase the risk of ongoing instability. While a large body of literature has focused on the results of surgical outcomes, the potential benefits of nonoperative treatment are much less well understood or documented.

Nonoperative management has formed an integral part of treating primary and recurrent dislocations. It is often considered to be the first-line treatment for patellar instability. One of the challenges around nonoperative management is the complexity of the interventions offered and the different approaches to rehabilitation taken in different centers. Various physical therapy techniques have been described with the aims of strengthening the quadriceps muscles; restoring

range of movement; addressing deficiencies in hip, trunk, or foot biomechanics that may precipitate instability; reducing pain; and improving patient confidence. Different methods of immobilization have also been used in the acute phase, and this also remains controversial. There are little data to determine which regimen is best or even what approaches are most commonly used in practice.

Few and poor-quality studies have meant that previous systematic reviews have failed to find robust evidence to suggest optimal nonoperative treatment regimens or even to determine whether current approaches to nonoperative management (such as physical therapy) have any effect on outcomes. The aim of this review was to define clinical outcomes after the nonoperative management of both first-time and recurrent patellar dislocations and to explore the variability in practice within the literature.

Завдання 3. Дайте відповіді на запитання.

1. What is the first-line treatment for patellar dislocations?
2. Why are the outcomes of nonoperative therapy poorly described?
3. When did patient-reported outcomes consistently improve?
4. Whom is a patellar dislocation as a debilitating injury typically associated with?
5. When do acute dislocations often occur?
6. When may recurrent dislocations occur?
7. What are management principles for patellar dislocations based on?
8. What has nonoperative management formed?

9. What is the aim of this review?

Завдання 4. Напишіть анотацію цього тексту.

Завдання 5. Прочитайте текст і випішіть нову лексику.

Rehabilitation of the burn patient

Rehabilitation is an essential and integral part of burn treatment. It is not something which takes place following healing of skin grafts or discharge from hospital; instead it is a process that starts from day one of admission and continues for months and sometimes years after the initial event. Burns rehabilitation is not something which is completed by one or two individuals but should be a team approach, incorporating the patient and when appropriate, their family. The term 'Burns Rehabilitation' incorporates the physical, psychological and social aspects of care and it is common for burn patients to experience difficulties in one or all of these areas following a burn injury. Burns can leave a patient with severely debilitating and deforming contractures, which can lead to significant disability when left untreated. The aims of burn rehabilitation are to minimise the adverse effects caused by the injury in terms of maintaining range of movement, minimising contracture development and impact of scarring, maximising functional ability, maximising psychological wellbeing, maximising social integration.

The rehabilitation for patients with burn injuries starts from the day of injury, lasting for several years and requires multidisciplinary efforts. A comprehensive rehabilitation programme is essential to decrease patient's post-traumatic effects and improve functional independence. However, while optimal treatment provision involves a multidisciplinary team approach, when this is not

possible or when availability of therapists and support services are limited, all members of the burns team can take responsibility for their part in rehabilitation to maximise the benefit to the patient. While different professionals possess expertise in their own specialities, there are some simple and effective methods that can be utilised to help the patient reach their maximum functional outcome. It is the dedication of the individuals within the burn team and the commitment to caring for the patient and encouraging them to participate and engage fully in their rehabilitation, which can make such a difference to their long-term quality of life.

In this article, an effort is being made to share the basic aspects of burn rehabilitation and provide practical information, which can be followed by different professionals working within the speciality of burns (and can be taught to family members) to best help their patients. Rehabilitation of burns patients is a continuum of active therapy starting from admission. There should be no delineation between an 'acute phase' and a 'rehabilitation phase' as this idea can promote the inequality of a secondary disjointed scar management and/or functional rehabilitation team. However, for the ease of following a pathway of patient care, the stages of rehabilitation have been divided into early stages and later stages of rehabilitation; although, it must be understood that there may be significant crossover between these two stages depending on the individual patient.

Depending on the size and severity of the injury, the patient's age and other pre-morbid factors, this stage can last from a few days to several months. The patient may be an inpatient or may be treated as an outpatient and is likely to be undergoing regular dressing changes, which are often painful and may also be a very frightening experience for the patient.

Regular pain relief is essential, in particular prior to all interventions such as change of dressing and exercise; this needs to be given in adequate time to take

effect before commencing the procedure. The aim of analgesic drugs should be to develop a good baseline pain control to allow functional movement and activities of daily living to occur at any time during the day. Inadequate pain relief in the early stages can result in a complete reluctance of the patient to participate in their rehabilitation in both the short and long term.

Early commencement of rehabilitation is the key to compliance with treatment and maximising long-term outcome. When the various aspects of rehabilitation are introduced as an integral part of care from day one, whether the patient is an in-patient or out-patient, they are easier for the patient to accept and follow rather than as an additional element to their care at a later date when contractures are already developing.

