

ODESSA NATIONAL MEDICAL UNIVERSITY  
Department of Urology and Nephrology

METHODICAL WORKING  
of practical training for teachers

Topic 10. Tuberculosis of the genitourinary system. Parasitic diseases in urology.

Academic discipline "Urology"

**Level of higher education:** Second (Master's)

**Knowledge field:** 22 "Health Care"

**Specialty:** 222 "Medicine"

**Program of professional education:** Medicine

Approved  
methodological meeting on the chair

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Protocol № 1

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Topic 10. Tuberculosis of the genitourinary system. Parasitic diseases in urology.

### 1. A theme urgency

Necessity of studying of the given theme is caused to augmentations of number of extrapulmonary forms of disease among which a genitourinary tuberculosis takes a leading place. The knowledge of clinical implications, diagnostics and treatment methods will allow to suspect, confirm and begin in due time treatment of patients that were treated apropos "a chronic pyelonephritis or a cystitis"

Despite use of different schemes of treatment by modern specific antibacterial preparations, therapeutic effect of therapy still remains unsatisfactory. Not in all cases the timely proof bacteriostatic result, stabilisation of destructive process in kidneys that conducts to necessity of the operative measure, proof invalidity and physical inability of patients is reached.

### 2. THE EMPLOYMENT PURPOSES:

#### 2.1. *The educational purposes*

- To acquaint students with the organisation phthisio-urologic services in Ukraine;
- To frame detailed representation about clinicoradiological classification of a tuberculosis of kidneys and a symptomatology of a tuberculosis of organs of genitourinary system;
- To give to students possibility to seize methods laboratory and radiological, and also bacteriological diagnostics of a tuberculosis of genitourinary system;
- To give to students skills of definition of adequate methods of conservative therapy and surgical treatment sick of a tuberculosis of genitourinary system and indications to them.

#### 2.2. *The educational purposes bound with:*

- Formation of professionally meaning substructure of the person;
- Actual aspects deontologic, ecological, legal, psychological, patriotic, professional responsibility.

### 3. Interdisciplinary integration.

Discipline	The nobility	To be able
1. Previous – phthisiology, the general surgery	Features of a pathogenesis and symptomatology nephrotuberculosis;  Substantive provisions of surgical tactics concerning a tuberculosis of urinary system.	To investigate organs of urinary system of patients;  To carry out base tool manipulations.
2. Following disciplines (are	General provisions of complex	To define the basic approaches

provided with the given discipline) – physiology	medical strategy concerning a tuberculosis of urinary system	to a choice of rational medical tactics for separate sick of a tuberculosis of urinary system.
3. Intrasubject integration (themes of disciplines with which it is integrated)	Pharmacology of modern antituberculous medical agents;  Clinical implications of surgical diseases which need to be differentiated with a symptomatology of a tuberculosis of urinary system	To prescribe and supervise efficiency of antituberculous therapy, to state a clinical estimation to the received laboratory, radiological and ultrasonic data.

#### 4. The employment maintenance

The genitourinary tuberculosis during our times wins first place among all not pulmonary forms of a tuberculosis and the second after lesions of lungs. It causes objectivity of a problem of the organisation of rational and effective forms of observation and treatment of this category of patients. The Ftiziourologichesky service is organised on the basis of an antituberculous network.

***Tuberculosis of kidneys and the top urinary ways.*** 40-50 % of kidneys sick of a tuberculosis in the anamnesis have an extrarenal tuberculosis. Thus the interval between occurrence of a primary extrarenal tubercular cell and nephrophthisis development reaches 15-20 years. As well as at a pyelonephritis, the leading local pathogenetic factor are disturbance уродинамики.

Nephrophthisis diagnostics provides:

1) the clinical; 2) the laboratory; 3) roentgenradiologic; 4) the endoscopic; 5) morphological diagnostics. The most frequent first symptoms of a renal tuberculosis are increase of an emiction and a pain at the time of an emiction (45 %), dull aches in lumbar area from outside lesions (32 %), a renal colic from outside lesions (5-10 %), a hematuria (6-8 %). In connection with a various and not pathognomonic symptomatology sick of a nephrophthisis many years remain under observation under "masks" of other diseases: an urolithiasis, a cystitis, a pyelonephritis, a prostatitis, an epididymitis.

For the general analysis of urine sick of a nephrophthisis acidic reaction, a moderate proteinuria (often false), a leukocyturia are characteristic. Meets эритроцитурия less often. The listed components of an urocheras can cause only suspicion on an urinary tuberculosis.

The major importance in diagnostics has presence in urine of micobacteria of a tuberculosis (BK) which are defined by three basic methods:

1. Bacterioscopic - a straight line бактериоскопия the smears painted on Tsilju-Nilsonu; Microscopy with use of ways of enrichment (flotation); luminescent microscopy.
2. Bacteriological (crops).
3. Biological (infection of animals).

