LECTURE COMPLEX

Discipline: "Genitourinary system in pathology "
Course code: GSP 3222
Name of the educational program:6B10115 "Medicine"
Amount of study hours/credits: 30 hours / 1 credit
Course and semester of study: 3rd year, 6th semester
Number of lectures: 2

Shymkent, 2025y.

The lecture complex was developed in accordance with the working curriculum of the discipline (sillabus) and discussed at a department meeting.

Protocol: № 11 «26» 06. 2025y.

Head of department, d.m.s., professor Bekmurzaeva E.K. _____

Lecture №1

1. Subject: Methods of examining patients with urinary system pathology. Diagnostic value.
2. Objective: Training students to identify risk factors, causes, and clinical features of genitourinary diseases. Renal palpation, percussion, and training in the methodology and technique of percussion determination of the upper bladder border.
3. Lecture abstracts:
I. Clinical research methods
1. Collection of anamnesis
Dysuria, pain (loin Pain), acute/chronic complaints
Frequency, volume, color of urination
Edema
Increased blood pressure
Previous diseases: pyelonephritis, glomerulonephritis, stones
Toxic effects (drugs, heavy metals)
Diabetes mellitus, hypertension
ComplaintsThe symptoms of patients with kidney disease vary. The main complaints include pain (headache, kidney and urinary tract pain, and pain when sitting on urine), swelling, impaired urine output, fever, and itching.
Feeling of pain. In some cases, patients experience complaints such as headache, dizziness, and blurred vision. In acute and chronic nephritis, chronic pyelonephritis, primary and secondary nephrosclerosis, and polycystic kidney disease, almost all of these complaints are caused by high blood pressure. In acute and chronic glomerulonephritis and pyelonephritis, the lumbar region is affected. The mechanism of these diseases is primarily due to kidney enlargement due to the hemostatic effect and tension of the outer membranes. Acute concomitant kidney diseases are characteristic, beginning with kidney discoloration and spreading down the urinary tract. The mechanism of this painful sensation is irritation of the nerve endings in the urinary tract during the passage of a stone through the urinary tract, caused by contraction of the smooth wall of the urinary tract.
One of the main complaints is urinary dysfunction. Its types include polyuria, anuria, oliguria, pollakiuria, nocturia, isuria, dysuria, and stranguria. The amount of urine excreted over a given period of time is called diuresis. Under normal conditions, a healthy person's natural diuresis is approximately 1-1.5 liters; impaired diuresis is called dysuria. Polyuria is defined as a daily diuresis of more than two liters. The causes of polyuria are divided into extramandibular and extramandibular.
Kidney related causes: 1) balanced stage of renal failure, 2) when the tumor returns.
Extrahepatic causes of polyuria: 1) diabetes mellitus; 2) diabetes mellitus; 3) when taking ureters.
Oliguria is defined as a daily urine output of less than 500 ml. The causes of oliguria are related to both the kidneys and non-renal organs.
Kidney-related causes: 1) acute nephritis; 2) nephrosis edema stage; 3) acute renal failure.
Extra-maxillary causes: 1) with increased sweating (profuse sweating); 2) with a persistent hangover; 3) with bloating; 4) with tumors.
AnuriaAnuria is a cessation of urination. Anuria is an extra-maxillary cause of renal and extra-maxillary anuria. Renal anuria occurs when the kidneys fail to produce urine (during acute renal failure). Extrahepatic anuria is also known as ischuria. It occurs with urinary tract obstruction (stone, tumor, prostatic hypertrophy).
Pollakiuria- frequent bowel movements. This is typical of bladder and laryngeal inflammation. Under normal conditions, sitting on urine occurs 4-7 times a day.

Nocturia-This is the excessive excretion of urine at night. Under normal conditions, the ratio of daytime to nocturnal urine output is 3:1. Nocturia, which is present in kidney disease, occurs in combination with polyuria.

Isuria is the passage of urine into the same stool each time throughout the day. Dysuria is difficulty and pain due to urination.

Strianguria- is released with a feeling of urinary incontinence-fermentation, which is characteristic of inflammation of the bladder and urinary bladder.