Patients may want to delay their rehabilitation until they feel better; however, every day without burn therapy intervention will make the eventual rehabilitation process more difficult and painful and may result in a poorer outcome. If windows are missed, they cannot be regained easily, since the inevitable sequelae of ever-increasing joint stiffness and tethered soft-tissue glide become more and more devastating with the passage of time. Patients may try to refuse treatment as they are in pain and may not understand fully the impact of not participating in their rehabilitation; they therefore need the support and encouragement of the burn care professionals to help them through this difficult experience with the knowledge of how different their quality of life can be.

Завдання 6. Напишіть реферат цього тексту.

Практичне заняття № 16

Модуль 2.

Тема: Physical therapy after frostbites.

Мета: відпрацювати навички усного мовлення з теми заняття, розвивати творче мислення студентів з теми заняття, прищепити осмислене ставлення до виконуваної роботи.

План:

1. Physical therapy after frostbites.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правил утворення та вживання англійського речення за фахом.
4. Виконання вправ, морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми: Physical therapy after frostbites необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 16

Тема: Physical therapy after frostbites

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

the surprising characteristics of frostbite; crippling tissue; to be more apt; the immersion foot; to be poorly adjusted; the severity of tissue damage; a direct thermal injury to the tissue; changes in the microcirculation; forming intracellular ice crystals; interstitial freezing with consequent extraction of water from the cells; to undergo acute changes within hours; sedation; suffering from exposure; to be incoherent; to be a mottled purple; to be dressed with fluffed gauze; shriveled tissue.

Завдання 2. Прочитайте текст і знайдіть нову лексику:

Treatment of Frostbite Today

One of the surprising characteristics of frostbite is the large amount of tissue that can be saved - even when the hand or foot seems hopelessly frozen. The best chance of preventing crippling tissue loss comes when you are lucky enough to see the patient while the tissue is still frozen and can be rewarmed rapidly. Unfortunately, he is more apt to be seen first by someone not familiar with rapid rewarming, since it only recently became the accepted treatment for frostbite.

Much of what we now know about frostbite was learned during wartime. During military campaigns, frostbite and the clinically similar immersion foot (which results when the foot is immersed in water for long periods) have reached epidemic proportions. Although immersion foot is uncommon among civilians, frostbite is still a problem in all but the southernmost parts of the United States. In five years, 54 frostbite victims have been hospitalized at Colorado General Hospital and Denver V.A. Hospital.

Neurasthenic, poorly adjusted, excessively sweating, or self-destructive individuals have been known since antiquity to have an increased susceptibility to frostbite. Many alcoholics are victims, having fallen asleep in a snowbank, a car, or an abandoned garage. Also, there have been patients who suffered repeated episodes of frostbite that seemed to be suicidal gestures.

Other likely victims include winter sports enthusiasts and accident survivors trapped in their wrecked automobiles. Several studies suggest that Negroes may have a decreased adaptability to cold.

The severity of tissue damage depends upon the degree and the duration of cold. Thus, wind, wetness, contact with metal, or anything that speeds heat loss increases the danger to exposed parts of the body.

In studies in rabbits, frostbite occurred when thermocouples deep in the tissue showed temperatures below 22°F., an observation generally confirmed in clinical studies during the Korean War. The nature of frostbite has been highly controversial. Until recently, most authorities believed that it was a direct thermal injury to the tissue. Others believed the indirect injury resulted from changes in the microcirculation. Now it appears that both mechanisms are important. Cold can destroy tissue directly by forming intracellular ice crystals or more commonly by interstitial freezing with consequent extraction of water from the cells. But the blood supply to the frozen area also undergoes profound changes.

Microangiographic studies in animals have revealed that frostbite causes tortuous dilatation of the small vessels, as well as sharply delineated occlusions and intravascular tubular filling defects. Vascular stasis follows. If the injured area does not undergo necrosis, it is left with a distorted vascular system reduced in cross section.

The frostbitten limb undergoes acute changes within hours. First the distal areas become pale, then cyanotic. Just proximal may be a zone of intense hyperemia. In time, the most severely affected areas blister and turn black. The depth of the gangrene is difficult to assess until weeks later.

Even without tissue loss, frostbite may cause lasting symptoms: hypersensitivity to cold, causalgia, hyperhidrosis, coldness, and stiff joints. The explanation may be found in studies showing that blood vessels in frozen tissues often lose their ability to constrict or dilate normally. In children, epiphyseal damage may cause abnormal development of joints or bones.

In most cases, the hands or feet will already have been thawed when you first see them. This is unfortunate because the supreme opportunity to favorably influence the outcome of frostbite is when the extremity is still frozen.

Until a few years ago it was thought that the frozen part should be rewarmed slowly by allowing it to warm at room temperature or even by rubbing it with snow, beating it, or immersing it in cold water. Such recommendations were passed from generation to generation and often taught by physicians to first-aid classes. Then in the mid-1950's the brilliant studies of R. B. Lewis conclusively demonstrated the fallacy of this approach. He recommended rapid rewarming instead, and clinical studies have amply confirmed his finding that much less tissue is destroyed by rapid rewarming than by slow.