Resolving possibility usual бактериоскопии, i.e. occurrence possibility (BK) - not less than 100000 microbic bodies in 1 ml of urine, luminescent microscopy - 10000, a flotation method - 1000 in 1 ml of a material, crops methods - 10 microbic bodies, biological tests - 1 microorganism in 1 ml of urine.

In a complex of modern laboratory methods of diagnostics the provocative test with a tuberculin of 20 which units, entered under a skin is applied, in sick of a nephrophthisis growth of intensity of a leukocyturia causes.

In a survey picture of urinary system approximately at 10 % of kidneys sick of a tuberculosis find cells of a calcification of a renal parenchyma which unlike urinary

concrements have not homogeneous structure, rough edges and are localised in a projection of a renal parenchyma, then when concrements in pyelocaliceal system.

At contrast X-ray inspections on an initial stage of process (инфильтративном a nephrophthisis) deformation of pyelocaliceal system at the expense of an inflammatory infiltrate (narrowing and diffusion of calyces, a prelum and their pushing off) becomes perceptible.

Typical radiological sign of a nephrophthisis is the cavern as a roundish additional cavity with unequal, lacerated edges which are bridged to pyelocaliceal system. At a tubercular pyonephrosis - numerous, bridged one of one cavern, transform a kidney into a uniform bag.

The tubercular lesion of an ureter the radiological is shown by its numerous narrowings, a tension and disappearance тазовой curvature. More often the ureter is dilated by sites of narrowings - сеткообразный an ureter. Concerning a bladder lesion are characteristic its deformation, скошенность, reduction in sizes (микроцистис).

Characteristic changes for a tuberculosis at cystoscopy: solitary бугорки, erosions, ulcers, changes of a mouth of an ureter from outside lesions (deformation and зияние).

In treatment of an urinary tuberculosis during our times the leading place is occupied with chemotherapy which is used as an independent method of treatment, a method of preoperative preparation and in the postoperative period.

туберкулостатические preparations distribute all on two groups - the first and the second row. First row preparations concern: гидрозид isonicotinic acid (Tubazidum and its derivatives), Ftivazidum, Larusanum, Methazidum, солюзид, ИНХА - 17, streptomycin and its derivatives (пассомицин, strepto-soljuzid) and ПАСК. All last preparations are considered reserve or second row preparations. First row preparations in this or that combination prescribe more often for the first time the taped patient (эгионамид, Cycloserinum, Канамycinum, Tibonum, etc.) - the patient at whom treatment by the basic preparations has appeared less effective.

Tuberkulostaticheskyy therapy spend regularly and regularly throughout long term. Continuous primary course of treatment makes not less than 2th years. All-round influence on process is reached by the combined treatment with two, three or even four туберкулостатическими preparations.

Surgical treatment of organs of urinary system sick of a tuberculosis is spent only against specific therapy. From methods of operative treatment are used органозберегающие operations on a kidney and urinary ways and a nephrectomy. The cavernotomy concerns the first of them, кавернэктомия, a nephrectomy, various kinds direct and indirect уретероцистонефростомии. The nephrectomy is shown at: a tubercular pyonephrosis; a total calcification of a kidney; at a nonfunctioning kidney (with full loss of function, it is confirmed \ache angiographically) and hypertonia presence; at a nonfunctioning kidney and a rack бацилярности.

Sick of a tuberculosis of organs of genitourinary system are subject to the account and leaving in the conditions of an antituberculous dispensary.

### **Tuberculosis of man's genitals**

The infection gets to genitals a hematogenic way in primary or secondary диссеминации a tuberculosis. The prostate, and then seed blisters at first is surprised, an epididymis, a testicle and is very rare - a sexual member. In due course on a deferent duct of a micobacterium of a tuberculosis get into an appendage of an opposite testicle. Probably and simultaneous lesion of a prostate and an epididymis.

Clinical picture. The first clinically shows an *epididymis tuberculosis*. Usually the tuberculosis of man's genitals has a chronic current, the epididymis tuberculosis in 50 % of cases proceeds in the acute form. Patients suddenly have a sharp pain in a corresponding half of scrotum, edema and scrotum reddening, the body temperature to 39-40<sup>0</sup>C raises, the general delicacy, a malaise, a headache, a nausea, appetite loss are observed. In 6-8 weeks the acute phenomena remit, the body temperature decreases to subfebrile, the general condition of the patient a little improves,

the hydroscelocele decreases. Considerably enlarged, dense, hilly, sharply painful epididymis is palpated. The seed funicle too is condensed. The acute phenomena gradually pass, nevertheless the appendage remains enlarged, hilly, dense.

