

ZAPOROZHYE STATE MEDICAL UNIVERSITY

Department of Psychiatry, psychotherapy, general and medical psychology,
addiction and sexology

Approved on the methodical conference of department
psychiatry, psychotherapy, general and medical psychology,
addiction and sexology

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“ _____ ” _____ 2015 year

METHODOLOGICAL DEVELOPMENTS

for practical classes on the topic 'Epilepsy' for the 4th year students of the Medical
Faculty (specialty "medicine")

Topic: "Epilepsy"

Hours - 4 academic hours

I. Background:

Epilepsy (Greek. Epilepsia - seizure, seizure) - Polyetiological chronic disease which is manifested seizures and other types of seizures, mental illness and personality disorders characteristic.

Epilepsy - one of the ancient diseases of mankind. Hippocrates first described as a disease of the brain or "sacred disease".

International statistics shows the incidence of 5 to 8 per 1000 population.

II. Whole lessons:

A. Develop the concept of epilepsy and paroxysmal neepileptychnyh states, principles of differential treatment of epilepsy, emergency help epistatusi. (a-I)

B. Know:

- 1). Pathogenetic mechanisms of disease (a-II);
- 2). Classification of seizures (a-II);
- 3). The principles of differential treatment of epilepsy (a-II);
- 4). Epileptic status (diagnostics, emergency assistance) (A-II);
- 5). Differential diagnosis of epilepsy and paroxysmal states neepileptychnyh (and II);

6). Treatment of paroxysmal and treatment mizhnapadnyy period (and II);

C. able to:

- 1). Inspect a patient with epilepsy (a-III);
- 2). Conduct clinical and research neurological patients with epilepsy (a-III);
- 3). Analyze the results of clinical and functional research methods (a-III);
- 4). Determine patient management with epilepsy (a-III).

D. Develop creative skills in the clinical and laboratory research tool when examining patients with epilepsy (a-IV).

III. The goals of personal development:

Priority mastering of eminent scientists in the study of the physiology and pathology of epileptic states. Education contemporary clinical thinking, deontological approach to the formation of patients with epilepsy. The use of psychotherapeutic effects in patients with epileptic syndromes. The formation of students of philosophical ideas about the activities of the central nervous system in normal and pathological conditions.

IV. Interdisciplinary integration:

Discipline	Know	Be able
I. Preliminary discipline (securing):		
Normal brain anatomy	Structure	Determine the location of abnormal cells in the CNS. Schematically show parts of the brain.
Normal physiology	Normal physiology neuron function and conduction of nerve impulses	Determine the function of different brain regions
Biochemistry	Main neurotransmitters	Explain the role of neurotransmitters in paroxysmal states