The ideal warming device is a deep-water bath with automatic temperature control. Because this is almost never available, use a makeshift tub and control

the temperature by adding appropriate quantities of warm water as the water cools. Keep the temperature between 103° and 107.5° F. (40° to 42° C.); higher temperatures risk further injury to the tissue, lower temperatures will not produce maximum benefit. During warming, the line between cyanotic, partially devitalized tissue and the proximal healthy tissue will move distally—first quite rapidly, then more slowly. Sedation may be cautiously prescribed if required during painful rewarming. If the patient is also suffering from exposure, as in the following case, he may require rewarming of the whole body.

A 25-year-old mountain climber was lost in a snowstorm without food for 40 hours. When rescued, he was conscious, but incoherent. His rectal temperature was 25° C.; respiration, 18; heart rate, 50; and blood pressure and peripheral pulse were unobtainable. At the hospital, the BUN was measured at 56 mg.%; the arterial pH, at 7.1.

When rewarming began, the patient's ankles were a mottled purple; his feet were dead white with no evidence of capillary filling. In water at 37° to 42° C., the color returned gradually to his feet, moving toward the toes rapidly at first, then more and more slowly. Simultaneously, he was wrapped in blankets and treated for shock and acidosis. It was apparent when the patient's feet were removed from the water that little if any tissue would be lost. A few hours later, oliguria set in and persisted for 72 hours, requiring dialysis. Two days later the BUN had dropped from 180 to 18 mg.%.

The frostbitten extremity may be dressed with fluffed gauze or left exposed. In either case, watch closely for infection. After a few days of immobilization, have the patient begin daily exercises. You can conveniently combine this with cleansing by having him flex his fingers and toes during whirlpool treatments using warm water and mild soap. In F. A. Simeone's analysis of cold injuries in wartime, exercise was one of the few measures of undoubted value.

One of the characteristics of frostbite is the large amount of tissue that can be salvaged in an apparently badly injured member. Often the black, shriveled tissue will eventually slough away like a cast, leaving far more viable tissue than had been anticipated. The amount of tissue loss may not be apparent for weeks or even months. That is why amputation should be delayed as long as possible—usually months. Debridement should be conservative.

The care of the patient long after frostbite is essentially supportive. The patient should avoid exposure to cold at all costs. Sympathectomy may be of value in patients with evidence of sympathetic hyperactivity.

For almost 25 years there have been isolated reports of the benefits of sympathectomy during the acute phase of frostbite. Such reports were difficult to evaluate; hence sympathectomy has not been applied widely. Recently Wesolowski and his associates have reported studies of patients who had symmetrical freezing of the hands or feet. Sympathectomy was performed on only one side; the other side was used as a control. On the side of the sympathectomy, the extremity had less pain, more rapid resolution of edema, less tissue loss, earlier demarcation, and faster healing.

These investigations as well as recent animal investigations suggest that the best time for sympathectomy is between 24 and 72 hours after thawing. This is not a recommendation for indiscriminate sympathectomy; it is not needed unless massive tissue damage is evident from the outset. Even then, the risk of the sympathectomy must be carefully weighed against the possible benefit. Less controversial is the role of sympathectomy for palliation of the symptoms that persist for years after cold injury—symptoms such as hyperhidrosis, coldness and pain.

Intra-arterial vasodilators such as Priscoline, anticoagulants, fibrinolytics, and low molecular weight plasma expanders may have value, but it has not yet

been established. Recent studies with low molecular weight dextran, however, suggest that it may prove valuable.

Завдання 3. Дайте відповіді на запитання.

1. What is one of the surprising characteristics of frostbite?
2. When do we know much about frostbite?
3. Who are the likely victims of the frostbite?
4. What does the severity of tissue damage depend upon?
5. What happens in frostbite?
6. What are the new ways to treat frostbite?
7. How long does it take healing of the frostbitten extremity?
8. What is the controversial role of early sympathectomy?
9. What are the experimental drugs for healing of the frostbitten extremity?

Завдання 4. Напишіть реферат цього тексту.

Практичне заняття № 17

Модуль 2.

Тема: Physical therapy after traumas and diseases of maxillofacial area.

Мета: активізація та закріплення знань з правопису, синтаксису та граматики за темою заняття. Формування навичок перекладу речень з англійської мови на українську. Виховання любові до мови.

План:

1. Physical therapy after traumas and diseases of maxillofacial area.
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правил утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми: Physical therapy after traumas and diseases of maxillofacial area необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття № 17

Тема: Physical therapy after traumas and diseases of maxillofacial area

Завдання 1. Прочитайте, перекладіть і вивчіть слова та словосполучення до теми:

injuries with maxillofacial trauma; the incidence of inflammatory complications; significantly worsens the outcome of trauma; to compensate lifecycle limitations; the persons of the able-bodied age; the expressed disadaptation; to be accompanied by expressed impairments; to be in the forefront; to accelerate bone healing; to reduce the degree of inflammation; masticatory muscles; the introduction of adaptive skills into everyday activities;

forced restriction of motor activity; the contracture of the mandible; the inability to open the mouth and the risk of displacement of bone fragments of the immobilized jaw.

