

# FOS LD (Urology) — English Translation

Translated sections: Appendix 1 (Tests, Questions 1-60), Appendix 2 (Situational tasks 1-45), Appendix 4 (Assessment scales — excerpt).

Source: the uploaded PDF file.

## Appendix 1 — Tests (Questions 1-60)

1. For radiolucent (X-ray negative) urinary bladder stones, the following is performed:

- A. Cystography with oxygen
- B. Sedimentation cystography
- C. Excretory urography with descending cystography
- D. Pneumopyelography

2. Types of hematuria:

- A. Painful
- B. Torpid
- C. Latent
- D. Decompensated

3. Contrast agents used for the diagnosis of kidney stones:

- A. Indigo carmine
- B. Urografin
- C. Barium
- D. Iodolipol

4. Instrumental method for diagnosing bladder stones:

- A. Cystolithotripsy
- B. Cystoscopy
- C. Cystography
- D. Ureterography

5. Relief of renal colic:

- A. Penicillin, ampicillin
- B. Proserin intramuscularly
- C. Diuretics
- D. Ureteral catheterization

6. To confirm a non-specific infection in the kidneys, it is necessary to perform:

- A. Zimnitsky urine test
- B. Urine culture for flora
- C. Excretory urography
- D. Retrograde pyelography

7. Types of excretory urography:

- A. Sedimentation
- B. Infusion
- C. Lacunar
- D. Genitography

8. Worm-like (cast-like) clots in hematuria indicate bleeding from:
- A. The prostate
  - B. The urinary bladder
  - C. The ureters
  - D. The urethra
9. What is the normal number of leukocytes in a general urinalysis?
- A. Should be absent
  - B. 10-15 per field of view
  - C. 4 or fewer per field of view
  - D. 15 or fewer per field of view
10. First aid for acute urinary retention (ischuria):
- A. Antispasmodics
  - B. Antibiotics
  - C. Analgesia
  - D. Urinary bladder catheterization
11. Which of the following относится to dysuria?
- A. Anuria
  - B. Hypoisothenuria
  - C. Hematuria
  - D. Nocturia
12. What is paradoxical ischuria?
- A. Oxaluria
  - B. Dribbling of urine in drops with an overfilled bladder
  - C. Urinary incontinence
  - D. Oliguria
13. Where does pain radiate during renal colic?
- A. To the groin
  - B. To the scapula
  - C. To the buttock
  - D. To the contralateral kidney
14. Causes of renal colic:
- A. Obstruction of the upper urinary tract
  - B. Obstruction of the lower urinary tract
  - C. Inflammatory diseases of the genital tract
  - D. Urethral strictures
15. Principles of renal colic relief:
- A. Antibiotic therapy
  - B. Diuretics
  - C. Lorín-Epstein block
  - D. Herbal medicines
16. Clinical manifestations of renal colic:

- A. Urinary incontinence
- B. Perineal pain
- C. Urinary retention
- D. Low back (lumbar) pain

17. Which urinary disorders do you know?

- A. Ischuria
- B. Hematuria
- C. Pyuria
- D. Isogiposthenuria

18. Initial hematuria occurs in the following conditions:

- A. Kidney tumors
- B. Kidney stones
- C. Acute cystitis
- D. Urethral strictures

19. Types of excretory urography:

- A. Compression
- B. Sedimentation
- C. Antegrade
- D. Lacunar

20. Methods to detect hidden (occult) pyuria:

- A. General urinalysis
- B. Nechiporenko test
- C. Zimnitsky test
- D. Rehberg-Tareev test

21. Which causes of urinary retention (ischuria) are known?

- A. Polycystic kidney disease
- B. Chronic pyelonephritis
- C. Urethral stricture
- D. Kidney stone

22. A characteristic laboratory sign of renal colic:

- A. Erythrocyturia
- B. Dysuria
- C. Polyuria
- D. Pyuria

23. Contraindications to excretory urography:

- A. Urolithiasis
- B. Urinary tract anomalies
- C. Chronic renal failure and acute renal failure
- D. Kidney tumor

24. Renal colic may be caused by:

- A. An inflammatory process in the kidney

- B. Polycystic disease
- C. A blood clot
- D. Urethral trauma

25. Which contrast agents for intravenous administration do you know?

- A. Oxygen
- B. Urografin
- C. Cholevid
- D. Indigo carmine

26. Differential diagnosis of renal colic is carried out with:

- A. Acute prostatitis
- B. Hydrocele
- C. Pyelonephritis
- D. Ectopic pregnancy

27. Treatment of renal colic:

- A. Antibiotics
- B. Ureteral catheterization
- C. Urinary bladder catheterization
- D. Detoxification