On appendage and testicle border the ramollissement site where the fistula is then formed is defined. At process diffusion on covers of a testicle and a testicle there is a reactive edema of covers. Diffusion of tubercular process on a testicle is not reflected in a clinical picture of disease. For a tubercular lesion of an appendage and a testicle adnations of a skin of a scrotum with an inflammatory infiltrate are characteristic. Process can calm down, and then recur with formation of a purulent fistula. At long existence of a fistula a possible full sequestration of an epididymis.

Other form of a tuberculosis of a testicle and its appendage is characterised by a chronic current. Disease begins hardly noticeably and long time proceeds asymptotically. In an epididymis, in particular in a tail site, there is a small painful inspissation which is gradually enlarged. The general condition of the patient does not change. Process gradually extends on a deferent duct, and then on a testicle. With increase of infiltration the appendage is accustomed to drinking with a skin.

*The tuberculosis of a prostate and seed blisters* long time has an asymptomatic current. After formation of massive infiltrates and caverns in a prostate there is a pain in a perineum, a rectum, a sacrum. In process of development of disease the pain extends on a testicle, there are dysuric disorders. At presence in a prostate of a cavern which is bridged with мочеиспускательным the channel, from it during a defecation pus is allocated.

At manual research through a rectum in initial stages of tubercular process the prostate is palpated irregular, a little hilly асимметрическая. In the started cases in a prostate during a palpation very dense knots with ramollissement sites are defined. On уретрограмме caverns in a prostate become perceptible.

The seed blister amazed with tubercular process, is palpated over a prostate in the form of round, dense тяжа.

At a *tuberculosis of a sexual member* on its head, near the external aperture мочеиспускательного the channel, appears бугорки which merge in strong nodules, turning to ulcers with подрывными edges which easily bleed. For late stages of a tuberculosis of a sexual member joining of a cavernitis which is accompanied by occurrence of inspissations in a depth of cavernous bodies is characteristic.

Treatment of man's genitals sick of a tuberculosis should be complex. This disease is exposed to treatment, than a tuberculosis of kidneys and urinary ways is worse. Specific antituberculous preparations prescribe in those doses, as at a tuberculosis of kidneys. Besides, carry out an immobilisation of a scrotum by means of hard swimming trunks. Widely apply novocainic blockade (with streptomycin) a seed funicle.

The diathermy and autohemotherapy are contraindicative UHF.

At an inefficiency of medicamental treatment throughout 2-3 months carry out partial excision (resection) of an epididymis or эпидидимэктомию. In case of partial involving in testicle process эпидидимэктомию unite to partial excision of an epididymis. At a total lesion a testicle delete – a hemicastration, орхэктомия. For the purpose of prevention of penetration of a tubercular infection in an opposite appendage and a testicle carry out a vasectomy. After operation spend long (throughout 2-3 years) specific chemotherapy.

Treatment sick of a tuberculosis of a prostate and seed blisters conservative, complex. Application инстилляций in a prostatic part мочеиспускательный the channel of solutions of

antituberculous preparations is effective. At a tubercular abscess of a prostate last open. If образовывается a prostate empyema, carry out a vesiculectomy.

The forecast concerning an absolute recovery more often adverse, especially at a bilateral lesion of appendages of testicles. Even at clinical recover there comes impassability of appendages of testicles and deferent ducts which leads to sterility. The tuberculosis of a prostate and seed blisters almost always comes to the end with irreversible disturbance of their functions. The forecast concerning a life at a tuberculosis of man's genitals the favorable.

### 5. The plan and organizational structure of employment.

№ п/п	The basic stages of employment, their function and the maintenance	The educational purposes in mastering levels	Tutorial and the control	Materials of methodical maintenance of presentation of employment, the control of knowledge	Term (in minutes or %) from the general time of employment
1	2	3	4	5	6
<b><i>Preparatory stage.</i></b>					
1	The introduction and definition of an urgency of a studied theme	Comprehension of a high urgency of a problem	Tables on a theme: "the Tuberculosis of organs of urinary system"	Statistical and clinical data on various data carriers	5 minutes
2	The control of initial level	Definition of quality of basic knowledge	Test question, situational problems	Tables, situational problems with a set of roentgenograms, a set кодограм and a slide behind a studied theme	10 minutes
<b><i>The basic stage.</i></b>					
3	Курация patients	Mastering by habits of inspection of patients and development of medical tactics	Clinical, radiological, ultrasonic data of patients, bladder phantoms, цистоскопические pictures	The obtained data of the surveyed patients. A set кодограм and slides behind a theme	20 minutes
4.	Analysis of patients for курации	Formation of professional abilities and habits concerning definition of the scheme of treatment	Item 3 See.	Item 3 See.	20 minutes