Завдання 2. Прочитайте текст і знайдіть нову лексику:

Complex Rehabilitation of Patients with Jaw Fractures

In the recent year the number of injuries with maxillofacial trauma has significantly increased in all countries of the world. Among maxillofacial injuries, fractures of the jaws occupy the main place (65- 80%), and most of the patients are young and able-bodied people. Despite the continuous improvement of the treatment methods of jaw fractures, the periods of immobilization and temporary disability are not reduced, and the incidence of inflammatory complications remains high, which significantly worsens the outcome of trauma. This largely

depends on the lack of an effective system of rehabilitation of patients and a comprehensive approach to treatment with the use of both, pharmacological, psychotherapeutic, and physical rehabilitation measures. Complex treatment and rehabilitation of patients with jaw fractures will promote rapid stabilization and reduction of posttraumatic manifestations of the disease and, as a result, improve physical and mental health and increase the life potential and the level of their working capacity. Rehabilitation is the process and system of medical, psychological, pedagogical, socio-economic measures aimed at eliminating or possibly more fully compensating for lifecycle limitations caused by a disorder of health with persistent disorders of the body's functions. Rehabilitation is a part of daily care and reduces the consequences of the disease. The scientific substantiation of the rehabilitation system for patients with injuries of the maxillofacial area is a multidisciplinary problem and is an urgent task of modern medicine due to large economic losses associated with their high prevalence among persons of the most able-bodied age. In recent years, the world has been growing the tendency to increase the chronic disability of patients with facial fractures and their rejuvenation. The expressed disadaptation leads in some cases to the refusal of professional activity, while maintaining the work capacity, the efficiency of their work is reduced, which leads to a significant decrease in the quality of life of patients, manifested in the limitation of communication and the impossibility of full participation in social life.

Damage to the maxillofacial area is accompanied by expressed impairments in the functions of chewing, swallowing, breathing, speech, aesthetics of the face. The consequences of diseases and injuries require long-term comprehensive rehabilitation measures from the side of the maxillofacial surgeon, orthodontist, speech therapist, orthopedist, physiotherapist, dentist therapist, otorhinolaryngologist, ophthalmologist, neurologist. In the rehabilitation complex after jaw fractures, such activities as timely and effective

fastening of fragments, antimicrobial and general tonic therapy, physical methods of treatment, nutrition, psychological support, exercise therapy and oral hygiene are in the forefront.

To accelerate bone healing, as well as to normalize the condition of local tissues and the entire body for the rehabilitation period, patients are recommended to undergo a course of physiotherapy. Physiotherapy is one of the methods of treatment, which is based on the impact of physical factors (heat, cold, electromagnetic waves, vibration, etc.) that have anti-inflammatory, antibacterial, and regenerative and immunomodulating effects on the body or the damaged area. Currently, in the maxillofacial traumatology, various physical factors are widely used, such as galvanization, laser therapy, ultrasound therapy. To reduce the degree of inflammation, physiotherapeutic effects were used - magnet therapy that reduces edema of tissues and magneto-laser radiation on the projection of the fracture, the electric field of UHF and ultraviolet irradiation, electrophoresis of calcium chloride and preparations preventing the development of connective tissue - lidase, ronidase. Hypothermia, which reduces ischemia of tissues and has analgesic and anti-inflammatory effect. Sollux, microwave therapy, percutaneous neuroelectrostimulation, electrostimulation of masticatory muscles with exponential current and diadynamic currents, hydrotherapy of the oral cavity, infrared radiation. Thermal and cold applications in the field of masticatory muscles, pelliotherapy, facial, neck, and collar massage.

Physiotherapy cannot be considered as the main method of treatment of jaw fracture; however, this method allows to significantly accelerating the process of recovery and healing. The use of new physico-pharmacological methods allows stimulating osteoreparative processes in bone tissue and significantly shortening the general terms of rehabilitation of patients.

Nutrition of patients with a jaw fracture plays a fundamental role in the complex of therapeutic and rehabilitation measures, affects the clinical outcomes

of the disease. Patients with jaw fractures are subject to malnutrition due to post-traumatic stress catabolism, which double the body's nutritional needs. The response is affected by starvation, which is observed after the immobilization of the jaws. Blocking the chewing function of the jaw, the painfulness of the feeding procedure due to the localization of trauma in 1-2 weeks and other factors is the cause of alimentary fasting; the consequence is the development of a number of catabolic changes.

Training of patients is an integral component of almost all complex rehabilitation programs. The learning process is aimed at providing the patient and his family members with information about the disease and treatment methods; it promotes the active participation of the patient in the treatment process, forming self-management skills and adherence to therapy. This helps the patient and his family better cope with the disease. The educational process within the framework of an integrated rehabilitation program promotes the introduction of adaptive skills into everyday activities, acquired in the process of rehabilitation, provides a long-term commitment to physical training and a healthy lifestyle.

Forced restriction of motor activity, prolonged immobilization of the jaws, and the possibility of scarring of soft tissue damaged during fracture can lead to such serious complications as contracture of the mandible, ankylosis of the temporomandibular joint, etc. The degree of severity of these disorders depends on the localization of the fracture: in fractures of the condylar process, degenerative changes in both joints are observed more often than with extraarticular fractures.