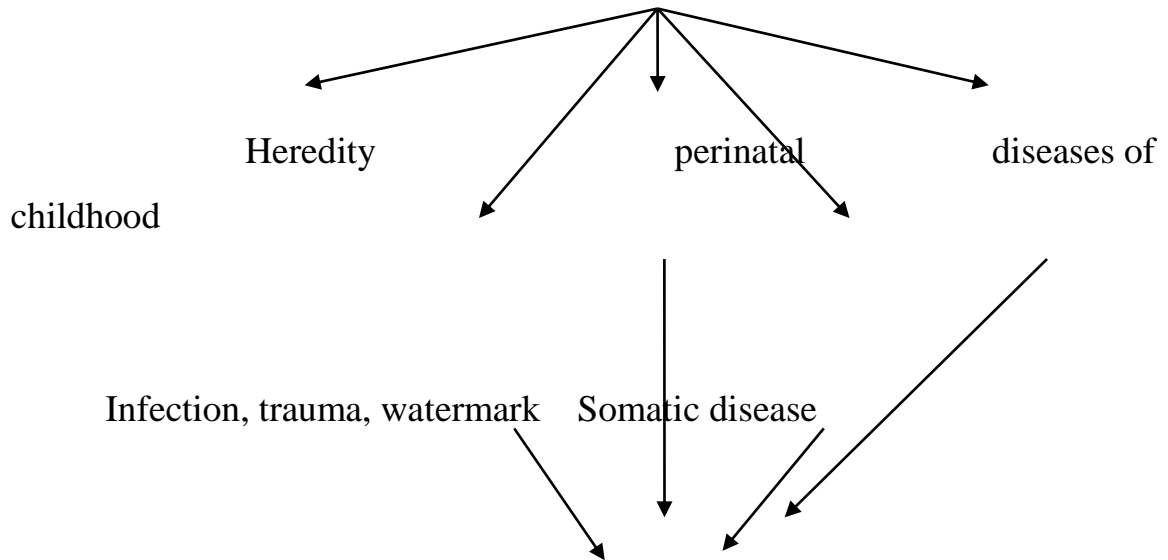
Pharmacology	Mechanisms of action of antiepileptic drugs	Antiepileptic conduct pharmacological tests
Propaedeutics of Internal Medicine	Methods function of internal organs	Physical examination of organs and systems
II. The following discipline (provide):		
Neurosurgery	Mechanisms of influence TBI and brain tumors on the development of epileptic seizures	Identify signs of brain tumor, head injury
Endocrinology	Regulation of the hypothalamic-pituitary endocrine glands	Identify the autonomic neuroendocrine syndromes
Cardiology	Mechanisms of fainting during cardiac diseases, mechanisms of cardiac autonomic regulation	Identify vegetative and organic disorders of the heart
III. Interdiscipline integration (between the themes of the discipline):		
Vascular diseases of the nervous system	Recurrent paroxysmal manifestations and CVA	Differentiate with epilepsy CVA
Diseases of the	Clinical	Autonomic and

autonomic nervous system	manifestations of autonomic paroxysms	differentiate syncope from epileptic
Inflammatory diseases of the nervous system	Clinical signs of meningitis, epidural and subdural abscess, encephalitis	Differentiate epilepsy with inflammatory diseases of the nervous system
Neuroses	Signs of convulsive states with nervousness	Differentiate hysterical and epileptic seizures