<i>The final stage.</i>					
5.	The decision of problems of 3 and 4 levels.	Correction of level of professional skills	Set of actual problems and selection of roentgenograms and the inspection data	The clinical given inspections and schemes of treatment of thematic patients	10 minutes
1	2	3	4	5	6
6.	The control of fidelity of the decision of problems	The control of level of professional abilities and habits	Item 5 See.	Item 5 See.	10 minutes
7.	Selective demonstration of slides and кодограм	Fastening of the received abilities and habits	Set of slides, tables, кодограм	Demonstration agents also are picked up materials behind an employment theme	10 minutes
8.	Rising of results of employment and problem to following employment	Summarising, granting of a house problem with a parcel to the literature			
Together					90 minutes

## **6. Materials of methodical maintenance of employment.**

6.1. Materials of the control for a preparatory stage of employment: questions, problems, tests.

6.2. Materials of methodical maintenance of the basic stage of employment: professional algorithms, rough cards for formation of practical abilities and habits, educational problems.

The decision of situational problems.

Clinical analysis of the thematic patient;

Clinical analysis of a case history;

Interpreting given clinical, laboratory, functional and special research receptions at sick of a tuberculosis of genitourinary system.

6.3. Materials of the control for the employment final stage: problems, tests and т.п.

1) A nephrophthisis suffer is more often

a) Children

- b) \* women
  - c) Men
  - d) Persons of advanced age
  - e) Persons of senile age
- 2) The tubercular dissemination of kidneys occurs, as a rule
- a) \* simultaneously both kidneys
  - b) One kidney
  - c) Primary lesion of kidneys
  - d) Secondary, from other organs, a lesion of kidneys
  - e) Correctly and
- 3) At a genitourinary tuberculosis the isolated lesion more often
- a) In total occurs
  - b) In a prostate
  - c) In a bladder
  - d) In ureters
  - e) \* in a kidney parenchyma
  - f) In renal лоханке
- 4) Tuberkulinovaja assay causes the following more often
- a) Changes in analyses
  - b) Augmentation of leucocytes
  - c) Rising of urea of a blood
  - d) \*в) an accruing leukocyturia, эритроцитую
  - e) Augmentation of globulins
  - f) Occurrence in urine of micobacteria of a tuberculosis
- 5) Preoperative therapy at planned sick of a tuberculosis
- a) Organs of urinary system averages
  - b) One week
  - c) Three weeks
  - d) \*в) three months
  - e) Six months
  - f) It is not required



- 6) A nephrophthisis do not differentiate
- a) With a chronic pyelonephritis
  - b) With a sponge kidney
  - c) With caliceal stones of a kidney
  - d) \*r) with a simple cyst of a kidney
  - e) With a necrotic papillitis
- 7) Tubercular micobacteria get to a kidney more often
- \*a) a hematogenic way
- a) Contact way from the next organs
  - b) Ascending way
  - c) Lymphogenous way
  - d) On walls of ureters
- 8) At acute (milliar) a tuberculosis of kidneys are surprised
- a) Only kidneys
  - b) Only lymph nodes
  - c) Only lungs
  - d) Only osteal system
  - e) \*д) many organs
- 9) At a nephrophthisis first of all arise
- a) Lesion of a renal papilla (specific papillitis)
  - b) Ulceration of a mucosa of calyces and лоханки
  - c) \*в) tubercular бугорки in a parenchyma
  - d) Specific inflammatory infiltrate
  - e) Tubercular cavern
- 10) The gross hematuria at kidneys sick of a tuberculosis is observed in
- a) Average
  - b) In 5 % of cases
  - c) In 10 % of cases
  - d) In 20 % of cases
  - e) \*r) in 30 % of cases
  - f) In 50 % of cases

- 11) An early stage of a clinical current of a tuberculosis of kidneys (on V.I.Shapovalu) means
- V.I.Shapovalu) means
  - Absence of clinical symptoms
  - \*б) process presence only in a renal tissue
  - Absence of tubercular caverns in a kidney
  - Absence of tubercular ulcers in urinary ways
  - Diffusion of tubercular process of kidneys on the top urinary ways and bladder
- 12) II stage of a nephrophthisis (on A.L.Shabadu) means
- infiltrative process
  - Papillitis
  - Small (to 1 sm in diameter) single caverns
  - Cavern of the big sizes in one of kidney segments
  - \*д) it is correct) and
- 13) At a tuberculosis of an epididymis the antituberculous
- Therapy is more often combined
  - With a vasoresection
  - With epididimectomy
  - \*в) with a vasoresection and epididimectomy
  - With orchectomy
  - Operative treatment is not shown
- 14) To the most typical changes of urine at a tuberculosis
- Kidneys concern
  - Acidic reaction
  - Alkaline reaction
  - The maintenance of a considerable quantity of fiber
  - The maintenance of moderate quantity (0.33-0.990 %) the squirrel
  - \*it is correct a) and b)
- 15) To the most typical changes of urine at a tuberculosis
- Kidneys concern
  - Cylindruria
  - Absence of cylinders in an urocheras

