

**Министерство здравоохранения Российской Федерации
ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ АВТОНОМНОЕ УЧРЕЖДЕНИЕ
«НАЦИОНАЛЬНЫЙ МЕДИЦИНСКИЙ ИССЛЕДОВАТЕЛЬСКИЙ
ЦЕНТР ЗДОРОВЬЯ ДЕТЕЙ»
МИНИСТЕРСТВА ЗДРАВООХРАНЕНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
(ФГАУ «НМИЦ здоровья детей» Минздрава России)**

УТВЕРЖДЕНО
на заседании Ученого совета
ФГАУ «НМИЦ здоровья детей»
Минздрава России
протокол № 11-2024 г.

**РАБОЧАЯ ПРОГРАММА ДИСЦИПЛИНЫ (ФАКУЛЬТАТИВ)
2.1.9.2. ИНОСТРАННЫЙ ЯЗЫК В НАУЧНЫХ ПУБЛИКАЦИЯХ**

**НАУЧНЫХ И НАУЧНО-ПЕДАГОГИЧЕСКИХ КАДРОВ В АСПИРАНТУРЕ
ПО НАПРАВЛЕНИЮ ПОДГОТОВКИ: 3.2. ПРОФИЛАКТИЧЕСКАЯ МЕДИЦИНА**

Научная специальность: 3.2.1. ГИГИЕНА

Трудоемкость программы - 72 ак.ч. (2 з.е.)

Форма обучения - очная

Москва, 2024

1. Цели и задачи изучения дисциплины

Целью факультативной дисциплины «Иностранный язык в научных публикациях» является подготовка высокообразованного специалиста, владеющего иностранным языком как средством для осуществления научной и профессиональной деятельности; а также средством межкультурной коммуникации в иноязычной сфере.

Программа может применяться для обучения специалистов, готовых в дальнейшем заниматься исследованиями по профилю своей специальности.

2. Задачи дисциплины:

1. Обеспечение владения учащимися лексическими и грамматическими нормами изучаемого языка, их правильного использования в различных видах речевой коммуникации в научной сфере.

2. Формирование основ языковой и речевой компетенций, позволяющих использовать английский язык как средство для получения профессионально-значимой информации с использованием различных видов чтения, формирование умения работать с научной литературой различного характера на английском языке.

3. Обеспечение владения языком, позволяющим общение с представителями других культур, расширение кругозора обучающихся.

3. Место дисциплины в структуре ООП

Дисциплина «Иностранный язык в научных публикациях» является факультативной в основной образовательной программе высшего образования подготовки научно-педагогических кадров и предполагает вариативность в рамках профиля подготовки исследователя.

4. Требования к результатам освоения дисциплины

Процесс изучения дисциплины направлен на формирование необходимых компетенций в соответствии с программой подготовки научно-педагогических кадров высшей квалификации, готовых в дальнейшем заниматься исследовательской деятельностью по профилю специальности в ФГАУ НМИЦ здоровья детей.

В результате освоения программы аспирант должен продемонстрировать умения:

1. работать с научной литературой различного характера;
2. читать, понимать, осуществлять поиск и обработку полученной информации на английском языке
3. владеть навыками анализа научных текстов на английском языке, навыками оценки различных методов и технологий, используемых иностранными учеными;
4. систематизировать и обобщать результаты научных исследований в различных областях медицины с учетом отечественного и международного опыта;
5. самостоятельно планировать и проводить научно - исследовательскую работу по своему профилю на материалах статей и публикаций на английском языке с целью получения научных данных;
6. представлять результаты научной деятельности в устной и письменной форме на английском языке;
7. использовать полученные знания для научной коммуникации на английском языке;
8. участвовать в работе научно- исследовательских коллективов по решению научных задач.

В процессе изучения дисциплины обучающиеся овладевают навыками по всем разделам языковой деятельности.

Фонетика

Уметь использовать интонационное оформление предложения; словесное, фразовое и логическое ударение в чтении и устной речи.

Лексика

При работе над лексикой учитывается специфика медицинских, научных текстов по различным специальностям, специальная терминология.

К концу обучения лексический запас должен составлять не менее 2000 лексических единиц. Рекомендуется составление терминологического словаря, включающего до 900 единиц лексики общенаучного словаря.

Учащийся должен владеть основной терминологической лексикой; знать основные модели словообразования английского языка; уметь использовать их в различных видах речевой деятельности.

Чтение.

Учащийся должен знать особенности научного стиля английского языка. Уметь самостоятельно работать с базами научной информации на английском языке; уметь использовать различные виды чтения для обработки большого объема информации, читать оригинальную научную литературу, опираться при этом на изученный языковой материал и профессиональные знания.