28. Fluctuations of urine specific gravity are assessed by the:

- A. Rehberg-Tareev test
- B. Nechiporenko test
- C. Zimnitsky test
- D. Addis-Kakovsky test

29. One of the causes of urinary incontinence is:

- A. Ectopic ureteral orifice
- B. Kidney trauma
- C. Bladder tuberculosis
- D. Nocturia

30. Contrast agents used for diagnosing kidney stones:

- A. Iodolipol
- B. Indigo carmine
- C. Triombrast
- D. Barium

31. For radiolucent ureteral stones, what is indicated?

- A. Excretory urography
- B. Pneumopyelography
- C. Cystography
- D. Antegrade urography

32. Which of the following relates to dysuria?

- A. Anuria
- B. Hypoisostenuria

C. Hematuria

D. Nocturia

33. What is paradoxical ischuria?

A. Oxaluria

B. Dribbling of urine in drops with an overfilled bladder

C. Urinary incontinence

D. Oliguria

34. Types of excretory urography:

A. Infusion

B. Combined

C. Sedimentation

D. Lacunar

35. Where does pain radiate during renal colic?

A. To the groin

B. To the scapula

C. To the buttock

D. To the contralateral kidney

36. Methods to detect hidden (occult) pyuria:

A. General urinalysis

B. Nechiporenko test

C. Zimnitsky test

D. Rehberg-Tareev test

37. A possible cause of urinary retention (ischuria) is:

A. Polycystic kidney disease

B. Chronic pyelonephritis

C. Urethral stricture

D. Chronic cystitis

38. A characteristic laboratory sign of renal colic:

A. Erythrocyturia

B. Pyuria

C. Bacteriuria

D. Urethrorrhagia

39. Which contrast agents for intravenous administration do you know?

A. Iodolipol

B. Verografin

C. Indigo carmine

D. Oxygen

40. Causes of total hematuria:

A. Urethral tumor

B. Tumor of the renal pelvis

C. Bladder tuberculosis

D. Orchiepididymitis

41. Contraindications to excretory urography:

- A. Hydronephrosis
- B. Kidney tumors
- C. Chronic renal failure
- D. Urolithiasis

42. Contraindications to cystoscopy:

- A. Acute cystitis
- B. Chronic cystitis
- C. Hematuria
- D. Bladder stones

43. Differential diagnosis of renal colic is carried out with:

- A. Pyelonephritis
- B. Hydrocele
- C. Hepatitis
- D. Ectopic pregnancy

44. Treatment of renal colic:

- A. Antibiotics
- B. Ureteral catheterization
- C. Physiotherapy
- D. Diuretics

45. Instrumental method for diagnosing bladder stones:

- A. Cystography
- B. Cystoscopy
- C. Urethrography
- D. Pneumopyelography

46. With a stone in the lower third of the ureter that disrupts urodynamics, pain is:

- A. Aching
- B. Dull
- C. Sharp
- D. Paroxysmal

47. In renal colic, pain radiates:

- A. To the contralateral kidney
- B. To the hypochondrium with radiation to the scapula
- C. To the lateral abdomen with radiation to the lumbar region
- D. To the inner thigh and the genital organs

48. Postrenal anuria occurs:

- A. With obstruction of both ureters
- B. With obstruction of one ureter
- C. With prostatic hyperplasia
- D. After transfusion of incompatible blood

49. Which stones are radiolucent (X-ray negative)?

- A. Oxalate
- B. Urate
- C. Cystine
- D. Carbonate

50. Causes of terminal hematuria:

- A. Urethral trauma
- B. Bladder polyp
- C. Ureteral duplication
- D. Kidney tumor

51. Differential diagnosis of renal colic is carried out with:

- A. Pyelonephritis
- B. Chronic acalculous cholecystitis
- C. Hepatitis
- D. Acute pancreatitis

52. What is indicated in urinary retention (ischuria)?

- A. Urinary bladder catheterization
- B. Antispasmodics
- C. Renal stenting
- D. Diuretics

53. Relief of renal colic:

- A. Penicillin, ampicillin
- B. Proserin intramuscularly
- C. Diuretics
- D. Ureteral catheterization