- d) Leukocyturia
  - e) Hematuria
  - f) \*it is correct b) and c)
- 16) The definitive diagnosis of a tuberculosis of kidneys establish on
- a) The basis of all listed, except
  - b) Allocation from urine of tubercular micobacteria
  - c) Histological research of a renal tissue
  - d) \*b) cystoscopy and a X-ray inspection
  - e) Provocative (tuberculine) the test
- 17) At an estimation provocative туберкулинового the test consider
- a) The maintenance in urine
  - b) Erythrocytes
  - c) Fiber, cylinders and microbes
  - d) Leucocytes
  - e) Cells of Shtergejmera - Malbina and active leucocytes
  - f) \* it is correct a) and c)
- 18) To changes of a mouth of an ureter, not characteristic for
- a) Nephrophthisis, concern
  - b) Edema
  - c) Deformation
  - d) Retraction
  - e) Hyperemia
  - f) \*cyst-like diverticulum
- 19) Probability of detection of micobacteria of a tuberculosis in urine above^
- a) At research of the vesical urine received at iIndependent emiction
  - b) At research of the urine received by the suprapubic bladder punctures
  - c) \*at research of the urine received from a kidney by catheterizations or percutaneous punctures
  - d) At research of the urine received by a catheterization Bladder
  - e) At carrying out 3-glass assays
- 20) For a nephrophthisis X-ray pattern it is characteristic

- a) Non-uniformity (seaness) destructive changes
  - b) The correct form and equal contours of cavities
  - c) The wrong form and rough contours of cavities
  - d) Uniformity of retention changes
  - e) \*it is correct a) and c)
- 21) For revealing of tubercular micobacteria in urine
- a) All listed ways are applied, except
  - b) The bacteriological
  - c) The bacterioscopic
  - d) \* the immunologic
  - e) The biological
- 22) A retrograde pyelography at suspicion on a tuberculosis
- a) Kidneys it is shown
  - b) At "a mute" kidney
  - c) At an ureter stricture
  - d) At isolates cavern
  - e) \* it is correct) and
  - f) All listed
- 23) Radiological signs петрификатов at a tuberculosis
- a) Kidneys have
  - b) Accurate contours and homogeneous structure
  - c) Indistinct contours and not homogeneous structure
  - d) Settle down in a projection of pyelocaliceal system
  - e) Settle down in a projection of a parenchyma of a kidney
  - f) \* it is correct) and
- 24) Application of antituberculous preparations is inexpedient
- a) In following combinations
  - b) Streptomycin + PASK + Ftivazidum
  - c) \*streptomycin + Kanamycinum
  - d) Streptomycin + Cycloserinum + Tubazidum
  - e) Tubazidum + Cycloserinum

- f) Streptomycin + PASK + салюзин
- 25) Application of antituberculous preparations probably in
- Following combinations
  - Streptomycin + Biomycinum
  - Streptomycin + Kanamycinum
  - PASK + Tibonum
  - PASK + an Aethoksidum
  - \*Rifadinum + Ethambutolum
- 26) At a stricture of an ureter of a tubercular aetiology
- It is necessary first of all
  - To enlarge streptomycin dose
  - To reduce streptomycin dose
  - \*B) to cancel streptomycin
  - To cancel all antituberculous preparations
  - To prescribe vitamins B6, B12 and With
- 27) For the purpose of the prevention of a stenosis of an ureter do not apply
- Prednisolonum
  - Lydasum
  - Vitreous
  - \*Azathioprinum
  - Vitamin D
- 28) At an infiltrativno-ulcer lesion of an ureter follows
- To apply
  - Streptomycin
  - Streptomycin + Ftivazidum
  - Streptomycin + Ethambutolum
  - Streptomycin + rifampicin
  - \*rifampicin + Ethambutolum
- 29) On purpose иммунокорректирующего treatments at a nephrophthisis do not apply
- Decaris
  - Placenta suspension