Changes in urine color. Under normal conditions, urine is pale yellow. Urine color depends on its concentration and the substances it contains. If bilirubin is present, the urine is greenish-brown; if urobilin is present, the urine is reddish-brown. Some rough substances (aspirin) are pale red.

The color of the urine will also depend on the size. Urine is pale yellow with polyuria and dark yellow with oliguria. When blood and urine mix, the color becomes cloudy, like white meat slop, or when mixed with pus. Vision impairment occurs due to narrowing of the arteries in the fundus and retinal edema. In cases of pyelonephritis, pyelitis, cystitis, and urethritis, the patient develops a fever due to inflammation of the urinary tract.

History of the disease. To determine the progression of kidney disease, it is necessary to immediately determine the patient's history of the flea. Acute nephritis is often caused by inflammation of the upper respiratory tract and herpes zoster. Chronic infections (tuberculosis, syphilis) and chronic purulent diseases (lung abscesses, bronchiectasis, osteomyelitis) lead to the development of renal amyloidosis. Patients with mercury chloride, bismuth, and iodine exposure may develop nephronephrosis.

Medical history. It's important to ask the patient about the diseases the fleas suffered from: pyelitis, pyelonephritis, and whether they had acute nephritis, kidney stones complicated by polypnea, or scarlet fever. Women should be asked about their pregnancy, including any tumors or urine changes during this period. It's crucial for the doctor to know if a patient with kidney disease is suffering from a severe cold, which could influence the course or exacerbation of the disease.

II. Methods of physical research

Palpation (palpation) of the kidney is a physical method of examining the internal organs.

Target:

Determination of the volume, position, and mobility of the kidneys

Pain assessment

Definition in case of an enlarged or prolapsed kidney (nephroptosis)

Method:

The patient lies on his back with his knees slightly bent.

The doctor places one hand on the lumbar region (below the lower rib cage).

The second hand is placed on the front surface of the abdomen, under the rib cage.

When you exhale, you press deeper, and at the moment when you breathe, the kidney feels it, “greeting the hand” as it goes down. When stroking the kidney, its: surface (smooth/uneven), soreness, mobility,

The size is being estimated.

Percussion of the kidneys (Pasternak's symptom)

Target:

Determination of the presence of pain upon impact in diseases of the kidneys and upper urinary tract.

As an auxiliary sign in the diagnosis of conditions such as pyelonephritis, kidney stone (urolithiasis), paranephritis.

Methodology:

The patient stands upright or sits and leans slightly.

The doctor places his palm on the lumbar region, on the renal project between the 12th rib and the spine.
With the other hand he strikes the palm with light to medium force (or percussion with the fingers).
The same action is repeated in the area of the second kidney.
Interpretation of the result:
Positive Pasternak's symptom (pain is present):
Percutaneous determination of the upper border of the bladder
Methodology:
1. Patient's position
The patient lies on his back, legs extended or slightly bent.
It is best to relax your abdominal muscles.
2. percussion zone
Percussion begins above the sharauak (symphysis).
Percussion is carried out upwards (towards the chest).
3. The point at which the dead-end sound turns into a drum sound, moving from bottom to top - is the upper border of the urinary bladder.
General urine analysis (GUA)

Density (hypo/hypersthenuria)
Leukocyturia
Erythrocyturia (hematuria)
Proteinuria
Cylindruria
Additional urine tests
Nechiporenko test - erythrocyte, leukocyte, 1 ml cylinder
Zimnitskaya test - change in daily density
Addis-Kakovsky
Bacteriological culture - identification of the infectious agent

Blood tests
Complete blood count (anemia, leukocytosis)
Biochemistry:
Creatinine
Urea
Electrolytes (K+, Na+, Cl-)
Total protein, albumin
VAT (SRP), antistreptolysin-O

Instrumental (instrumental) research methods
1. Ultrasound examination (ultrasound)
Kidney size
Expansion of the renal pelvis system
Stones
Cysts, tumors
Bladder filling, residual urine

2. Radiographic methods
Simple urography review - viewing radiopaque stones

Excretory urography - assessment of the excretory function of the kidneys
Cystography - pathology of the bladder (reflux, diverticulum)
Urethrography - urethral strictures

3. CT and MRI
CT (contrast): stones, tumor, hydronephrosis, trauma
CT spirals are the "gold standard" for stone detection.
MRI of veins, tumors, questionable conditions

4. Illustrative material:presentation.

5. Literature: Mukhin N.A., Selected lectures on internal medicine: lecture. GEOTAR-Media 2017.

6. Control questions(feedback):
1. What are the main complaints associated with diseases of the genitourinary system?
2. What should you pay attention to during a general examination of patients?
3. How is kidney palpation performed?
4. What information does palpation of the kidneys provide?
5. How is kidney percussion performed?