The use of therapeutic physical exercises influences to the improvement of the general condition of the patient, the prevention of complications associated with the hypodynamia and immobilization of the temporomandibular joint, the acceleration of bone fragments consolidation, the faster restoration of these jaws'

the function and the reduction of the patient's incapacity for work, as this is an important element of complex treatment and rehabilitation. The fulfillment of these tasks depends to a large extent on how timely the functional treatment is started and whether it is performed correctly.

The method of therapeutic gymnastics for fractures of the jaw depends on the periods of bone healing, acting in traumatology, features of immobilization (one or two-jaw splinting, osteosynthesis) and the clinical condition of the patient. For each gymnastics session, general strengthening (general tonic), and special exercises should be included in such sequence and dosage to ensure a general effect on the body and to improve local processes in damaged tissues. The character of general tonic and breathing exercises depends on the regimen of movements and the functional state of the respiratory and circulatory organs of the patient.

The use of special exercises for mimic and masticatory muscles depends on the method of immobilization. Contributing the recovery of the coordinated work of the muscles involved in swallowing, chewing and speech is the primary goal of the first period gymnastics.

In the case of a double-maxillary splint, exercises for masticatory muscles are not used because of the inability to open the mouth and the risk of displacement of bone fragments of the immobilized jaw. Doctor can send impulses to reduce the actual masticatory muscles with closed teeth at a slow pace (1-2 seconds interval), without much effort.

Functional load for the temporomandibular joint is strengthened by prescribing individual tasks, which consist of several special exercises performed by the patient independently 7-10 times during the day. Mechanotherapy and passive movements of the lower jaw should not be prescribed together with double-jawed splinting, as this can lead to the formation of a false joint.

The therapeutic exercises include breathing and general tonic exercises for all muscle groups in quantity, which does not cause the pulse to accelerate by more than 20-30% compared to the state of rest. Already on the 4th-5th day, most patients go from bed rest to open ward regimen. In the initial stage, general strengthening exercises with gymnastic sticks, dumbbells, exercise and then gradually add jumping rope, lunges, pushups, squats, twists, hoops, morning jogs etc. While performing gymnastic exercises, patients can feel fatigue at the beginning, then, under the influence of regular physical exertion, ease of movement, strength, high spirits, improvement of endurance and motor activity are experienced. Regular physical exertion in a gentler mode and with the control of a diet, in patients improves both physical states and psychopathological manifestations of the disease. Due to physical exertion, most patients with trauma in the maxillofacial region may experience an emotional lift, also an increase in self-esteem, which is the effectiveness performed of the therapeutic and rehabilitation measures, determined by the dynamics and improvement of the physical and mental state of the patients. Therapeutic gymnastics improves the general condition of the patient, stimulates reparative processes in damaged bones and soft tissues, prevents complications associated with immobilization (osteomyelitis, false joint, contracture) and increases the functional efficiency of operations or orthopedic treatment.

Rehabilitation measures improve physical activity and functional status, improve general health status, reduce the severity of local symptoms of the underlying disease, and, possibly, have a positive effect on the progression of the disease. Timely treatment and constant care will help to survive this unpleasant episode without significant losses.

Завдання 3. Напишіть реферат цього тексту.

Практичне заняття № 18

Модуль 2.

Тема: Communicative and rhetorical properties of language

Мета: активізація та закріплення знань з правопису, синтаксису та граматики за темою заняття. Формування навичок перекладу речень з англійської мови на українську. Виховання любові до мови.

План:

1. Communicative and rhetorical properties of language
2. Правила з правопису, морфології, синтаксису та граматики.
3. Правил утворення та вживання англійського речення за фахом.
4. Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми: Communicative and rhetorical properties of language необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття 18

Тема: Communicative and rhetorical properties of language

Завдання 1. Прочитайте текст і знайдіть нову лексику.

Завдання 2. Дайте відповідь на запитання: What are the main business etiquette rules?

BUSINESS ETIQUETTE RULES

When it comes to business etiquette, there are rules that aren't meant to be broken. Some of these may seem like common sense, but you would be surprised by how many times you may have made a mistake without even noticing it.

We've put together these business etiquette rules that will help you avoid awkward situations.

1. Pay attention to names.

Names are one of the first pieces of information that we learn about someone. It is how people recognize and address you.

When you tell others your name, include your last name. This is especially important if you have a common first name like Ashley or John.

When you first meet someone, pay attention to their name. If you aren't sure how to pronounce it, be sincere and ask. If it is an unusual or difficult to pronounce name, the person is probably used to it and won't mind. It shows that you have taken an interest in them and care about getting it right. Don't carelessly butcher their name or invent a nickname. Call people what they want to be called.

Remembering names can be challenging, especially if you meet multiple people at one time. One trick that you can use is to identify a characteristic that helps you differentiate them. Another is to repeat their name and try to use it in your conversation 3 to 4 times, but not so frequently that it is obvious.