- c) Diuciphonum
  - d) Aloe
  - e) \*Immuran
- 30) Streptomycin is active
- a) In very acidic medium
  - b) In acidic medium
  - c) In neutral medium
  - d) \*r) in alkaline medium
  - e) In any medium
- 31) For elimination of side-effects at treatment by streptomycin do apply
- a) Polyvitaminums
  - b) Plentiful drink
  - c) Saltless diet
  - d) Calcium pantothenate
  - e) \*it is correct a) and c)
- 32) For elimination of by-effects at treatment by preparations GINK apply vitamins WITH
- a) B1
  - b) B6
  - c) B12
  - d) \* a combination of vitamins B6 and B12
- 33) For elimination of by-effects at treatment by Cycloserinum DO apply
- a) Hydrochloric acid
  - b) glutamine acid
  - c) Nicotinic acid
  - d) ATP
  - e) \*д) it is correct b) and c)
- 34) Organosohranjajushchie operations on a kidney at a nephrophthisis are spent in all listed cases, excluding
- a) Clinicoradiological signs of the segmentary deenergizings of a tubercular kidney
  - b) Solitary cavern in one of kidney segments

- c) Inefficiency of the combined antibacterial therapy spent not less of 1 year at patients with solitary cavern of a kidney
  - d) Presence of a stricture of an ureter of a specific aetiology
  - e) \*an open tubercular pyonephrosis
  - f) Organosohranjajushchie operations at a destructive tuberculosis kidneys make after the ineffectual specific therapies
  - g) Within 1st month
  - h) Within 3 months
  - i) Within 4-6 months
  - j) \*Within 8-12 months
  - k) Within 2th years
- 35) At the limited destructive nephrophthisis and it is necessary for an ureter stricture
- a) To spend more intensive antibacterial therapy
  - b) To make a nephrectomy
  - c) To make an ureter plasty
  - d) To liquidate the destruction centre in a kidney the operative way
  - e) \*it is correct a) b) c)
- 36) At a nephrophthisis and satisfactory function of collateral kidneys the nephrectomy is absolutely shown
- a) \*At the switched off tubercular pyonephrosis
  - b) At an open tubercular pyonephrosis
  - c) At a polycavernous nephrophthisis
  - d) At isolated kidney cavern
  - e) At a nephrophthisis and ureter narrowing
- 37) At the patients who have transferred a nephrectomy concerning a tuberculosis, among diseases of the remained kidney most often are observed
- a) Tuberculosis
  - b) Pyelonephritis
  - c) Nephrolithiasis
  - d) Tumour
  - e) \*it is correct a) AND d)
- 38) Specific chemotherapy at the preoperative

- a) To preparation sick of a nephrophthisis
  - b) It is not spent
  - c) It is spent within 1st week
  - d) \*B) it is spent not less than 2 weeks
  - e) It is spent not less than 2 months
  - f) It is spent not less than 6 months
- 39) Treatment in tbc of kidneys is observed on the average
- a) At 10 % of patients
  - b) At 20 % of patients
  - c) At 40 % of patients
  - d) At 50 % of patients
  - e) \*At 80 % of patients
- 40) Criteria of curation at a nephrophthisis consider
- a) Absence in urine of tubercular micobacteria, Leucocytes and erythrocytes within 1st year after treatment terminations
  - b) Absence in urine of tubercular micobacteria, Leucocytes and erythrocytes within 3th years after the treatment terminations
  - c) Absense in urine of tubercular micobacteria, Leucocytes and erythrocytes within 5th years after Treatments
  - d) Stabilisation and involution of the centres of a destruction
  - e) \* it is correct b) and c)
- 41) Criteria of curation in a nephrophthisis are based
- a) On negative results of crops of urine during 2th years after the treatment termination
  - b) On stability of a X-ray pattern
  - c) On negative results provocative tuberculine tests within 5th years
  - d) \* All is correct
- 42) For the purpose of the control over results of treatment of patients
- a) Urine crops are made by a nephrophthisis
  - b) Every week
  - c) \*6) every month
  - d) 1 time in 2 months
  - e) 1 time in 3 months



- f) 1 time in 6 months
- 43) At an active tuberculosis of one or both kidneys patients
- Are temporarily invalid during
  - 2 months
  - 3 months
  - 4-8 months
  - \*9-12 months
  - 1.5-2th years
- 44) At definition of working capacity of patients with calmed down or
- The cured nephrophthisis a degree estimation
  - Functional condition of kidneys
  - Has no value
  - Has relative value
  - Has some value
  - Has great value
  - \*д) has very much great value
- 45) The patient with the calmed down or clinically cured tuberculosis
- Kidneys at satisfactory function of a kidney
  - Work with appreciable physical is contraindicative Strain (transfer into other work is required)
  - Work in the adverse of Weather conditions is contraindicative
  - Work with toxic substances is contraindicative
  - Patients admit invalids of III group, if
    - Transfer into other work leads to depression
    - Qualification or volume of productive activity
  - \*all listed truly
- 46) Sick of a tuberculosis of kidneys admit invalids of II group
- At renal insufficiency of the second degree
  - At renal insufficiency of the third degree
  - At far come tuberculosis of kidneys and it is not enough Effective antibacterial therapy
  - \* all listed is correct