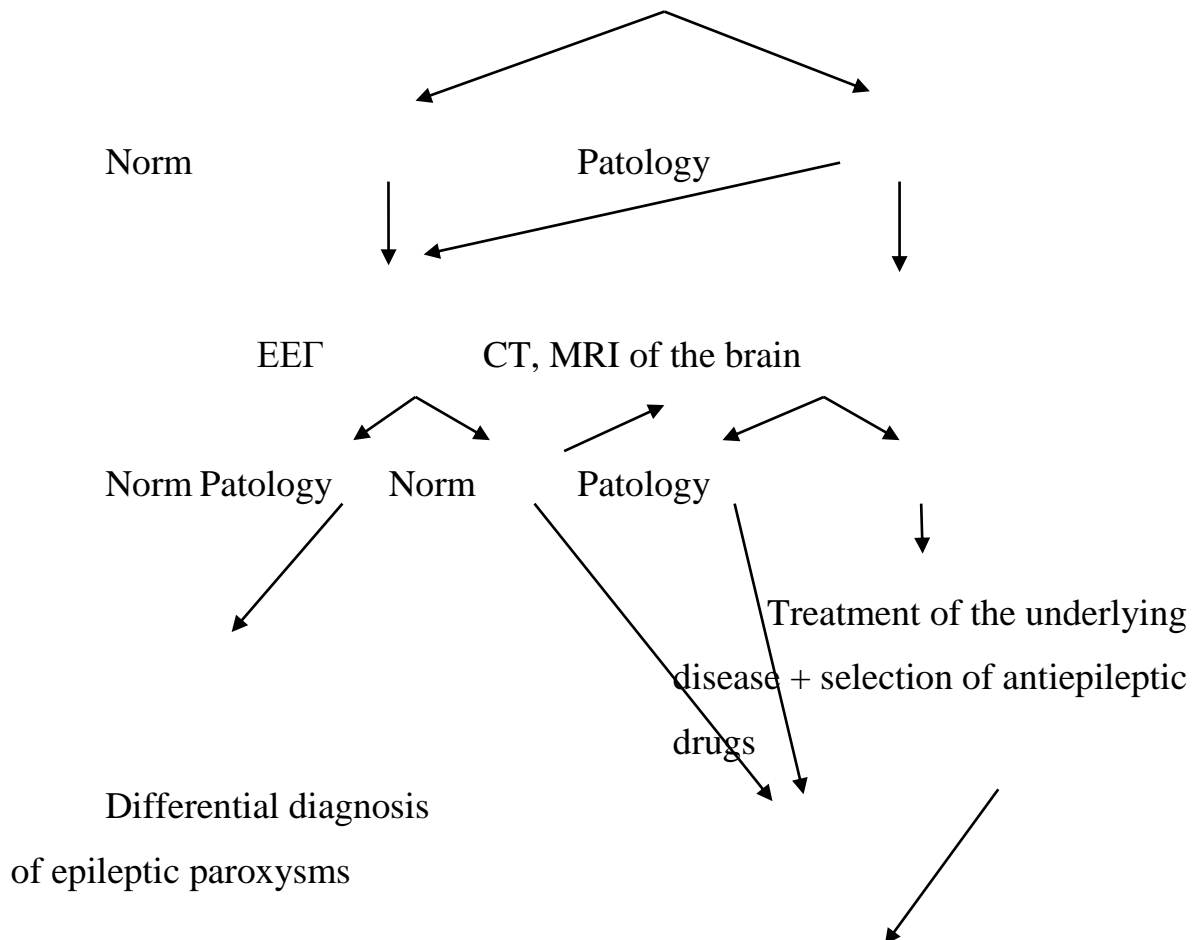
V. Content of the topic classes

Epilepsy

Anamnesis

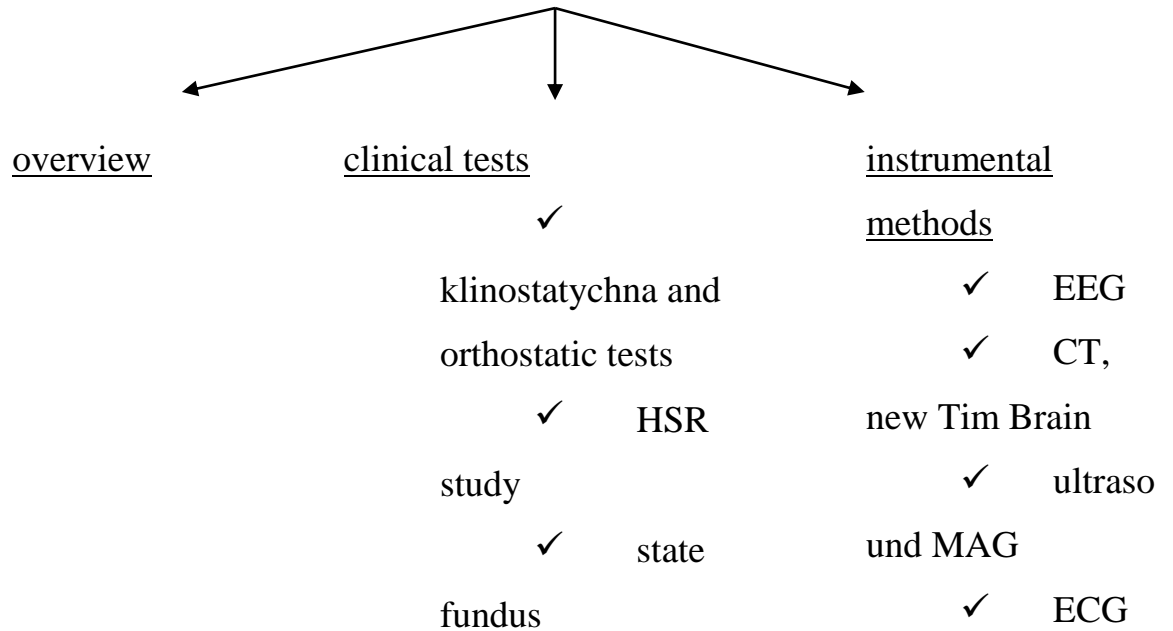


Neurological status



Selection of antiepileptic drugs

Research methods



VI. Plan and organizational structure of employment:

	The main stages of employment, their functions and content	Educational objectives in the levels of assimilation	Control methods and learning	Materials methodological support (control, visibility, instruktyvnosti)	Time (Min)
The preparatory phase I.					
	<p style="text-align: center;">Organization of classes</p> <p style="text-align: center;">Setting training goals and motivation</p> <p style="text-align: center;">Control output knowledge, skills,</p> <p style="text-align: center;">skills:</p> <p>1). Etiology, pathogenesis of epilepsy;</p> <p>2). Classification of seizures;</p> <p>3). Neepileptychni paroxysmal attacks;</p> <p>4). Pathological conditions without court;</p> <p>5). Methods for</p>	<p style="text-align: center;">I</p> <p style="text-align: center;">II</p> <p style="text-align: center;">II</p> <p style="text-align: center;">II</p> <p style="text-align: center;">II</p> <p style="text-align: center;">II</p> <p style="text-align: center;">II</p> <p style="text-align: center;">II</p> <p style="text-align: center;">II</p>	<p style="text-align: center;">Test control Level</p> <p style="text-align: center;">Individual oral examination</p> <p style="text-align: center;">Front conversation</p> <p style="text-align: center;">Test control level II</p> <p style="text-align: center;">The solution of typical problems II</p>	<p style="text-align: center;">Academic journal</p> <p style="text-align: center;">P2.</p> <p style="text-align: center;">"Educational Purposes"</p> <p style="text-align: center;">P1.</p> <p style="text-align: center;">"Topicality"</p> <p style="text-align: center;">Methodological developments</p> <p style="text-align: center;">Thematic table posters, slides</p> <p style="text-align: center;">structural logic</p> <p style="text-align: center;">Questions for individual oral survey</p> <p style="text-align: center;">Tests I, II equal</p> <p style="text-align: center;">Typical tasks II equal</p>	5 in

