

*S.A. Abdullaev, 2nd year master's degree*

*N.I. Yakubov, senior teacher.*

*A.T. Zulunov, senior teacher*

*Andijan State Medical Institute*

*Andijan, Uzbekistan*

## COMPARATIVE EVALUATION OF DIFFERENT METHODS FOR IMAGING DIAGNOSIS OF RENAL TUBERCULOSIS

**Summary.** Diagnosis of kidney tuberculosis remains an urgent problem in clinical medicine. Clinical signs of kidney tuberculosis do not have sufficient specificity, and patients often seek specialized medical care several months after the onset of the first symptoms of the disease. Despite significant progress in the development of phthiology, medical technology and radiation research methods, the diagnosis of kidney tuberculosis, especially in the early stages, remains unsatisfactory. At the present stage, radiological research methods are of decisive importance in the diagnosis of kidney tuberculosis.

Tuberculosis of the kidneys from the moment of its occurrence to the first clinical manifestations develops quite secretly and asymptotically. Therefore, it is extremely necessary to develop an optimal diagnostic algorithm that would allow in a short time to verify the diagnosis and choose the optimal treatment tactics.

**Key words:** Urinary tract, survivors of pulmonary tuberculosis, epidemic situation, respiratory tuberculosis, urogenital tuberculosis.

*2 курс магистратуры*

*Н.И. Якубов, старший преподаватель*

*В. Зулунов, старший преподаватель*

*Андижанский государственный медицинский институт*

## **СРАВНИТЕЛЬНАЯ ОЦЕНКА РАЗЛИЧНЫХ МЕТОДОВ ИССЛЕДОВАНИЙ ЛУЧЕВОЙ ДИАГНОСТИКИ ТУБЕРКУЛЁЗА ПОЧЕК**

**Резюме.** Диагностика туберкулеза почек остается актуальной проблемой клинической медицины. Клинические признаки туберкулеза почек не обладают достаточной специфичностью, и больные часто обращаются за специализированной медицинской помощью через несколько месяцев после появления первых симптомов заболевания. Несмотря на значительный прогресс в развитии фтизиатрии, медицинской техники и лучевых методов исследования, диагностика туберкулеза почек, особенно в ранних стадиях, остается неудовлетворительной. На современном этапе решающее значение в диагностике туберкулеза почек имеют рентгенологические методы исследования.

Туберкулез почек с момента его возникновения до первых клинических проявлений развивается довольно скрытно и бессимптомно. Поэтому крайне необходима разработка оптимального диагностического алгоритма, который позволил бы в короткие сроки верифицировать диагноз и выбрать оптимальную тактику лечения.

**Ключевые слова:** Мочезые пути, перенесших туберкулез легких, эпидемической ситуации, туберкулезу органов дыхания, мочеполовой туберкулез.

**Relevance.** Genitourinary tuberculosis occupies a leading place in the structure of extrapulmonary forms of tuberculosis, its share in various countries is 30-40%. In industrialized countries, in persons who have had pulmonary tuberculosis, kidney tuberculosis develops in 8-10% of cases. In recent years, Russia has seen a deterioration in the epidemic situation of respiratory

tuberculosis. Thus, in the period 1986 - 1990, the incidence decreased and amounted to 45.1 - 37.6 cases per 100,000 population, respectively, and in 1996 - 2001 it increased and amounted to 57.5 - 88.2 cases per 100,000 population [Shilova MB, 2004] Indicators of ps extrapulmonary tuberculosis have the opposite dynamics, so its frequency among newly diagnosed processes in 1993 was 8.0%, and in 2003 - 3.9%. The discrepancy between the dynamics of the incidence rate of respiratory tuberculosis and extrapulmonary localizations is due to the shortcomings in the detection and diagnosis of extrapulmonary tuberculosis. Taking into account the epidemic situation of tuberculosis in Russia, a further increase in the incidence of urogenital tuberculosis should be expected in the next decade.

In more than half of knockers, urogenital tuberculosis is diagnosed at a late and advanced stage of the development of the tuberculosis process. The main methods of radiation diagnosis of organ tuberculosis urinary system remains excretory urography and ultrasound methods surgical treatment, it is necessary to obtain information not only about the state of the upper urinary tract, but also about the function of the contralateral kidney and the volume of the preserved parenchyma of the ball organ. For this, visualization of the vasculature of the kidneys is necessary.

**Purpose of the study.** Improving the efficiency of diagnosing kidney tuberculosis through the use of complex radiation methods.

**Materials and research methods.** This work will be based on the results of radiological and statistical examination of 50 patients with various forms of kidney tuberculosis.

A comprehensive standard examination will include clinical, laboratory and the following radiological methods: complex sonography of the kidneys using an expert-class ultrasound device GE LOGIQ S-8, mode 2/3/4D/Doppler, 2-15MHz and an expert-class multispiral computed tomograph ANATOM 64 Precision and examination of patients in the Andijan Regional TB Dispensary and the Fergana Regional TB Dispensary of the Republic of Uzbekistan.