Учащийся должен владеть приемами различных *видов чтения*:

- *изучающего чтения*, предполагающего полное и точное усвоение прочитанного, с установкой на выделение смысловых блоков, обобщение и анализ информации;

- *ознакомительного чтения* с целью извлечения и восприятия основной информации, определения рассматриваемых в тексте вопросов и основных положений автора;

- *просмотрового чтения*, направленного на понимание основного содержания текста с целью определения, нужен ли этот текст для более подробного изучения, какая информация может пригодиться в зависимости от задач;

- *поискового чтения*, направленного на быстрое нахождение определенной информации и получение самого общего представления о содержании текста.

Кроме того, важно развитие навыков чтения вслух, в том числе навыков произношения основных терминов, выделения важной и второстепенной информации при чтении с помощью интонации.

Говорение

К концу обучения учащийся должен владеть подготовленной и неподготовленной монологической речью в виде резюме, сообщения, доклада. Диалогической речью в ситуациях научного, профессионального и бытового общения. Уметь выражать свое мнение, знать и уметь использовать стилистические обороты и терминологию научного стиля. Иметь навыки выступления перед аудиторией с сообщениями, презентациями, докладами по различным темам.

При этом рассматриваются:

1. Вопросы, связанные с различными научными исследованиями. Особенности исследований.
2. Основные трудности исследований
3. Обсуждение результатов исследования, используемых методов и технологий.
4. Устные обсуждения прочитанных статей и материалов, проработанного

материала.

Аудирование.

Учащийся должен уметь понимать оригинальную монологическую и диалогическую речь общенаучного характера, опираясь на изученный языковой материал, и профессиональные знания.

Письмо

Учащийся должен выполнять письменные упражнения, уметь составлять план прочитанного материала на иностранном языке, излагать содержание прочитанного в форме резюме, реферата, тезисов; уметь

составлять текст сообщения, доклада, выступления.

Грамматика

Учащийся должен знать и практически владеть грамматическим минимумом по иностранному языку, необходимым и достаточным для осуществления устной и письменной коммуникации в профессиональной и учебной сферах. Рекомендуется использование грамматических конструкций, характерных для научного стиля в устной и письменной речи.

5. Структура и содержание дисциплины

5.1. Объем дисциплины и виды учебной работы

Виды учебной деятельности	Всего часов
Общая трудоемкость дисциплины	72 ч.
Обязательная аудиторная учебная нагрузка	54 ч.
В том числе:	
Практические занятия	18 ч.
Самостоятельная работа	36 ч.
Промежуточная аттестация	18 ч.
Вид итогового контроля: тестирование, переводы статей, написание тезисов	

Специфика обучения иностранному языку, в том числе в процессе подготовки к дальнейшей научно-исследовательской работе в ФГАУ НМИЦ здоровья детей, не предусматривает его поэтапное преподавание; обучение включает одновременно все виды речевой деятельности (чтение, говорение, аудирование, письмо, а также грамматический материал). В связи с этим невозможно указать одну тему практического занятия, точное количество часов, отводимое для каждого вида деятельности в отдельности. Материал объединяется в соответствии с тематикой обсуждаемых проблем и задачами занятия.

5.2. Содержание разделов дисциплины

Практические занятия включают работу над произношением, изучение новой лексики, выполнение грамматических и лексических упражнений, чтение и перевод различных текстов, их анализ и разбор грамматических конструкций, ответы на вопросы, пересказы, самостоятельные сообщения на разные темы, тренировку монологической и диалогической речи - большое внимание уделяется развитию навыков устной речи. Интерактивными видами деятельности являются выступление с докладом на научно-теоретической конференции или мини-конференции.

5.3. Самостоятельная работа

Самостоятельная работа включает в себя следующие элементы: проработка учебного материала, выполнение домашних заданий, выполнение упражнений и тестовых заданий по грамматике и лексике, работа с оригинальной медицинской литературой, письменные и устные переводы, составление рефератов; самостоятельный поиск и обработку материалов из интернета, проработку разговорных тем, подготовку презентаций.

Самостоятельная работа осуществляется в аудитории под руководством преподавателя, и во внеаудиторное время, в том числе и в библиотеке, включая электронную библиотеку. Большое место занимает индивидуальная поисковая деятельность, работа с Интернет-ресурсами. Оценка результатов самостоятельной работы организуется в двух формах: самоконтроль и контроль со стороны преподавателя. Проверка перевода индивидуальных текстов, работы производится на занятиях.

6. Система и формы контроля

Текущий контроль знаний производится на каждом занятии. Он осуществляется в виде проверки устных и письменных домашних заданий, устных опросов по тексту; письменных переводов, бесед по устным темам, ответов на вопросы, проверки составленных рефератов, презентации доклада, лексико-грамматического тестирования.

В результате занятий учащийся овладевает умением:

- письменно переводить научные статьи с английского языка на русский и краткие резюме и аннотации с русского на английский, анализировать научные тексты.