<p>differential diagnosis of epilepsy and paroxysmal neepileptychnyh states;</p> <p>6). Treatment paroxysm and treatment in the absence of attacks</p>				
<p>II. The main stage</p>				
<p>Formation of skills and abilities:</p> <p>1). Take the history of the disease;</p> <p>2). Inspect neurological status of the patient, conduct laboratory research tool, able to interpret their data;</p> <p>3). To ground the preliminary diagnosis;</p> <p>4). Assign additional methods of inspection and evaluate their results;</p> <p>5). To ground the final diagnosis by clinical classification;</p> <p>6). To conduct differential diagnostics</p>	<p>III</p> <p>III</p> <p>III</p> <p>III</p> <p>III</p> <p>III</p>	<p>Methods of forming habits:</p> <p>professional training</p> <p>II level</p> <p>test solution, typical problems of level II</p>	<p>Algorithms for formation of practical skills</p> <p>Methodical development.</p> <p>Neurological hammers.</p> <p>Table.</p> <p>Tests typical tasks III level</p> <p>Algorithms</p>	<p>30 min</p>

	<p>of epilepsy and paroxysmal neepileptychnyh states;</p> <p>7). Make a plan of treatment based on etiology, severity of the disease;</p> <p>8). Determine patient management, conduct examination of disability</p>	<p>III</p> <p>IV</p>	<p>Methods of forming abilities:</p> <p>professional training in solving atypical clinical situations, problems III level</p>	<p>formation professional skills.</p> <p>Patients.</p> <p>Stories patient.</p> <p>Case custom problem.</p> <p>Simulation games.</p> <p>Equipment.</p> <p>These EEG, CT, NMR studies</p>	
<p>III Final stage</p>					
<p>.</p> <p>.</p> <p>.</p> <p>.</p>	<p>Control and correction of professional skills and abilities</p> <p>Summing up classes (theoretical, practical, organizational)</p> <p>Homework (basic and additional literature on the subject)</p>	<p>III</p>	<p>Control methods habits: individual control of practical skills and their results.</p> <p>Analysis and evaluation of clinical work, decision tests, tasks</p>	<p>Equipment clinical results examination.</p> <p>Challenges III level</p> <p>Tests of W</p> <p>Estimated to map independent work with literature</p>	<p>min</p> <p>min</p> <p>min</p>

VII. Materials methodological support classes:

7.1. Materials for the preparatory phase control classes.

Materials for test control (I a):