Lecture № 2
1.Topic: Leading clinical syndromes (dysuric, nephrotic, nephritic, hypertensive and renal failure) in the urinary system.
2. Objective: Based on the integration of fundamental and clinical disciplines, train students in the basics of clinical examination of the genitourinary system in health and disease, and to diagnose pathological syndromes during physical and laboratory-instrumental examination of the patient.
3. Lecture abstracts:
1. Clinical significance of dysuric syndrome:
An early and sensitive sign indicating damage to the bladder, urethra and lower urinary tract.
Helps to differentiate diseases such as cystitis, urethritis, prostatitis, stones, at the first level.
Suspected high level of infection (pyelonephritis).
Allows to identify acute conditions such as urinary obstruction (adenoma, stricture).
Disturbance of the normal character and frequency of urination.
Main symptoms:
Pollakiuria - frequent urination
Oliguria/anuria - decrease/absence of urine volume
Strangury - painful urination
Dysuria - itching, fermentation, pain when urinating
Nocturia - increased frequency of urination at night
Enuresis is involuntary urination.
Urgency - a feeling of inability to control oneself
Main reasons:
Cystitis
Urethritis
Prostatitis
Kidney stones (urolithiasis)
Neurogenic bladder

Bladder tumors

2. Clinical significance of nephrotic syndrome

A marker of severe structural damage to the glomerular apparatus.
Indicates high renal permeability filtration proteinuria.
Allows to assess the severity of systemic effects in case of edema and hypoalbuminemia.
Nephrotic syndrome is a leading indicator in the detection of chronic and potentially dangerous diseases such as amyloidosis, diabetic nephropathy, and membranous glomerulopathy.
High risk of thrombosis and infectious complications.
A severe proteinuric condition that develops as a result of damage to the glomerular filtration membrane of the kidneys.
Main features (classical tetrad):
Severe proteinuria (>3.5 g/day)
Hypoalbuminemia (<25-30 g/l)
Severe edema (up to anasarca)
Hyperlipidemia and lipiduria
Reasons:
Membranous glomerulopathy
Minimal change disease
Focal segmental glomerulosclerosis
Diabetes (diabetic nephropathy)
Amyloidosis

3. Clinical significance of nephritic syndrome

The main manifestation of acute inflammatory process of the glomeruli.
Allows recognition of conditions requiring immediate monitoring, such as acute poststreptococcal glomerulonephritis.
The combination of hematuria + hypertension + oliguria is an important diagnostic triad of acute kidney injury.
Helps to identify the onset of acute renal failure at an early stage.
An important indicator of systemic vasculitis and immunological diseases (SLE, IgA nephropathy).
A syndrome that develops as a result of inflammation of the glomeruli.
Main symptoms:
Hematuria (macro/micro; "meat wash" color)
Normal or moderate proteinuria (usually <3 g/day)
Oligoanuria
Arterial hypertension
Swelling (minor)
Cylindruria
Reasons:
Acute poststreptococcal glomerulonephritis
IgA nephropathy (Berger's disease)
Vasculitis

4. Clinical significance of hypertensive (renal) syndrome

Allows to determine the renal nature of arterial hypertension.
In patients with hypertension, there is always a sign of suspicion of kidney pathology.
An early marker of deteriorating kidney function, as damage to the renal arteries and glomeruli directly increases blood pressure.