54. With bladder calculi, diagnostic value has:

- A. Cystography
- B. Pyelography
- C. Urethrography
- D. Angiography

55. Contrast agents used for diagnosing kidney stones:

- A. Indigo carmine
- B. Urografin
- C. Barium
- D. Iodolipol

56. Types of hematuria:

- A. Simple
- B. False
- C. Decompensated
- D. Initial

57. Which urinary disorders do you know?

- A. Ischuria
- B. Hematuria
- C. Pyuria
- D. Isogiposthenuria

58. Indications for urethral bougienage:

- A. Acute urethritis
- B. Chronic urethritis
- C. Urethral stone
- D. Urethral stricture

59. Causes of renal colic:

- A. Obstruction of the upper urinary tract
- B. Obstruction of the lower urinary tract
- C. Inflammatory diseases of the genital tract
- D. Urethral strictures

60. Worm-like (cast-like) clots in hematuria indicate bleeding from:

- A. The prostate
- B. The urinary bladder
- C. The ureters
- D. The urethra

## Appendix 2 — Situational Tasks (1–45)

Task 1. After a blow to the perineum, a patient notes discharge of blood from the urethra. What is this symptom called and how can its appearance be explained?

Task 2. A man complains of painful urination and blood in the last portions of urine. What is this symptom called and where is the pathological focus located?

Task 3. A woman complains of painful urination; the first portions of urine are stained with blood. What is this symptom called and where is the pathological focus located?

Task 4. A 65-year-old patient complains of frequent urination (up to 10 times/day) with a weak stream; he has to strain when urinating and gets up to urinate up to 4 times at night. What is this symptom called? In which diseases is it observed?

Task 5. After catheterization, 450 ml of urine was evacuated from the bladder. What is this symptom called? In which diseases is it observed?

Task 6. A 67-year-old patient complains of frequent urination with a weak thin stream; at night he gets up to urinate up to 6 times. After urination he does not feel satisfied. Which examination methods can establish the diagnosis?

Task 7. A patient has prolonged low-grade fever and elevated ESR. The patient has been treated with antibacterial drugs for a long time with no effect. Which urologic diagnostic methods will you use to clarify the diagnosis?

Task 8. A 13-year-old girl: survey urography shows a large renal pelvic stone. Excretory urography reveals markedly dilated rounded calyces and renal pelvis on the right. No contrast passes through the ureter. What can be assumed? What complaints may the patient have?

Task 9. A 10-year-old child complains of lower abdominal pain. He sustained trauma in a car accident; last urination was 5 hours before the trauma. There is no urge to urinate. Which examination methods can clarify the diagnosis?

Task 10. A woman was hit by a car. After that, total hematuria with worm-like clots appeared, with low back pain. Breathing is painful and difficult. On the right side of the chest there is sharp tenderness and crepitation along the 11th rib. Which diagnostic methods will you undertake to clarify the diagnosis? List the key clinical symptoms.

Task 11. Excretory urography of a 5-year-old girl with normal voiding but persistent wet underwear shows complete duplication of the ureter on the right; cystoscopy shows two right ureteral orifices and one левый. What congenital anomaly is this? Which diagnostic methods can clarify the diagnosis?

Task 12. In radiologic examination, a patient has a non-functioning right kidney. Which investigations are needed to clarify the diagnosis?

Task 13. Patient L., 14 years old, admitted in serious condition with high fever and chills. Skin pale with jaundiced edema. Pulse 120/min, BP 100/70 mmHg. Abdomen moderately distended; enlarged kidneys palpable on both sides. Excretory urography shows marked dilation of calyces, pelvis and ureters bilaterally down to the bladder. At 60 minutes, there is almost no contrast in the bladder. Indicate the possible cause and outline a treatment plan.

Task 14. No complaints. Preventive chest fluoroscopy shows a shadow above the diaphragm that could be mistaken for a tumor. In fact, there is a renal anomaly. How to avoid the mistake?

Task 15. In a boy, the external urethral meatus opens on the нижней surface of the penis and is combined with ventral curvature (flexion contracture). What is this anomaly called? What treatment is needed?

Task 16. A 35-year-old woman has постоянные left lumbar pain for 3 weeks. Intravenous urography: right kidney functions well; on the left the kidney contour is not seen and there is no function. Cystoscopy: left ureteral orifice is absent. What renal anomaly can be suspected? Which radiological methods can clarify the diagnosis?