2. Greet everyone.

Greeting the people that you come in contact with isn't only polite but it establishes rapport. You never know who the people that you greeted could be, so it is important to greet everyone with the same degree of kindness.

A simple "Hi, how are you?" or even a smile and nod is enough. However, adding more could make them remember you and view you as friendly and pleasant. It can also strike up conversation. Be considerate though. If they appear to be in a rush or not interested at the moment, don't force a conversation on them.

Some ways to strike up a conversation could be to:

Compliment something that they are wearing and ask where they found it.

Remark on your surroundings. This can be anything ranging from the weather to a book they are holding or the office space.

The key is to ask open-ended questions that will require more than a "yes" or "no" and move the conversation along.

3. Offer a handshake and make eye contact.

Handshakes are the universal business greeting. A firm handshake is still considered a positive trait. A weak one is negative.

Usually, the higher ranking person will offer their hand first, but if they don't, you can still offer yours. Make eye contact when you shake their hand and smile. Those who avert their eyes are viewed as lacking confidence and honesty.

4. Give cues that show you're paying attention.

When someone else is speaking, it is important to nod or smile. This shows that you are engaged and actively listening. It tells them that you care about what they say and value their thoughts.

Be careful not to interrupt. If you wish to speak, you may send a nonverbal signal by opening your mouth, but it is polite to wait for them to finish.

5. Introduce others.

No one likes to awkwardly stand with a group of people who have no idea who they are and what they are doing there. It's uncomfortable. If you strike up a

conversation with someone and are with a person that they haven't met yet, it is polite to make an introduction.

Give a little more information than just their name though. You might add the person's role at your company and what they do. This gives others some background, but keep it brief.

6. Send customized, handwritten Thank You notes.

It's perfectly fine to send out auto-confirmation and thank you emails after customers make a purchase online. However, a thank you by email—especially if it is a large account or long-standing business relationship—is considered ingenuine and rude.

Instead, write out a thoughtful thank you and send it by snail mail. It may take a few more minutes of your time and a little change for postage, but it is more appreciated.

7. Proofread emails for grammar and typo mistakes.

If you are like most professionals, you will communicate a lot through email. Each message sent reflects on you, so you need to make sure that they are professional and well-written. You shouldn't have typos in emails. It only takes a few seconds to proofread your emails before hitting send.

Technology can even do most of it for you. For example, you can download the Grammarly extension for free. It checks your emails for mistakes and offers suggestions to correct mistakes.

8. Be polite and professional in all forms of communication.

It doesn't matter if you are meeting face-to-face, by phone or through email, each interaction needs to be professional.

When you communicate through text only, you don't have the tone of voice, facial expressions and other nonverbal cues that accompany it. Remember this when writing emails. Keep messages short and to the point, but don't send anything that you wouldn't say in-person.

9. Always be on time.

Whether it is arriving to work or a meeting or making a deadline, punctuality is critical. Time is precious.

When you miss a deadline, the whole team is affected and may have to cover for you. Teams rely on everyone to do their part. It is easy to underestimate how much time you'll need to complete a project if you don't regularly track your work. When you are late, you are being disrespectful and inconsiderate of another person's time and commitments. Don't be late.

If you are running behind schedule, contact them as soon as you realize that you won't make it on time. Don't show up too early either. Arriving between 5 to 10 minutes before your appointment is ideal.

10. Dress appropriately.

Dress codes have become much more relaxed in recent decades. However, just because there is no rule that says you can't show up for work in a hoodie, sweatpants and flip flops, it doesn't mean that you should.

As much as we like to tell ourselves not to "judge a book by its cover," our immediate reaction is to do just that. In fact, studies have shown that the first thing that people notice about others is their appearance. It is the primary influence on first impressions.

You don't have to put on a three-piece suit, but dressing smart shows that you put effort into your appearance and are more likely to put the same enthusiasm into your work.

When you dress in loungewear in a professional setting, people may think that you are lazy. It doesn't mean that you can't wear a comfy shirt and jeans occasionally. If it is appropriate for the work environment and situation, then go for it.

11. Always practice good hygiene.

No matter what you wear, good hygiene is always a must. Comb your hair. Trim your beard. Clean your fingernails. Make sure your clothes smell good. No

one wants to sit next to and work alongside someone who smells like body odor and fried food.

12. If you invite others to a business lunch, it's your treat.

Lunch meetings give you the opportunity to get to know a colleague better, impress an investor or learn more about a client and their needs. The rule of thumb is that the person who extends the invitation covers the bill.

13. Table manners matter.

You should also be aware of other dining etiquette. Many of the rules that your parents enforced at the dinner table are still in play.

Don't talk with your mouth full or chew with it open.

No elbows on the table.

Don't blow your nose with the napkin. No texting or playing with your phone at the table.

14. Keep your workspace neat.

A desk cluttered with old coffee cups, piles of paper and more Post-It notes than free space, will distract you and annoy others.

If you can't keep your workspace clean and organized, then how will you manage your work? It is a question that colleagues, clients, and others will think.