- участвовать с определенной степенью свободы в диалогическом и монологическом общении на изучаемом языке, представлять результаты своей деятельности в виде краткого сообщения, презентации, следуя при этом нормам изучаемого языка.
- понимать на слух высказывания в форме диалогической и монологической речи.
- писать развернутые тексты (статьи) и сжатые тексты (планы, резюме, рефераты), касающиеся сферы деятельности учащегося.

6. Критерии оценки качества знаний

В конце учебного года проводятся итоговые занятия для проверки знаний.

В аудитории выполняется:

- письменный перевод текста по специальности или научной статьи;
- проводится опрос по представленному письменному переводу текстов и научных статей;
- проводится беседа относительно профессиональной деятельности учащегося;

В качестве дополнительной возможности может проводиться итоговая конференция, на которой учащиеся делают презентации по различным темам. (5-7 минут)

При этом учащийся должен показать владение орфографической, лексической и грамматической нормами изучаемого языка и правильно использовать их.

Вопросы для беседы

Introduce yourself

1. How old are you?
2. Where did you study after school?
3. What Institute or University did you graduate from
4. What do you know about the history of your University?
5. Where is the University situated?
6. What famous scientists worked at the University?

Medical Institution

1. What clinic (hospital, research center) do you work at?
 2. When was it founded?
 3. What departments are there in your clinic, Centre, etc?
 4. Who is the head of the clinic?
 5. What is the clinic's equipment?
 6. What research work do specialists of your clinic carry out?
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1. What laboratory department do you work at?
 2. Who is the head of your laboratory?
 3. What problems are studied in your laboratory? What kind of research does your laboratory carry out?
 4. What equipment do you use in your laboratory?

Working day

1. How many patients do you usually have?
2. What are your professional responsibilities?
3. How long does your working day last?
4. How does your working day begin?
5. What do you do after making rounds?
6. What diseases do you treat?
7. What methods do you use in your work?
8. How do you treat your patients?
9. What lectures and practical classes do you attend?
10. How many 24 – hour duties a month do you have?

Review of a scientific book/article

1. Are there a lot of publications on the subject/theme?
2. What English books or journals on the problem have you read?
3. What is the most useful and valuable publication on the problem of your interest?
4. Who is the author of this book/article?
5. Where and when was it published?
6. What problems do these books/publications deal with?
7. Who is the book addressed to?

Describing a disease

1. What pathologies are you dealing with in your practice?
2. What is this disease characterized by?
3. Who does this disease usually attack?
4. What factors usually promote the onset of the disease?
5. What are the main symptoms of the disease?
6. When are the attacks of pain more common?
7. How long does the disease usually last?
8. What organs are involved in the process?
9. What methods of treatment do you use?

History taking

1. What is a case history of a patient?
2. What data does the doctor ask the patient?
3. What is the case history of the present illness?
4. What information do the questions about past illnesses help to obtain?
5. What does the family history contain?
6. What additional questions about different systems may the physician ask?
7. How do you examine your patient?
8. What questions do you usually ask your patient during examination?
9. What instructions do you usually give your patient in the course of examination?

Medical specialities

1. Is it a new area of medicine?
 2. What field of medicine do you work in?
 3. What does it deal with?
 4. When did it begin to develop?
5. What kinds, branches and directions are there in it?
 6. What methods of examination are there in it?
7. What procedures do specialists in this field perform?
8. What instruments and devices are used in it?
9. What are the most prominent scientists working in this field of medicine?

Scientific forum

1. Have you ever taken part in any Symposiums, Conferences, Seminars?
2. Where and when was it held?
3. Did you send any short abstract of your report?
4. What was the main aim of this scientific meeting?
5. What was the programme of the Symposium?
6. What is an e-posters session?
7. What were working languages of the Symposium?
 8. Was simultaneous translation provided?

Для письменного перевода и устного резюме на английском языке, передачи содержания используются оригинальные тексты,

Примеры текстов для письменного перевода и работы над ними

Текст 1.

'Truly remarkable' drug helps motor neurone disease

Scientists say they have slowed and even reversed some of the devastating and relentless decline caused by motor-neurone disease (MND).

The treatment works in only 2% of patients but has been described as "truly remarkable" and a "real moment of hope" for the whole disease.

One leading expert said it was the first time she had seen patients improve - but this is not a cure.

MND, also known as amyotrophic-lateral sclerosis (ALS), is caused by the death of the nerves that carry messages from the brain to people's muscles. It affects their ability to move, talk and even breathe.

The disease dramatically shortens people's lives and most die within two years of being diagnosed.

Les Wood, 68, from South Yorkshire, was the first British patient in the international trial, published in the New England Journal of Medicine.

MND had forced him, an electrician, and his wife, Val, a nurse, to give up their careers, as walking and using his hands became more difficult.