Renovascular hypertension is a disease that progresses rapidly if left untreated, with a high risk of stroke and heart attack.
Helps to select a strategy for treating hypertension (drugs targeting the renin-angiotensin system).
Arterial hypertension that develops as a result of kidney disease.
Main symptoms:
Very high white (often diastolic ↑)
Severe headache
Changes in the retina (retinopathy)
Symptoms of heart failure
Decreased kidney function
Reasons:
1) renovascular hypertension:
Renal artery stenosis (atherosclerosis, fibromuscular dysplasia)
2) parenchymal diseases of the kidneys:
Chronic pyelonephritis
Glomerulonephritis
Polycystic disease
Diabetic nephropathy
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Polycystic disease
Diabetic nephropathy

5. Clinical significance of renal failure syndrome
A) acute renal failure (ARF)
Allows for timely recognition of acute, rapidly developing, life-threatening conditions.
With timely correction, it can be completely reversible.
Helps identify causes requiring immediate treatment such as shock, dehydration, poisoning, obstruction.
May indicate acute dangerous complications such as hyperkalemia, metabolic syndrome.
B) chronic renal failure (CKD / CKD)
An indicator of end-stage chronic progressive kidney disease.
Determines the need for dialysis or transplantation.
Drastically increases cardiovascular risk due to cardiorenal contact.
Allows for early detection of systemic complications such as anemia, bone mineral disorders, and uremia.
Impaired ability of the kidneys to maintain homeostasis; water-electrolyte and acid-base balance and nitrogenous excretion are disrupted.
A) acute renal failure (ARF)
Symptoms:
Oliguria/anuria
Azotemia (↑urea, ↑creatinine)
Hyperkalemia
Метаболический метаболикалықдоз
Edema
Uremic symptoms (vomiting, vomiting, discomfort)
Reasons:
Prerenal (shock, dehydration)
Renal (glomerulonephritis, tubular necrosis, toxins)
Postrenal (obstruction - stone, tumor)
B) chronic renal failure (CKD / CKD)
Symptoms:
Increased creatinine and urea over a long period of time
Persistent hypertension
Anemia (↓EPO production)

Mineral and bone disorders (hypocalcemia, hyperphosphatemia)
Uremic intoxication
Yellowish-gray skin color
Polyuria → oliguria after
Reasons:
Diabetic nephropathy
Glomerulonephritis
Pyelonephritis
Polycystic disease
Systemic diseases (SLE, vasculitis)

4. Illustrative material: presentation.

5. Literature: Mukhin N.A., Selected lectures on internal diseases: lecture. GEOTAR-Media 2017.

6. Control questions:

1. What types of kidney failure do you know?
2. What pathologies cause acute renal failure?
3. Clinical manifestations of nephrotic syndrome?
4. What laboratory and instrumental studies are used to diagnose nephrotic syndrome?
5. How does renal edema differ from cardiac edema?
6. What are the laboratory findings for renal failure?
7. What are the main causes of hypertensive (renal) syndrome?
8. What are the laboratory changes in nephrotic syndrome?

11. **Учебные ресурсы**	
Электронные ресурсы, включая, но не ограничиваясь ими: базы данных, анимации симуляторы, профессиональные блоги, веб-сайты, другие электронные справочные материалы (например: видео, аудио, дайджесты)	**«Пропедевтика внутренних болезней»** Ivashkin, V. T. Internal diseases propedeutics [Электронный ресурс] :textbook. - Электрон. текстовые дан. (142Мб). - М. : ГЭОТАР - Медиа, 2017. - эл. опт. диск Ішкі аурулар./Бимурзаев Ғ.Н., Зарипова Г.К. , 2020 /https://aknurpress.kz/reader/web/2594 Ішкі аурулар пәнінен клиникалық тапсырмалар жинағы. Ержанова Г.А., МухановаА.К. , 2016/ https://aknurpress.kz/reader/web/2370 Шкі аурулар пропедевтикасынан жағдаяттық тапсырмалар Оразова Б.О., Марченко Т.В. ,2016/ https://aknurpress.kz/reader/web/2348 Ахметов Қайырғали Жәлелұлы. Ішкі аурулар пропедевтикасы пәнінің клиникалық дәрістері. Алматы: «Эверо», 2020. – 262 бетhttps://elib.kz/ru/search/read_book/22/ Внутренние неинфекционные заболевания с клинической рентгенологической оценкой КГУ им. А. Байтурсынова, 2011. – 94 с. http://rmebrk.kz/book/1024356
Электронные учебники	**«Пропедевтика внутренних болезней»** Внутренние болезни. Т. 1 [Электронный ресурс]: учебник / под ред. В. С. Моисеева. - 3-е изд., испр. и доп.- Электрон. текстовые дан. (66.5Мб). - М.: ГЭОТАР - Медиа, 2015. – 960