Your workspace reflects on your professional image as well as on your company, so clean it up. Dust a few times a month, develop a system of organization and promptly discard trash in the bin.

15. Show respect for shared areas and items.

Working in an office often means that you are sharing the space with others. Many offices will have a shared kitchen or at least, a company fridge to store lunches, snacks, and drinks. Don't be the person that steals someone else's food from the company fridge.

Clean up after yourself. If you use the company printer, stapler or other office supplies, then be respectful. Replenish paper and staples for the next person who uses it.

16. Don't overshare but don't be too distant either.

Don't drag your personal life into professional settings. Telling everyone in the office about your cheating boyfriend or your wild, drunken weekend escapades puts others in tense and awkward positions. It's not appropriate for work either, and those who overshare are often fired for it.

People want to know a little bit about you though. If you don't share anything, you will come off as snobbish or distant. It is important that you know which topics are work appropriate and which are not. Talking about the great food and beaches you visited during a recent trip to Thailand may be appropriate. However, sharing that you went skinny dipping after smoking a huge joint while on vacation there is not.

In general, politics and religion are the two topics considered inappropriate in nearly every professional setting. If you have a personal or medical issue that will affect your work, have a private one-on-one meeting with your manager or boss to let them know.

Don't be a nosy neighbor. Remember to respect the privacy and personal space of others. You may be comfortable sharing details about yourself, but others may not be.

17. Be mindful of how others work.

Some people like to work while blasting loud music. Others might need complete silence to focus and concentrate.

In one office space, there is a mix of workers with different styles of working. If you like to listen to music, do it through headphones. If you need silence, try headphones with active noise-cancelling technology.

18. Be aware of nonverbal cues.

You might be surprised by how much your facial expressions, body language and hand movements convey to others. Your facial expressions play a huge role in how others perceive you.

For example, a recent study by Cornell researchers found that people formed impressions of others based on their facial expressions in photographs. Whether the person in the photo was smiling determined if they viewed their personality as negative or positive. Their first impression from the photo even influenced how they felt about the person after meeting them face-to-face months after.

19. Put away your phone.

We've become so attached to our smartphones, tablets and wearable devices that it can be hard to disconnect. However, there are times when pulling out your phone is offensive.

Texting or surfing the Internet on your phone during a meeting is plain rude. Checking your Facebook feed or Twitter notifications in front of a customer reflects poorly on your company and will likely cause you to lose that customer and your job. It's impossible to give someone your full attention when you are distracted by your phone, so put it away. Switch it to silent or turn it off completely.

The rules of business etiquette may change based on the location and culture. If your business is global or you travel internationally for work, research the business culture and etiquette. In some cases, people are understanding if you mess up because of a cultural or language barrier. However, showing that you are considerate of their traditions is appreciated.

Завдання 3. Дайте відповідь: Is it true or false?

1. Don't arrive on time.
2. Dress appropriately for work.
3. Speak kindly of others.
4. Show interest in others.
5. Watch your body language.

6. Don't introduce yourself and others.
7. Interrupt others.

Завдання 4. Вставте слова, де необхідно.

(workspace, handshake, nonverbal, respect, mindful,)

1. Offer and make eye contact.
2. Show.... for shared areas and items.
3. Be..... aware of cues.
4. Be..... of how others work.
5. Keep your.... neat.

Завдання 5. Прочитайте текст і знайдіть нову лексику.

Oral presentation

Giving an oral presentation as part of a speaking exam can be quite scary, but we're here to help you. Watch two students giving presentations and then read the tips carefully. Which tips do they follow? Which ones don't they follow?

It's not easy to give a good oral presentation but these tips will help you. Here are our top tips for oral presentations.

Do:

- Use the planning time to prepare what you're going to say.
- If you are allowed to have a note card, write short notes in point form.
- Use more formal language.
- Use short, simple sentences to express your ideas clearly.
- Pause from time to time and don't speak too quickly. This allows the listener to understand your ideas. Include a short pause after each idea.

- Speak clearly and at the right volume.
- Have your notes ready in case you forget anything.
- Practise your presentation. If possible record yourself and listen to your presentation. If you can't record yourself, ask a friend to listen to you.
Does your friend understand you?
- Make your opinions very clear. Use expressions to give your opinion.
- Look at the people who are listening to you.

Don't:

- Write out the whole presentation and learn every word by heart.
- Write out the whole presentation and read it aloud.
- Use very informal language.
- Only look at your note card. It's important to look up at your listeners when you are speaking.

Завдання 6. Вивчіть нові слова та словосполучення.

Explain what your presentation is about at the beginning:

I'm going to talk about ...

I'd like to talk about ...

The main focus of this presentation is ...

Use these expressions to order your ideas:

First of all, ...

Firstly, ...

Then, ...

Secondly, ...

Next, ...

Finally, ...

Lastly, ...

To sum up, ...

In conclusion, ...

Use these expressions to add more ideas from the same point of view:

In addition, ...

What's more, ...

Also, ...

Added to this, ...

To introduce the opposite point of view you can use these words and expressions:

However, ...