A mutation in a specific part of his genetic code leads to the production of a toxic form of the protein SOD1, which kills motor neurones. These mutations cause about 2% of MND cases but one in five of those that run in families.

The trial on 108 people, funded by pharmaceutical company Biogen, used an innovative type of medicine called gene silencing. The drug tofersen effectively mutes the defective DNA so less SOD1 is produced.

The treatment requires monthly lumbar punctures, in which a needle is passed between the bones in the spine to put the drug directly into the spinal fluid.

After six months of therapy, those getting the drug had lower levels of SOD1 but were physically no better.

After a year, however, it was slowing the pace of the disease - and some patients' symptoms improved.

Les had his first dose in 2016 - and in home videos recorded a year later, he said: "I could genuinely say, hand-on-heart, I felt better.

"I actually walked in the house, without sticks, I thought, 'This drug's working.'"

Now, he says: "MND is a progressive disease - so although my symptoms have continued to worsen, I would not be without the drug and the difference I know it has made to my quality of life."

For Prof Dame Pamela Shaw, the director of the Neuroscience Institute, in Sheffield, and a veteran of more than 25 clinical trials in the disease, this was something incredible.

She told me: "This is the first where patients participating have reported improvement in their motor function - 'I can walk without my sticks. I can go up my garden steps, which I haven't been able to do for two years. I can write my Christmas cards this year, which I couldn't do last year.'"

The results were a "real moment of hope" and the start of a "new era" in which we can expect progress in other forms of MND too.

In the early stages, the researchers say, the drug is stopping further damage. It cannot lead to the formation of new motor neurones and the remaining ones may be taking a year to recover and form new connections with muscle tissue.

"It may take time for people to heal from the damage that has already been caused," said Dr Timothy Miller, the principal investigator, at Washington University.

"The vast majority of people living with ALS experience a relentlessly progressive downhill course, so the stabilisation of function is truly remarkable."

The treatment directly targets the fundamental cause of this type of MND so it will do nothing for the 98% of patients without the SOD1 mutation - although, it is hoped the other mutations, in more than 30 different genes, implicated could be targeted in a similar way.

"The approach used, of reducing proteins harmful in MND, is likely to have wider applications for more common types of MND," said Prof Chris McDermott, of University of Sheffield.

Tofersen is being considered for regulatory approval in the US and provided free in the UK ahead of a decision on whether the NHS should pay for it.

MND Association research director Dr Brian Dickie said the treatment had the "potential to deliver a significant benefit" for a relatively rare group of people with the disease.

The big question, he added, was whether to give the drug in the earliest stages of the disease, when it "may be even more effective", or even to healthy people with the SOD1 mutation to "prevent the onset of disease".

Текст 2.

Abstract Background:

The aim of this study was to elucidate the epidemiological features of carbapenemase-producing Enterobacterales (CPE) in the pediatric and neonatal patients, to describe clinical characteristics of neonatal patients with CPE infections, and to assess risk factors for neonatal rectal colonization with CPE. Results: A total of 439 carbapenem-resistant Enterobacterales (CRE) isolates recovered from 367 infant patients were characterised, including 397 isolates of *Klebsiella pneumoniae* (KP) and 42 isolates of *Escherichia coli* (EC). Carbapenemase gene blaNDM-1 was the most commonly detected, accounting for 86.56% (n=380), followed by blaKPC-2 (9.11%, 40) and blaIMP-4 (4.33%, 19). MLST analysis showed 17 different STs detected within CPKP isolates, with ST20, ST2068, ST36 and ST17 being the most frequently isolated types. Eleven STs were identified within CPEC isolates, with ST325 being the dominant types. Eight isolates of NDM-1 producing KP, belonging to ST23, were identified as having hypervirulent traits. The main infections caused by CPE were pneumonia (n=90) and sepsis (n=16).

All infected patients received monotherapy, with meropenem and ciprofloxacin being the most commonly used antibiotics. All pneumonia patients were cured or improved after treatment. Of the 16 patients with sepsis, 9 were cured or improved, 3 died, and 4 abandoned treatment without any clinical improvement. The rectal prevalences of CPE in the 0–3 days old (DO), the 4–28 DO, and the 29 DO–1 year old groups were decreased from 15.31%, 27.37% and 14.29% in the first stool screening period to 11.78%, 19.59% and 4.07% in the second stool screening period, respectively. Multivariate analysis showed that cesarean section, acidosis, respiration failure, gastric lavage and enema were independent risk factors for rectal colonization in the 0–3 DO group, whereas cesarean section, cephalosporins, gastric lavage and residence in rural area were independently associated with rectal colonization in the 4–28 DO group.

The implementation of a series of evidence-based control measures eventually contained the CPE transmission. Conclusions: Continued vigilance, epidemiological studies, and multimodal infection prevention strategies are urgently needed due to frequent importations. Keywords: Carbapenemase-producing, *Klebsiella pneumoniae*, *Escherichia coli*, Risk factors, Infection prevention

Текст 3.