Внутренние болезни. Т. 2 [Электронный ресурс]: учебник / под ред. В. С. Моисеева. - 3-е изд., испр. и доп.- Электрон. текстовые дан. (45.1Мб). - М.: ГЭОТАР - Медиа, 2015. -895
Пропедевтика внутренних болезней : Учебник. / Т.С. Рябова, Е.С. Рысс, В.Я. Плоткин и др.. - СПб.:СпецЛит, 2015. - 414 с. http://rmebrk.kz/book/1174389
Внутренние болезни в работе врача общей практики :Учебноепособие. / К.Ж. Садыкова, Ш.У. Скендерова, С.К. Саттиева. - Туркестан: Туран, 2017. - 96 с. http://rmebrk.kz/book/1167635
Пропедевтика внутренних болезней: Учебник. – 6-е изд., I - том перераб. и доп. – Алматы: Эверо, 2020. – 400 с.https://elib.kz/ru/search/read_book/676/
Пропедевтика внутренних болезней: Учебник. – 6-е изд., II - том перераб. и доп. (Учеб. лит. Для студентов медицинских вузов). – Алматы: Эверо, 2020. – 212 с https://elib.kz/ru/search/read_book/682
Пропедевтика внутренних болезней: Учебник. – 6-е изд., III - том перераб. и доп. (Учеб. лит. Для студентов медицинских вузов). – Алматы: Эверо, 2020. – 208 с.https://elib.kz/ru/search/read_book/684/
Нұрсұлтанова С.Д., Бакирова Р.Е., Мамашалиева С.Б., Беков Е.К., МадиеваЛ.С. Жүрек тамыр жүйесінің аурулары бар науқастарды тексеру әдісі және техникасы. Оқу-әдістемелік құрал.- Алматы, «Эверо» баспасы. - 2020.https://elib.kz/ru/search/read_book/705/
Ішкі ағза ауруларының пропедевтикасы. Оқулық Айтмбет Б.11-Алматы «Эверо» 2018ж,-568 бет.https://elib.kz/ru/search/read_book/3086/
Стрюк, Раиса Ивановна. Внутренние болезни : в 3 ч. : Ч. 1учебник / Р. И. Стрюк, И. В. Маев ; [Перв. Моск. гос. мед. ун-т им. И. М. Сеченова]. - Алматы : Эверо, 2016. - URL: http: https://elib.kz/ru/search/read_book/2766/.
Стрюк, Раиса Ивановна. Внутренние болезни : в 3 ч. : Ч. 2учебник / Р. И. Стрюк, И. В. Маев - Алматы : Эверо, 2016. - URL: https://elib.kz/ru/search/read_book/2767/
Стрюк, Раиса Ивановна. Внутренние болезни : в 3 ч. : Ч. 3учебник / Р. И. Стрюк, И. В. Маев. - Алматы : Эверо, 2016. – URL: https://elib.kz/ru/search/read_book/2768/
Пименов, Ю. С. Внутренние болезни. Том 1 : учебное пособие / Ю. С. Пименов, И. В. Роганова, Л. Н. Финько. — Москва : РЕАВИЗ, 2008. — 146 с. / Цифровой образовательный ресурс IPR SMART: https://www.iprbookshop.ru/10141.html
Роганова, И. В. Внутренние болезни. Том 2 : учебное пособие / И. В. Роганова, В. Ф. Роганов, И. О. Прохоренко. — Москва : РЕАВИЗ, 2008. — 132 с. / Цифровой образовательный ресурс IPR SMART : https://www.iprbookshop.ru/10142.html