- 47) Contraindications to a direction in the special phtisiourologic sanatoria of kidneys sick of a tuberculosis Are
- Late stages of chronic renal insufficiency
  - Acute renal insufficiency
  - Urinary fistulas
  - Urine incontience
  - \*it is correct a) and b)
- 48) Contraindications to a direction in the special phtisiourologic sanatoria of kidneys sick of a tuberculosis Are
- Active pulmonary tuberculosis
  - Tuberculosis of kostno-articulate system
  - Amyloidosis of kidneys
  - \*all is correct
- 49) The lethality at a nephrophthisis makes approximately
- 0.5 %
  - \*5 %
  - 10 %
  - 20 %
  - 30 %
- 50) To changes of a mucosa of a bladder at tuberculosis taped by cystoscopy, concern
- Tubercular tuberculi
  - Ulcers
  - Cicatrical changes mucous, located Mainly in the field of an ureter mouth of amazed kidney
  - \*all listed
  - Only a) and b)
- 51) To the most typical symptoms of a tuberculosis urinary
- Bubble concern
  - Dysuria
  - Terminal hematuria
  - Rise in temperature, cold fits
  - \*r) it is correct) and

- f) Correctly and
- 52) Complications of a tuberculosis of a bladder concern
- Vesicoureteral reflux
  - Bladder shrinkage
  - Pyelonephritis
  - \*r) all listed
  - Only and
- 53) At a tubercular cystitis apply instillations
- Colloid silver of 2 %
  - Argentum nitricum (silver nitrate) 1:10
  - \*в) Dibunolum
  - Correctly and
  - Correctly, and
- 54) At intestinal plastic wrinkled bladder it is not Used
- Preterminal part of an ileal intestine
  - Terminal part of an ileal intestine
  - Other departments of small intestines
  - Sigmoid intestine
  - \*д) a rectum
- 55) Initially a tuberculosis are surprised
- Bladder
  - мочеиспускательный the channel
  - \*в) a kidney
  - Ureter
  - Renal лоханка
- 56) At a genital tuberculosis at the man more often
- Initially are surprised
  - Seed blisters
  - \*б) a prostate
  - Testicle
  - Epididymis

- f) Deferent duct
- 57) Characteristic for a tuberculosis of a prostate symptoms
- Pains in a perineum and a rectum
  - Dysuria
  - Allocation of pus from an urethra
  - \*r) all listed
  - Only and
- 58) Manual rectal research at the tubercular
- Prostatitis taps
  - Hilly surface of a prostate with a presence of dense nodules
  - Reduction of the sizes of a prostate
  - Accurate contours of a prostate
  - Presence along with the dense centres of sites of fluctuation or retractions
  - \*д) it is correct) and
- 59) A tuberculosis of an epididymis among all diseases sexual
- Organs at men meets on the average
  - In 5 % of cases
  - In 10 % of cases
  - \* in 20 % of cases
  - In 30 % of cases
  - In 40 % of cases
- 60) To local changes, characteristic for a tuberculosis of a testicle and
- Its appendage, concern
  - Augmentation, inspissation, epididymis tuberosity
  - Reactive hydrocele
  - Appendage and testicle adnation dense solderings, a fistula on to the scrotum skin, starting with an epididymis
  - Grain-like a deferent duct
  - \* all listed
- 61) At an epididymis tuberculosis is surprised more often
- Appendage body

- b) \*б) an appendage tail
  - c) Appendage head
  - d) All appendage
  - e) Appendage and testicle tissue
- 62) To diagnostics of a tuberculosis of an epididymis apply all Listed, except
- a) Bacteriological research of an ejaculate
  - b) Puncture biopsy
  - c) Researches separated from an urethra
  - d) \*urine researches
  - e) Correctly a) and c)
- 63) At acutely arisen tuberculosis of an epididymis it is observed
- a) Pain in the field of an epididymis
  - b) Appendage tumescence
  - c) Hyperemia and scrotum cutaneous dropsy
  - d) Only and
  - e) \*all listed
- 64) At acutely arisen tuberculosis of an epididymis prescribe
- a) All listed, except
  - b) Rest
  - c) Scrotum immobilisations (суспензорий)
  - d) Antibacterial therapy
  - e) \*thermal procedures and physiotherapeutic treatment
- 65) At an appendage tuberculosis make
- a) \*a) epididimectomy
  - b) Hemicastration
  - c) epididimectomy with a testicle resection
  - d) Bilateral epididimectomy
  - e) epididimectomy with a vasoresection from the opposite part
- 66) Duration of the antituberculous medicamental Treatments at which unsuccessfulness the operative is shown Treatment, at an epididymis tuberculosis makes
- a) 1 month

- b) \*2 months
- c) 4 months
- d) 6 months
- e) 1 year

### 9. A problem with УДРС and НДРС from the given theme.

Subjects УДРС: On the basis of the given stories of illnesses of groups of patients at which the specific lesion of organs of sexual system was suspected to present algorithms of complex inspection of such persons.