Clinical characteristics of neonatal CPE infection

During the study period, a total of 115 patients aged less than 3 days had nosocomial CPE acquisitions, 25 of whom had respiratory tract colonization. The remaining patients (n=90) developed infections caused by CPE, in which pneumonia and sepsis accounted for 84.44% (76/90) and 15.56% (14/90), respectively. The demographic and clinical characteristics of the 76 patients with pneumonia were summarized in Table 2. The great majority of patients were males (72.37%, 55/76), 80.26% (61/76) were born prematurely, and 67.11% (51/76) were born by cesarean delivery. The main comorbid conditions were anemia (56.58%), hypocalcemia (52.63%), hypoxic-ischemic encephalopathy (48.68%), pulmonary membrane disease (46.05%), and respiratory failure (42.11%). All but two patients were given gastric lavage, 72.37% (55/76) had received mechanical ventilation, and 31.58% (24/76) had peripherally inserted central catheters placed. All 76 infected patients received antimicrobial treatment before CPE isolation, with β -lactam/ β -lactamase inhibitor combinations (77.63%) being the most frequently used antibiotics, followed by cephalosporins (31.58%) and carbapenems (23.68%). Among the CPE groups with different carbapenemase types, the most commonly used antibiotics varied prior to CPE isolation, with β -lactam/ β -lactamase inhibitor combinations (100%) in the IMP-4 and KPC-2 groups, and β -lactam/ β -lactamase inhibitor combinations (58.54%) and cephalosporins (56.10%) in the NDM-1 group. After the culture results were obtained, 81.58% (62/76) changed antimicrobial therapy. Meropenem was the most frequently administered antibiotic, especially in the KPC-2 group (100%) and NDM-1 group (79.41%), followed by ciprofloxacin in the IMP-4 group (58.33%) and NDM-1 group (17.65%). Of the 76 patients treated with antibiotics, all were cured or improved regardless of whether the antibiotic regimen was changed.

Fourteen patients aged less than 3 days, 7 males and 7 females, developed sepsis, including 2 cases with IMP-4 KP, 5 cases with KPC-2 KP and 7 cases with NDM-1 KP. Among these patients, 8 were premature and 10 were born via a cesarean deliveries. The mean gestational age was 234.57 ± 17.51 days and the mean birth weight was 1890.00 ± 678.75 g. The mean length of hospital stay was 23.43 ± 17.52 days. Twelve patients were given gastric lavage, 7 received nasogastric tube feeding, 9 had been subjected to mechanical ventilation, and 5 had peripherally inserted central catheters placed. All the 14 patients received β -lactam/ β -lactamase inhibitor combinations treatment before CPKP isolation, two of whom also received cephalosporins treatment. Antimicrobial therapy was changed in 12 patients after culture results were available. Among them, one NDM-1 KP infected patient was treated with ciprofloxacin and cured, 11 were treated with meropenem, 8 of them were cured or improved, 2 died from IMP-4 KP infections, and 1 died from NDM-1 KP infection. The remaining two KPC-2 KP infected patients who continued to receive β -lactam/ β -lactamase inhibitor combinations abandoned treatment without any clinical improvement. In the 4–28 DO group, 16 of 25 patients contracted infections caused by CPKP, including 2 KPC-2 KP sepsis, 6 KPC-2 KP pneumonia, 7 NDM-1 KP pneumonia and 1 IMP-4 KP pneumonia. The infected patients were 11 males and 5 females, with a mean age of 17.69 ± 7.21 days. The mean gestational age of the patients was 250.38 ± 22.66 days, and the mean birth weight was 2387.81 ± 875.04 g. The mean length of hospital stay was 14.88 ± 5.34 days. Three patients were preterm and six were cesarean deliveries. Ten patients received nasogastric tube feeding and 2 received mechanical ventilation. None of the patients received peripherally inserted central catheters. After CPKP isolation, 11 patients were treated with meropenem, 3 treated with ciprofloxacin, and 2 treated with β -lactam/ β -lactamase inhibitor combinations. Following antibiotic treatment, all pneumonia patients, including 5 community-acquired infections and 9 hospital-acquired infections, were cured or improved, while the two nosocomial sepsis patients (one male and one female) abandoned treatment without clinical improvement after meropenem therapy.

Текст 4.