	Клинические задачи по внутренним болезням : учебное пособие / Р. И. Сайфутдинов, Л. К. Козлова, О. В. Бугрова [и др.]. — Оренбург : Оренбургская государственная медицинская академия, 2012. — 152 с. -URL: https://www.iprbookshop.ru/21817.html
Литература	**«Пропедевтика внутренних болезней»** **Основная:** Василенко, В. Х. Пропедевтика внутренних болезней. Т. 1. : Учебник / В. Х. Василенко, В. В. Василенко ; . - Алматы :Newbook, 2021. - 400. с. Василенко, В. Х. Пропедевтика внутренних болезней. Т. 2. : Учебник / В. Х. Василенко, В. В. Василенко ; . - Алматы :Newbook, 2021. - 212. с. Василенко, В. Х. Пропедевтика внутренних болезней. Т. 3. : Учебник / В. Х. Василенко, В. В. Василенко ; . - Алматы :Newbook, 2021. - 208. с. Мухин , Н. А. Ішкі аурулар пропедевтикасы: оқулық. - М. : ГЭОТАР - Медиа, 2015 Ахметов, Қ. Ж. Ішкі аурулар пропедевтикасы пәнінің клиникалық дәрістері [Мәтін] : оқу құралы / Қ. Ж. Ахметов. - Алматы : New book, 2022. - 266 с. Василенко, В. Х. Ішкі аурулар пропедевтикасы. Т. 1. :оқулық / мем. тілге ауд. К. Асқамбай. - Алматы :Эверо, 2015. - 336 б. с Василенко, В. Х. Ішкі аурулар пропедевтикасы. Т. 2 :оқулық / мем. тілге ауд. К. Асқамбай. - Алматы :Эверо, 2015. - 176 б. с Василенко, В. Х. Ішкі аурулар пропедевтикасы. Т. 3 :оқулық / мем. тілге ауд. К. Асқамбай. - Алматы :Эверо, 2015. - 192 б. с Айтбембет, Б. Н**.** Ішкі **ағза** ауруларының пропедевтикасы: оқулық Алматы : Эверо, 2014. - 568 бет.- Маколкин, В. И. Ішкі аурулар : оқулық. - М. : ГЭОТАР - Медиа, 2014. - 976 бет Гребенев, А. Л. Пропедевтика внутренних болезней : учебник / А. Л. Гребенев. - 5-е изд., перераб. и доп. - Алматы :Эверо, 2014. - 520 с **Модуль**"Кроветворная система" : интеграционный учебник / С. К. Жауғашева [ж. б.] ; жауапты ред. С. Б. Жәутікова, С. Д. Нұрсұлтанова. - М. : "Литтерра", 2014. - 288 бет. с. **Дополнительная:** Омаров, Т. Р. Неотложные состояния в клинике внутренних болезней : учебное пособие / Т. Р. Омаров, В. А. Омарова. - Караганда : АҚНҰР, 2019. - 518 с Диагноз при заболеваниях внутренних органов. Формулировка, классификации : учебное пособие / под ред. В. А. Ахмедова. - М. : ГЭОТАР - Медиа, 2016. – 256 Мухин, Н. А. Избранные лекции по внутренним болезням : лекция / Н. А. Мухин. - 2-е изд. - М. : ГЭОТАР - Медиа, 2017. - 328 с.

Ішкі аурулар бойынша объективтендірілген құрамдастырылған клиникалық емтихан : оқу-әдістемелік құрал = Объективный структурированный клинический экзамен по внутренним болезням : учебно методическое пособие / М. Оспанов атындағы БҚММУ; құрас. Қ. Ж. Ахметов [ж.б.]. - М. : "Литтерра", 2016. - 368 б.
Сырқатнама : оқу-әдістемелік құрал / Г. М. Есенжанова [Ж. б.] ; ҚР ДС жӘД Министрлігі. - 2-бас. толық. және өңд. - Қарағанды : ЖК "Ақнұр", 2015. - 80 с
Ахметов К.Ішкі аурулар пропедевтикасы пәнінің клиникалық дәрістері;оқу құралы.-Эверо,2014
Ахметов Қ. Ж.Ішкі аурулар пропедевтикасы пәнінің клиникалық дәрістері : оқу құралы / Қ. Ж. Ахметов. - Алматы : New book, 2022. - 266 с.
Diagnosis of internal diseases by syndromes : training manual / E. K. Bekmurzaeva. - Almaty : Эпиграф, 2022. - 128 с
Сейдахметова А. А. Ішкі аурулардың метеорологиялық факторларға тәуелділігі : монография / А. А. Сейдахметова. - Шымкент, 2025. - 108 б. - Мәтін.