On the other hand, ...

Then again, ...

Завдання 7. Виберіть тему вашої презентації.

My future specialty.

The sale of cigarettes should be made illegal.

Should school students be required to wear a school uniform?

How to become an Olympic champion.

Popular sports in Ukraine.

Практичне заняття № 19

Модуль 2.

Тема: My future profession

Мета: активізація та закріплення знань з правопису, синтаксису та граматики за темою заняття. Формування навичок перекладу речень з англійської мови на українську. Виховання любові до мови.

План:

1. My future profession
- 2.Правила з правопису, морфології, синтаксису та граматики.
- 3.Правил утворення та вживання англійського речення за фахом.
- 4.Виконання вправ ,морфологічний, синтаксичний і граматичний аналіз матеріалу.

Методичні рекомендації:

Під час вивчення теми: My future profession необхідно приділити увагу засвоєнню лексико-граматичного матеріалу. Необхідно знайти та засвоїти функціонуючі лексичні одиниці у тексті за фахом. Бажано пропонувати усний переказ теми і виконання вправ для закріплення отриманих знань.

Практичне заняття 19

Тема: My future profession

Завдання 1. Прочитайте текст та перекладіть.

My Future Profession: Rehabilitation Specialist

My future profession is a rehabilitation specialist, also known as a rehabilitologist. This profession plays a very important role in modern healthcare, as it helps people recover their physical abilities and improve their quality of life after injuries, illnesses, or surgeries. Rehabilitation specialists work with patients of different ages, from children to elderly people, and support them on the path to regaining independence and self-confidence.

A rehabilitation specialist works with patients who have disorders of the musculoskeletal system, nervous system, or chronic diseases that limit movement and daily activities. Such specialists often help people after strokes, fractures, spinal injuries, or sports traumas. Their main task is to restore motor functions, reduce pain, prevent complications, and help patients adapt to new physical conditions. For this purpose, rehabilitologists use therapeutic exercises, massage, physiotherapy, and modern rehabilitation technologies.

An important part of this profession is communication with patients. A rehabilitation specialist must be patient, attentive, and empathetic, because recovery is often a long and difficult process. Psychological support and motivation are as important as physical treatment. The specialist explains exercises, monitors progress, and adjusts rehabilitation programs according to individual needs and health conditions of each patient.

Rehabilitation specialists usually work in hospitals, rehabilitation centers, sports clinics, or private medical institutions. They often cooperate with doctors,

nurses, psychologists, and social workers to achieve the best results. Teamwork allows them to create comprehensive rehabilitation plans and provide effective care.

I have chosen this profession because I want to help people regain their health and return to an active life. I believe that being a rehabilitation specialist requires not only professional knowledge and skills but also kindness, responsibility, and a strong desire to help others. In the future, I hope to become a highly qualified rehabilitologist and make a positive contribution to the healthcare system.

Завдання 2. Дайте відповіді на запитання.

1. What is the role of a rehabilitation specialist in modern healthcare?
2. Who do rehabilitation specialists work with in terms of patients' age and conditions?
3. What types of injuries or illnesses do rehabilitologists often help patients recover from?
4. What are the main goals of rehabilitation treatment mentioned in the text?
5. Which methods and techniques are used by rehabilitation specialists in their work?
6. Why is communication an important part of a rehabilitation specialist's profession?
7. What personal qualities should a rehabilitologist have according to the text?
8. Where do rehabilitation specialists usually work?
9. Why is teamwork important in the work of a rehabilitation specialist?
10. Why did the author choose the profession of a rehabilitation specialist?

Завдання 3. Прочитайте текст та перекладіть.

My thoughts about the profession of trainer

Each person chooses his goal in life, focusing on their ability to ability. I think that people are for something special in life. I would like to become a sport trainer. I want to look good and have good health. I really like to be with people. I like to give advice and help people. Trainer monitors the training of athletes, prepares them for competitions. Trainer leads athletes to a higher level, improving the results.

The main tasks of a trainer is to study and maximum use of individual physical and psychological resources of the sportsman, to properly distribute the load, intensity and mode of training that an sportsman had time to recuperate.

The trainer also needs to know an effective remedy their wards. He or she must also make the best use and methods of physical, technical, tactical, psychological and theoretical training for best results.

The trainer has to see the status sportsman`s health, emotional support and for win. Trainers for people whose love sports are a family man "second mom". Every sport trainer will be happy to see the result of their work.

Every trainer wants to achieve good results, so that his student-sportsman rises to champion. This process requires patience, long years of self-control training for an objective assessment of achievements and failures, the willingness to enhance skills, improve, honesty in work (especially when working with children).

I shall be very glad if I could become a trainer, and I'll do anything to me it happened.

Завдання 4. Дайте відповіді на запитання.

1. Why it is so difficult to choose a profession for yourself?
2. Is it important to make your decision in advance?
3. What are your favourite activities?
4. Have you made the decision of your future profession?
5. What kind of working hours are suitable for you?

Завдання 5. Розкажіть тему “My future profession”.

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Навчальне видання

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