1) What type of epileptic seizure, which is most common in adults:

- A. * complex partial
- B. generalized tonic-clonic
- C. absences
- D. simple partial
- E. dzheksonovskyy

2) partial seizures include all of the above except:

- A. * dzheksonovskyyh attacks
- B. precursors period
- C. aura
- D. attack
- E. period after attack

3) seizures can be provoked by all nyschenavedenym except:

- A. * Multiple Sclerosis
- B. Pneumococcal meningitis
- C. Subarachnoid hemorrhage
- D. subfrontalna meninhama
- E. intracerebral hematoma

4) If the patient generalized tonic-clonic epileptic seizure, death can come from all nyschenavedenoho except:

- A. * bifida jamming in a large foramen

- B. hyperthermia
- C. dehydration
- D. arrhythmia
- E. renal failure

5) Female 26 years in the general store there was an attack by the court in connection with what she brought to the emergency department. None of the persons who accompanied the woman did not know about it. CT-examination of pathology is detected, CSF within normal limits. Additional methods of inspection were made in the period after protracted attack. What is the most likely diagnosis:

- A. * generalized epileptic seizure
- B. simple partial seizures of epilepsy
- C. serous meningitis
- D. encephalitis
- E. Multiple Sclerosis

Materials for individual oral survey: (level II)

- Define the concept of epilepsy
- Pathogenetic essence epileptic focus in disease development
- The role of endogenous and exogenous factors in the formation of epileptic foci
- Classification of seizures: generalized, partial, partial-generalized
- The principles of differential diagnosis of epilepsy and paroxysmal states
- neepileptychnyh
- Status epilepticus - diagnosis, emergency care
- Instrumental and functional methods of examination of patients with epilepsy
- Treatment of paroxysmal and treatment period mizhnapadnyy

Materials for test control (IIa):

Test 1 - Test multiple choice

Offer to treat status epilepticus intravenous administration of large doses

Sibazon thanks to its properties:

1. fast acting intravenous administration
2. rapidly excreted from the body
3. not affect the breathing center
4. do not help to reduce pressure
5. oppress attacks for 24 hours after a single administration

Answer: 1.2.

Test 2 - the relationship between the elements of the two data series

Pathology morphological structures observed the following symptoms:



Потиличні півкулі

прості зорові галюцинації

прості, складні, вторинно-

генералізовані напади з

відсутністю постіктальної

сплутаності, рухових проявів

Test 3 - a test that involves determining the correct sequence of steps given

Identify the correct sequence of symptoms characteristic of most temporal partial seizures (71%):

1. oroalimentary automatisms
2. aura
3. Interrupt motor activity
4. The patient looks around
5. The movements of the whole body
6. Brush repeated automatizmy

A: 2, 3, 1, 6, 4, 5.

Test 4 - in substitution or with response independently constructed

What are the main pharmacological agents used to treat epilepsy

1.
2.
3.
4.
5.
6.

Answer:

- topamaks
- carbamazepine
- valproate
- lamotridzhyn
- levetyratsepam
- fenitoyne and other

Typical tasks (II):

The patient in '24 suddenly appeared fear, impaired consciousness, vocalization, complex zhestykulyatorni automatism, facial flushing, involuntary urination. The EEG, MRI revealed no pathology. The attacks were repeated 2 times a month.

Set:

- clinical diagnosis
- Topical diagnosis
- Clinical management of such patients
- General principles of treatment

(Epilepsy, complex partial frontal (tsynhulyarni) paroxysms)

7 year old boy was inattentive in class several times for the entire period of lessons. The teacher pointed out periodic missing child and look prytsmokuvannya lips. Fall or court never observed. During a short "no" it is not vidzyvavsya to his name. Mother still notice these signs, but did not give them importance, considering dreamy child.

Set:

- clinical diagnosis
- Assign additional methods of inspection
- Tactics
- Principles of treatment

(Absences)

21 year old man complains of several attacks that happened to him over the past 4 years. The attacks occurred suddenly, without precursors and every attack ended injury. Ambient told that he suddenly appeared no opinion, it zmovkav body napruzhuvalosya, vyhynalosya forward a few seconds stay in this position he started to shake heavily and kicks. Every time he prykushuvav a tongue did not hold urine. The EEG - abnormal complexes are recorded in all parts of the brain.