Epidemiological change of CPE

in neonatal patients In April 2013, a sporadic epidemic of NDM-1 KP ST39 clone occurred in neonatal ward, involving 13 cases less than 3 days old, all of whom were nosocomially acquired. This clone was initially isolated in March 2013 from a 5-month-old child with community-acquired pneumonia in the pediatric ward and might subsequently be transmitted to the neonatal ward via rotating medical staff. But it disappeared in December 2013. In January and July 2014, IMP-4 KP ST307 and KPC-2 KP ST11 clones were separately introduced into the ward and then spread rapidly, affecting 18 and 37 clinical cases, respectively. Between November and December 2014, NDM-1 KP ST20 was detected in three neonatal patients. Despite the implementation of basic infection control practices, especially reinforced hand hygiene before and after patient contact, the spread of these clones could not be controlled. Routine environmental screening showed that CPKP could be isolated from the ward environment and the hands of medical staff, including 2 isolates of CPKP ST39 and CPKP ST20 from rubber ring of incubators, 2 isolates of CPKP ST39 and CPKP ST307 from humidified water, 2 isolates of CPKP ST20 and CPKP ST11 from incubator handles, 1 isolate of CPKP ST20 from object surface and 1 isolate of CPKP ST20 from medical staff hands. This suggested an important model of transmission via the hands of healthcare workers from the contaminated environment to new patients. Considering that the neonatal ward and ICU were located on the same floor, and that adult ICU at that time had experienced the epidemic of KPC-2 KP ST11 clones, it was speculated that there existed an important route of ‘non-patient transfer’ transmission between the two wards. So a new ward was opened in another building at the end of 2014 to receive new admissions. Those who had been affected remained in the original ward until they were discharged. Extensive environmental screening cultures were performed one month before and after admission to the new ward, but did not yield any CRE. In January 2015, NDM-1 K

Примеры текста для передачи содержания

Текст 1

Esophagoscopy

is a procedure in which a flexible endoscope is inserted through the mouth or, more rarely, through the nares and into the esophagus. The endoscope uses a charge-coupled device to display magnified images on a video screen. The procedure allows visualization of the esophageal mucosa from the upper esophageal sphincter all the way to the esophagogastric junction (EGJ).

This procedure is one of several procedures that fall under the category of upper endoscopy, including gastroscopy, esophagogastroduodenoscopy (EGD), and enteroscopy. Esophagoscopy alone is uncommon: It is generally performed as part of a more complete upper endoscopic procedure in which the esophagus, stomach, and portions

of the small intestine are explored endoscopically.

In the United States, esophagoscopy is usually performed with moderate sedation, which is achieved by administering a narcotic and benzodiazepine in combination. In Europe and Asia, however, the procedure is commonly performed without sedation. Topical anesthesia is sometimes implemented to improve patient tolerance and comfort. Very rarely, general anesthesia is used in patients who are difficult to sedate or are at higher risk of airway compromise. There is some evidence for the effectiveness of unsedated esophagoscopy in monitoring pediatric esophageal disease.

Текст 2.

Ulcerative Colitis in Children

Ulcerative colitis (UC) is a disease characterized by remitting and relapsing inflammation of the large intestine. UC, Crohn disease (CD) and indeterminate colitis account for the disorders that represent the inflammatory bowel diseases (IBDs).

Many patterns of presentation are possible within the pediatric age group. The hallmark symptoms of UC include abdominal cramping, diarrhea, and bloody stools, but physical symptoms vary with extent, duration, and severity of the disease. UC affects the rectum, with contiguous involvement that can include the entire large intestine. The disease phenotype can be characterized according to the Paris Classification, which divides the disease into isolated proctitis, left-sided colitis, extended colitis, and pancolitis. Extraintestinal manifestations of UC, such as joint pain, ophthalmic conditions, and hepatobiliary disease may occur in some patients.

In the United States, 2 of every 100,000 children (age's 10-19 y) are affected, and 20-25% of all cases UC occur in persons aged 20 years or younger and the disease is increasing among young children (< 5 y).

Colonoscopy with biopsy is the most valuable procedure in evaluating patients with inflammatory bowel disease. Typical findings in someone with UC are inflammation that is first evident in the rectum and that proximally extends in a contiguous fashion.

The therapeutic goal is to gain clinical and laboratory control of the disease with minimal adverse effects while permitting the patient to function as normally as possible. Approximately 5-10% of patients with UC require acute surgical intervention because of fulminant colitis refractory to medical therapy. Total proctocolectomy is often curative in patients with UC and removes the risk of colonic adenocarcinoma

The mainstay of outpatient management is anti-inflammatory therapy with 5-aminosalicylic acid (5-ASA) preparations, such as sulfasalazine and mesalamine. Acute flares of UC in the pediatric population tend to respond well to corticosteroids, but numerous adverse effects prevent long-term use. Immunomodulatory agents and tumor necrosis factor inhibitors are also used to alleviate exacerbations of disease and increase patient comfort, as are newer therapies (eg, vedolizumab), and they can be a viable treatment option when the patient is steroid-dependent or steroid-refractory.

Текст 3.

Scientists Restore Some Activity in Brains from Dead Pigs

Scientists say that the brains of animals and humans risk severe damage without blood flow and oxygen. But, researchers say they were able to restore some activity in the brains of pigs that had been killed four hours earlier.