Task 17. Two hours ago a patient sustained a stab wound to the right lumbar region. Skin pale, BP 90/60 mmHg, pulse 90/min. Breathing is difficult. In the right lumbar area there is tumor-like swelling with sharp tenderness. Blood is coming from the wound tract. There is no hematuria. Your opinion on the type of injury? Your diagnostic actions?

Task 18. Parents complain that a child often has fever spikes, especially when difficulty urinating appears. Urine is cloudy with a large sediment and unpleasant smell. Excretory urography shows dilation of ureters, pelvis and calyces. The bladder is enlarged, 'tower-shaped'. What is this anomaly called? Why does UTI occur?

Task 19. During cystoscopy, in the projection of the left ureteral orifice there is a lesion 2.5 x 2.0 cm that collapses during ureteral diastole. What anomaly is suspected? Additional diagnostic methods? Principles of treatment.

Task 20. A 24-year-old patient is admitted with acute urinary retention and fever up to 39°C. Rectal exam shows enlarged and painful prostate. What disease is it? What additional diagnostic methods are needed? Prescribe treatment.

Task 21. A stone in the lower third of the left ureter 0.7 x 0.5 cm. Mild ureteral dilatation; left kidney function preserved; temperature normal. Methods of diagnosis and treatment?

Task 22. A patient underwent surgery 2 months ago for a right kidney stone. Urinalysis: pyuria, соль crystals, oxalates and uric acid. Prescribe treatment including basic and preventive measures.

Task 23. Radiologic exam shows that at 10, 60, 120 minutes the function of the left kidney is markedly delayed. For diagnosis a retrograde pyelogram was performed: at 26-27 cm on the left there is an impassable obstacle when introducing a No. 5 ureteral catheter. What disease is this? What additional diagnostic methods are needed?

Task 24. A female patient Ж. complains of suprapubic pain, stranguria, and hematuria after being hit by a car. Exam: BP 90/60, pale skin. Renal areas painless. Suprapubic muscle tension and pronounced tenderness. Urine visibly mixed with blood. Urination is difficult, small portions. Your preliminary diagnosis? Diagnostic criteria? Treatment tactics?

Task 25. Emergency urology: a 23-year-old patient after blow to the perineum (bicycle frame) 2 hours ago. Complaints: urinary retention, urethrorrhagia, weakness, suprapubic pain, burning in the perineum. Exam: increasing perineal urohematoma; enlarged bladder palpable above pubis. What is the medical tactic? Preliminary diagnosis?

Task 26. A 42-year-old male complains of weakness, lack of appetite, weight loss, субфебрильная fever. History: ill for 6 months; had a single episode of hematuria then. Treated by therapist; no effect. Your diagnosis? Additional investigations?

Task 27. A 55-year-old woman delivered by ambulance with gross hematuria. History: hematuria occurred three times every two weeks after minor physical нагрузки. What should be the urgent tactics of the urologist? Treatment measures and дальнейшая management.