Subjects НДРС: to Prepare the report behind a theme: "Modern methods of cystoplasty in patients with a bladder tuberculosis"

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### Recommended literature.

#### Basic:

1. S.P. Pasechnikov; Urology: textbook/ Ed. S. P. Pasyechnikova, S. A. Vozianov, V. N. Lesovy [and others]. - View. 3rd – Vinnytsia: New Book, 2019.
2. Pasechnikov S.P. Modern problems of urology: [manual]: doctor's guide/ S.P. Pasechnikov, V.I. Zaitsev. - Kyiv: L-ry Health of Ukraine; 2017.
3. Stus V.P. Urology (practical skills for intern doctors) / V.P. Stus, S.P. Pasechnikov. Teaching and methodical manual. - Dnipropetrovsk: Akcent PP LLC, 2016.
4. Sarychev L.P. Symptoms of urological diseases: method. rec. For teachers / L. P. Sarychev, S. M. Suprunenko, S. A. Sukhomlyn, Ya. V. Sarychev. – Poltava, 2019.
5. O.V., Lyulko, O.F. Vozianov Textbook "Urology" 3rd edition. Thresholds Dnipropetrovsk. - 2012 p.
6. "Urology (Methodical development of practical classes for students)" edited by Professor V.P. Stus, second edition, supplemented. / A.P. Stus, Moiseenko M.M., Fridberg A.M., Pollion M.Yu., Barannik K.S., Suvaryan A.L., Krasnov V.M., Kryzhanivskyi O.Yu. - Dnipro: Accent LLC. - 2018. - 336c.
7. Urology: textbook for students. higher med. academic established: translation from Ukrainian publications / S.P. Pasechnikov, S.A. Vozianov, V.N. Lesovoy, F.I. Kostev, V.P. Stus, et al./ Ed. S.P. Pasechnikov - Edition 2. - Vinnytsia: Novaya Knyga, 2015. - 456 p.: illustr.

8. Urology: textbook for students of higher medical education Institutions /S.P. Pasechnikov, S.O. Vozianov, V.M. Lesovoy (et at.); ed. by Pasechnikov. / S.P. Pasechnikov, S.O. Vozianov, V.M. Lesovoy (et at.) - Vinnytsia: Nova Knyha, 2016. - 400 p.
9. EAU Guidelines, edition presented at the 28th EAU Annual Congress, Milan 2021. ISBN 978-90-79754-71-7. EAU Guidelines Office, Arnhem, The Netherlands.
10. Alan W. Partin, Alan J. Wein, et. all - Campbell Walsh Wein Urology, E-Book (12th ed.) – 2020.
11. Omar M. Aboumarzouk - Blandy's Urology, 3rd Edition – 2019.
12. David Thurtle, Suzanne Biers, Michal Sut, James Armitage. - Emergencies in Urology – 2017.
4. Philipp Dahm, Roger Dmochowski - Evidence-based Urology, 2nd Edition – 2018.

Additional:

1. Boyko M.I., Pasechnikov S.P., Stus V.P. and others Clinical andrology // Doctor's guide "Androlog". - K.: LLC "Library "Health of Ukraine", 2013. - 222 p.
2. Sarychev L.P. Clinical anatomy and physiology of organs of the urinary and male reproductive system: method. rec. for teachers / comp. L. P. Sarychev, S. A. Sukhomlyn, S. M. Suprunenko. – Poltava, 2019. – 11 p.
3. Sarychev L.P. Symptoms of urological diseases: method. rec. for teachers / L. P. Sarychev, S. M. Suprunenko, S. A. Sukhomlyn, Ya. V. Sarychev. – Poltava, 2019. – 14 p.
4. Medical student's library. Urology. Edited by F.I. Kosteva. - Odesa, 2004. – 296p.
5. Atlas-guide to urology. Ed. A.F. Vozianova, A.V. Lulko Dnipropetrovsk, 2002.-T. 1,2,3
6. Urology / Ed. Prof. O.S. Fedoruk - Chernivtsi: Bukovyna State Medical University, 2011. - 344p.

**Information resources:**

University website <https://onmedu.edu.ua>

Library [library.odmu.edu.ua](http://library.odmu.edu.ua)

1. <https://uroweb.org/>
2. <https://www.nccn.org/>
3. <https://www.auanet.org>
4. <https://www.inurol.kiev.ua/>
5. <https://www.souu.org.ua/>