Nenad Sestan of the Yale School of Medicine in New Haven, Connecticut was one of the researchers. He said, by medical definitions, the brains were not "living brain(s)." He added that the brains could not think or sense anything.

The researchers, however, found that cells within brains that have lost their supply of blood and oxygen could survive longer than scientists had believed.

They said the research might lead to new medical treatments for stroke and other conditions. It also provides a new way to study the brain and how drugs work in it.

The research was supported mostly by the National Institutes of Health and published this week in the journal Nature.

The 32 brains in the study came from pigs that had been killed for food. The scientists put the brains into a device in their lab. Four hours after the animals died, they began pumping a specially designed blood substitute through the organs.

After six hours, scientists found that individual brain cells in one area of the brain had continued to keep important details of their structure. And when they sent electric signals to the brains, the cells responded in a way that showed viability.

The scientists studied the artificial blood before and after it entered the treated brains. They found the brain cells were absorbing blood sugar and oxygen and producing carbon dioxide: a signal that they were working. They also found that blood pathways in treated brains reacted to a drug that makes them wider.

But, the brains did not show large amounts of activity that would be a sign of **consciousness**. The scientists said restoring consciousness was not the goal of the study. And they do not know whether it is possible.

The scientists said they had no plans to try their methods on human brains at this time. However, they are now looking to keep the study for longer than six hours of treatment.

Christof Koch is president of the Allen Institute for Brain Science in Seattle, Washington. He did not take part in the study, but he said he was surprised by the results, especially since they came from such a large animal.

He said the study could increase our knowledge “to bring people back to the land of the living” after a drug overdose. He suggested it also could help with treatments for when the brain has not received enough oxygen for an hour or two.

Примеры тестов для текущего контроля

Тест 1

I. Выберите правильный вариант. (Только один вариант является верным).

1. I ... glasses since I was a child.
a) wear; b) wore; c) am wearing; d) have been wearing.
2. When the phone rang, I ... dinner.
a) cook; b) was cooking; c) had been cooking; d) have been cooking.
3. He usually had dinner at 4 p.m., ...?
a) had he; b) hadn't he; c) did he; d) didn't he.
4. He works ... and makes good progress.
a) hard; b) hardly; c) good; d) badly.
5. He reminds me ... someone I knew in the army.
a) of; b) to; c) from; d) about.
6. Mary is here. Where are ...?
a) other; b) others; c) the others; d) another.
7. What ... bad weather we are having today!
a) the; b) a; c) an; d) —.
8. Did you read ... English books at school?
a) some; b) many; c) much; d) none.
9. I want to know what
a) are you doing; b) were you doing; c) will you do; d) you are doing
10. I've made ... mistakes now than I made last time.
a) few; b) a few; c) fewer; d) less.
11. Can ... of you help me?
a) some; b) any; c) somebody; d) anybody.
12. This translation is twice as
a) easy; b) easier; c) the easiest; d) much easier.
13. We ... two compositions this month.
a) write; b) wrote; c) were writing; d) have written.
14. I had a feeling that somebody ... there before.
a) is; b) was; c) has been; d) had been.
15. She won't see him ... he phones her.
a) except; b) after; c) unless; d) because.
16. ... only one theatre and two cinemas in this city ten years ago.
a) there is; b) there was; c) there are; d) there were.
17. My watch....
a) stops; b) has stopped; c) have stopped; d) stop.
18. Do you know when he ...?
a) comes; b) will come; c) shall come; d) come.
19. I don't have any pets. Neither
a) she does; b) does she; c) is she; d) does she have.
20. His parents didn't let him ... TV late.
a) to watch; b) watch; c) watching; d) watched.

II. Переведите на английский язык:

1. Москва была основана Юрием Долгоруким.
2. Небо темное, может пойти дождь.
3. Мы не знали, что он собирается нас навестить.
4. Кто знает прогноз погоды на завтра?
5. Нам не пришлось долго ждать их.