- Task 28. A 60-year-old male admitted with inability to urinate and suprapubic pain. History: acute onset 8 hours ago. Your tactics? Diagnostic investigations.
- Task 29. A 40-year-old woman has 2 months of frequent painful urination with рези, weakness, fatigue, decreased appetite, at times dull suprapubic pain. In clinic: ESR 65 mm/h; urinalysis: SG 1.010, protein 0.101 g/L, leukocytes 3-5, erythrocytes 20-25 per field. Treated for acute cystitis with no effect. What disease to suspect? Which diagnostic methods confirm? Proposed treatment.
- Task 30. A 53-year-old male complains of difficulty urinating with weak stream, incomplete emptying, nocturia 5-6 times. Kidney areas painless. Bladder not palpable. DRE: enlarged prostate, firm-elastic, painless, median sulcus smoothed. Your diagnosis? Diagnostic measures. Proposed treatment.
- Task 31. A 62-year-old male complains of thin слабый urine stream, suprapubic pain, 15 kg weight loss in 3 months, weakness. Exam: abdomen soft, kidneys not palpable. DRE: prostate enlarged, stone-hard, nodular, painless, fixed. Your diagnosis? Diagnostic test to clarify.
- Task 32. A 54-year-old male with ulcerations in the coronal sulcus area for 1 month. Syphilis microreaction negative. Locally: two ulcers with indurated edges, hyperemic rim, sizes 1.0 x 0.8 and 0.5 x 1.0 cm, painless. Your предполагаемый diagnosis? Main diagnostic test to confirm.
- Task 33. A 35-year-old male with enlargement of right половина of the scrotum. Exam: scrotal asymmetry; testis enlarged, very firm; epididymis indurated; painless; left testis normal. Transillumination negative. Enlarged inguinal nodes palpable. Diagnosis? Treatment tactic.
- Task 34. A 38-year-old male with frequent urination with рези and pain at the end of micturition. Before dysuria - cloudy urine. Relatives had TB; he had exudative pleuritis 5 years ago. Urine culture negative. Urine: protein 0.66 g/L, leukocytes 'covering the field', erythrocytes up to 10-15 per field. What disease to suspect? Additional tests?
- Task 35. A 26-year-old male with purulent discharge from scrotal skin. Skin adherent to testis; testis enlarged; purulent scrotal fistula. Antibiotics/sulfonamides/compresses for 2 weeks no effect. Preliminary diagnosis? Treatment plan.
- Task 36. During cystoscopy: small millet-seed whitish elevations under the bladder mucosa with a hyperemic rim, in groups near vessel crossings close to ureteral orifice. What disease to suspect? Additional studies? Tactics.
- Task 37. Retrograde pyelogram: an additional cavity with uneven 'eaten' edges communicating with the collecting system. Mantoux test sharply positive. For which disease is this typical? What additional tests?
- Task 38. A 35-year-old woman treated for chronic pyelonephritis for years with short improvements; a sluggish infection picture. Doctor suspects специфический процесс; бактериология, Mantoux, ultrasound were non-diagnostic. Which additional methods might help diagnosis?
- Task 39. A 45-year-old male had tuberculous coxitis in childhood; Koch's bacillus found in urine. X-ray: multiple ureteral strictures; ureter stretched, normal pelvic curve absent; right kidney function markedly reduced, contralateral normal. Diagnosis? Treatment plan.
- Task 40. Cystoscopy: bladder mucosa around left ureteral orifice hyperemic; grayish-yellow nodules with red rim. Catheterization of left ureteral orifice: catheter impassable at first centimeter. Ultrasound: impaired urine drainage from left kidney. Diagnosis? Additional diagnostics? Treatment tactics.

Task 41. A 23-year-old male: gradually painless enlargement of left then right half of scrotum. No fever/pain. After 3 years moderate pain, scrotal skin adherent to epididymis, purulent fistulas formed. Last year: sharply decreased semen, poor sleep, weakness. Culture from fistulas indicates a specific process. Diagnosis? Treatment tactic.

Task 42. A patient was hit by a car. Total gross hematuria with worm-like clots. Breathing painful and difficult. On the right chest: sharp tenderness and crepitation along the 12th rib. Preliminary diagnosis? Which diagnostic methods would you use to clarify the diagnosis?

Task 43. On day 5, a patient is admitted in severe condition with signs of peritonitis. Urinary retention. Catheterization yields a small amount of urine with blood (40 ml). What should be diagnostic and therapeutic tactics? What disease is it?

Task 44. A patient left a building and went to the toilet. Suddenly received a blow to the abdomen. The feeling of urge to urinate disappeared. Ignoring condition, went home. After 12 hours: dry mouth, thirst, abdominal muscle tension. False urges to urinate appeared. Preliminary diagnosis? Diagnostic and therapeutic measures?

Task 45. A patient was hit by a car while crossing improperly. On falling he felt suprapubic pain and lost consciousness. When attempting to urinate, passed a small amount of urine with blood and felt burning in the perineum. Exam: bladder enlarged; perineal hematoma in a 'butterfly' pattern. Preliminary diagnosis? What diagnostic and therapeutic measures will you undertake?

## Appendix 4 — Assessment Scales (excerpt)

Scale for assessing oral theoretical questioning (current and interim control)

1. Confident answer 0-10%
2. Understanding of the problem 0-30%
3. Reasoned use of medical terminology (appropriateness and reliability of information) 0-30%
4. Keywords: importance for the stated topic, correct use, quantity 0-15%
5. Logic and последовательность of oral statement 0-10%

Total. Sum of points

Scale for assessing solution of a situational case (current and interim control)

1. Correct formulation of the diagnosis 0-30%
2. Correct choice of action algorithm 0-20%
3. Correct selection of additional diagnostic methods 0-20%
4. Correct prescribing of treatment tactics 0-30%

Total. Sum of points

Scale for assessing a presentation report (current control) — excerpt

Design of the presentation. 70%

1. Title slide with heading 0-4%