Set:

- clinical diagnosis
- Clinical management of such patients

➤ General principles of treatment

(Generalized tonic-clonic seizures)

The 37 year-old man was involuntary twitching of the left thumb. Within 30 seconds twitching spread to the entire left arm. In the left forearm and hand appeared forced movements. The attack patient does not remember, but she said that then he fell and twitching spread to the entire left half of the body. In no conscious he was 3 minutes, then 15 minutes to come to their senses. During the attack he prykusyv a tongue involuntary sechepuskannya was noted.

Set:

- clinical diagnosis
- Clinical management of such patients
- General principles of treatment

(Dzheksonovskyy partial seizures)

7.2 Materials methodological support for the main stage of employment

/II	Task	The sequence of	Note, warning self-control
.	To capture the methods of inspection of patients with epilepsy	Perform examination of patients in the following order: <ol style="list-style-type: none"> 1. Collect carefully complaint, the case history and life. 2. Carefully collect information about the symptoms of the attack, the character convulsive paroxysms, duration of the attack, the state in the period after the attack, so the presence of aura. 3. Perform external examination of patient 4. Investigate somatic status 5. Investigate neurological status 6. Familiar with additional research methods 	Pay attention to a history of data prenatal pathology, fibrillar twitching in childhood, childhood diseases. Pay attention to the state of consciousness during the attack and after, clinical symptoms Pay attention to the current physical illness. Pay attention to general clinical data and additional research methods - EEG, CT, MRI studies of the brain
.	Set topical and clinical diagnosis, determine	Based on the identified symptoms justify topical diagnosis, formulate clinical	

	treatment plan	diagnosis. Assign the differential treatment.	
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7.3 Materials Control for the final stage of employment.

Custom tasks (level III)

Woman '25 fired for loss of important papers. For several years she episodes were recorded unconscious action. The last time she buried the plates in the back yard, hid his underwear. His actions did not remember it. Her husband said that she was "missing" for 5 minutes, and impaired consciousness lasted about an hour. During the attack the patient does not fall all the time was in motion. With increased attacks the patient began to complain about the appearance of an unpleasant taste in the mouth, which looked like motor oil taste and was a harbinger of an attack. The EEG detected abnormal fire activity in the temporal destiny.

Set:

- preliminary diagnosis
- type attack
- patient management
- therapeutic measures

(Epilepsy, complex partial seizures)

Man '17 complains appearance posmykuvan in hand when awakening, as after a day of rest, and the morning after a normal night's sleep. A few months later twitching began to appear during the day, many hours after awakening. He did not lose consciousness, but at the time he could stay on his feet. Once the attack led to the fall, which resulted in a patient broke his wrist.

Set:

- preliminary diagnosis
- additional inspection should be
- a differential diagnosis
- patient management, therapeutic measures

(Myoclonus)

Woman '22 delivered to the induction center in a coma. A month ago there appeared a change in behavior as excessive suspicion and merriment. A week before the hospital took those visual auditory hallucinations. No medication is not used, the doctors are not addressed. On the day of hospitalization developed generalized seizure attack in violation of consciousness to coma. On MRI brain lesions found in temporal destiny. In the study of CSF - protein-cell dissociation.

Set:

- preliminary diagnosis
- a differential diagnosis
- patient management
- therapeutic measures

Test III level

Fill table

Symptoms of partial seizures

<i>Sign</i>	<i>Simple partial seizures</i>	<i>Complex partial seizures</i>
State of Mind	preserved	broken
debut disease	dear age	dear age
Symptoms	depend on the localization of the pathological focus	depend on the localization of the pathological focus
State of consciousness after the attack	No confusion	there is confusion
Duration	seconds	minutes
EEG data	Contralateral	

	epileptiform discharges. Upon removal of the attack outside the ECG abnormality is not detected.	ONE-SIDED bilateral level, focal or diffuse.
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Secondary generalized seizures

Educational displays	Dependent on the type of attack (simple, complex partial) and localization of pathological focus
Further symptoms	Generalized tonic-clonic seizures

VIII. Literature

Training.

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