II. Выберите правильный вариант:

1. Mother doesn't have much free time. Neither
a) do I; b) do I have; c) I do; d) I am.
2. It has been snowing all day. I wonder when
a) will it stop; b) does it stop; c) it stops; d) it will stop.
3. This is ... useful advice. a) such; b) such a; c) so; d) so a.
4. I have two rooms. One is a bedroom, and ... is a sitting room.
a) other; b) the other; c) another; d) others.
5. He ... his hat to welcome us.
a) rose; b) has risen; c) raised; d) is rising.
6. I haven't the slightest idea of what I ... to do in this situation.
a) could; b) ought; c) would; d) should.
7. They let their children ... different pets at home.
a) keeps; b) keeping; c) keep; d) to keep.
8. You have to support your children ...?
a) have you; b) haven't you; c) do you; d) don't you.
9. We all... mistakes when we are young.
a) do; b) make; c) did; d) made.
10. Something is wrong with the watch. Can you repair ...?
a) they; b) it; c) them; d) its.
11. She looks ... today.
a) happily; b) happy; c) nicely; d) beautifully.
12. I'll give the book back as soon as he ... it.
a) will want; b) want; c) wants; d) doesn't want.
13. When the phone rang I... a bath.
a) had; b) was having; c) had been having; d) have been had.
14. He ... whenever he goes to the theatre.
a) is boring; b) has bored; c) bores; d) is bored.
15. If it ... rain, we'll have the party outside.
a) won't; b) wouldn't; c) doesn't; d) didn't.
16. When I arrived at the party, Tom ... home.
a) had already gone; b) has already gone; c) already went; d) have already gone.
17. Is that the man ... yesterday?
a) you're met; b) met you; c) you met; d) has met you
18. We couldn't find the cat ...
a) any; b) nowhere; c) anywhere; d) everywhere.
19. He won't let anyone ... his records.
a) to touch; b) to have touched; c) touch; d) touching.
20. ... already dark outside.
a) There was; b) It was; c) There had been; d) It had been.

V. Переведите на английский язык:

1. Что ты делаешь сегодня вечером?
2. Я опоздала на десять минут.
3. Кто из вас самый старший в семье?
4. Можно мне еще чаю?
5. Мы спросили, сколько времени нам потребуется, чтобы добраться поездом до Ярославля.

Test 2.

Choose the right variant

Which is a part of a digestive system?

- Heart
- Brain
- Intestine
- Lungs

An instrument for injections is called _____

- A syringe
- A pipette
- An
- A bedpan

endoscope

Tuberculosis is a disease that affects person's _____

- Eyes
- Liver
- Lungs
- Pancreas

Which word combination is odd?

- Circulatory system
- Urinary system
- Central nervous system
- Open system

BMI is referred to as _____

- Big mouth intake
- Blood measuring instrument
- Body mass index
-

Bowel movements index

A _____ performs operations.

-
- Surgeon
-
- Pediatrician
-
- Cardiologist



GP

_____ are tube-like organs in our bodies that transport waste from the stomach to the anus.



Bladders



Spleens



Kidneys



Intestines

A femur is a part of a(n) _____



Arm



Head



Leg



Face

What is the name of the doctor who induces unconsciousness in patients?



Neurologist



Optometrist



Cardiologist



Anaesthesiologist

If a tumor is not dangerous, it is considered _____



Benign



Malignant



Kind



Harmless

If a person has blepharitis, he/she has problems with the _____



Intestine



Eyes



Heart



Lungs

Which word is odd?



Cavity



Decay



Enamel



Pupil

Which of these is NOT a part of the eye?



Iris



Retina

Rib

Lens

The act of receiving a person into the hospital is called _____

Dismissal

Admission

Acceptance

Adoption

The state of not being able to have children is called

Infertility

Pregnancy

Conception

Conceiving

A feeling of sickness that makes a person want to vomit is called

Nausea

Disgust

Faintness

Repulsion

The injection of blood taken from donor into the bloodstream of a recipient is called

Blood circulation

Bloodflow

A blood transfusion

Bloodletting

8. Информационное обеспечение обучения Основная литература:

1. Английский язык для медиков: учеб. пособие для студентов, аспирантов, врачей и научных сотрудников / М. С. Муравейская, Л. К. Орлова. - 15-е изд., стер. - М.: ФЛИНТА: Наука, 1999. – 384 с.

2. Английский язык для студентов-медиков: учебное пособие для вузов / Н.И. Кролик М.: ООО “Издательство Астрель”: Издательство АСТ”, 2003. -128 с.

3. Сборник текстов и упражнений для развития навыков устной речи на английском языке по вопросам учебной, научной и клинической работы. Методическое пособие для аспирантов медицинских вузов. Российский Государственный медицинский университет, 2008

4. Professional English in Use. Medicine. Eric H. Glendinning, Ron Howard. Cambridge University Press, 2007

5. Сборник упражнений по английской грамматике к базовому курсу “Easy English” / учебное пособие для учащихся средней школы и студентов неязыковых вузов / Выборова Г.Е, Махмурян К.С – М.: АСТ – Пресс КНИГА, 2005 – 176 с.

9. Электронные информационные ресурсы

- ЭБС «Консультант студента. Электронная библиотека медицинского вуза».
<http://www.studentlibrary.ru>

- ЭБС «Консультант врача. Электронная медицинская библиотека».
- База данных «ClinicalKey». <https://www.clinicalkey.com>
- Электронно-библиотечная система «Elibrary», доступ к периодическим изданиям <https://www.elibrary.ru/defaultx.asp>
- База данных рефератов и цитирования SCOPUS <https://www.scopus.com>
PubMed <https://www.ncbi.nlm.nih.gov/nlmcatalog/journals>