**Research results.** Genitourinary tuberculosis occupies a leading place in the structure of extrapulmonary forms of tuberculosis, its share in various countries is 30-40%. In industrialized countries, in persons who have had pulmonary tuberculosis, kidney tuberculosis develops in 8-10% of cases. In recent years, Russia has seen a deterioration in the epidemic situation of respiratory tuberculosis. Thus, in the period 1986 - 1990, the incidence decreased and amounted to 45.1 - 37.6 cases per 100,000 population, respectively, and in 1996 - 2001 it increased and amounted to 57.5 - 88.2 cases per 100,000 population [Shilova MB, 2004] Indicators of ps extrapulmonary tuberculosis have the opposite dynamics, so its frequency among newly diagnosed processes in 1993 was 8.0%, and in 2003 - 3.9%. The discrepancy between the dynamics of the incidence rate of respiratory tuberculosis and extrapulmonary localizations is due to the shortcomings in the detection and diagnosis of extrapulmonary tuberculosis. Taking into account the epidemic situation of tuberculosis in Russia, a further increase in the incidence of urogenital tuberculosis should be expected in the next decade.

In more than half of knockers, urogenital tuberculosis is diagnosed at a late and advanced stage of the development of the tuberculosis process. The main methods of radiation diagnosis of organ tuberculosis urinary system remains excretory urography and ultrasound methods surgical treatment, it is necessary to obtain information not only about the state of the upper urinary tract, but also about the function of the contralateral kidney and the volume of the preserved parenchyma of the ball organ. For this, visualization of the vasculature of the kidneys is necessary. Angiography of the kidneys is currently practically not used due to the high invasiveness of the method and the likelihood of complications reflects the state of the renal function at the time of the study, but does not give a complete picture of the possibilities of restoring the parenchyma of the organ affected by the tuberculous process. Stepping computed tomography does not allow a reliable assessment of the anatomical state of the ureters.

Newly diagnosed or recurrent urogenital tuberculosis established in 291 men (61.91%) and 179 women (38.09%) Mean age patients with urogenital tuberculosis was  $55.35 \pm 13.56$  years. In 232 patients (49.36%) with newly diagnosed and recurrent urogenital tuberculosis was combined with active or inactive extra-urogenital tuberculosis Among them prevailed patients with pulmonary forms of tuberculosis - 204 (87.93%) cases. In 11 (4.74%) patients had extrapulmonary extra-urogenital tuberculosis localizations In 17 (7.33%) patients - multiple organ tuberculosis, including with lung damage Among 232 patients with newly diagnosed and recurrent urogenital tuberculosis in combination with organ tuberculosis breathing, 140 (68.63%) had actively current tuberculosis process in 42 (30%) cases it was disseminated, and in 12 (8.57%) cases of fibrous - cavernous pulmonary tuberculosis.

The diagnosis of urogenital tuberculosis was established for the first time on the basis of isolation of Mycobacterium tuberculosis in urine, prostate secretion or detachable fistulas in 188 (40.00%) patients, based on histological examination of the biopsy or surgical material in 217 (46.17%) patients, based on the clinical and radiological picture an ex juvantibus therapy in 65 (13.83%) patients were 238 patients out of 470 (50.64%)

The diagnosis of recurrence of tuberculosis of the urinary system was established on the basis of the isolation of mycobacterium tuberculosis in the urine and fistula discharge in 20 (72.43%) patients, based on histological examination of biota or intraoperative material 1 (3.57%) to the patient, on the basis of a clinical-radiological picture and therapy ex juvantibus 7 (25.00%) patients 21 (75.00%) were bacteria excretors patient.

Relapses of isolated tuberculosis of the male genital organs was not recorded in the past Apparently, the damage to the urinary system is associated with hormonal restructuring, which occurs later in men than in women significant reduction in incidence after the age of 70 years obviously due not so much to the peculiarities of the course of the infectious process, how much natural population decline in this age period.

**Conclusion.** The susceptibility of urogenital tuberculosis among diagnostic patients increased in 2.27 times, among patients with a history of tuberculosis 3.49 times. Among patients with newly diagnosed urogenital tuberculosis socially adapted persons predominate (83.62%), predominantly middle and old 'age To risk groups by disease genitourinary tuberculosis includes persons who are in a state of chronic stress 24.26% suffering from chronic inflammatory diseases and anomalies in the development of the urinary system (14.89%). Among comorbidities, diseases of the endocrine system predominate systems (7.02%).

Tuberculosis of the urinary system is characterized by torpidemia course in 25% of cases the process is asymptomatic, in 48% of cases under mask of chronic inflammatory diseases of the genitourinary organs the structure of the disease is dominated by limited destructive processes with preservation of renal function (66.01%) tendency to decrease their share due to the growth of common destructive forms by 23.64%.

#### **Literature.**

1. Andreev A.V. Vascular headaches in children: (Clinical Dopplerography. Research): Author. diss. ...Dr. med. Sciences. - St. Petersburg, 2000.
2. Badalyan L.O. Children's neurology: textbook. allowance. - M.:MEDpress, 1998.- S.607.
3. Bondarenko E.S., Freidkov V.N., Shiretorova D.Ch. Headache in children: textbook. allowance. - Izdvo TSOLIUV, 1997.- 56p.
4. Zubareva E.A., Dvoryakovsky I.V., Zubarev A.R. Dopplerography of perinatal lesions of the brain. – M.:Vidar, 1999.–96p.
5. Zubareva E.A., Lobanova L.V. // Ultrasonic and functional diagnostics. - 2002.- No. 3.-pp. 41–49.
6. V.G.Lelyuk and S.E. Lelyuk, Ultrasonic Diagnostics. - 1996.-No. 4.–P. 66–67.
7. Lelyuk V.G., Lelyuk S. E. Ultrasonic angiology. – M.: Realnoe Vremya, 1999.
8. Nikitin Yu.M., Trukhanov A.I. et al. Doppler ultrasound diagnostics of vascular diseases. – M.: Vidar, 1998. – 432 p.

9. Nikitin Yu.M., Trukhanov A.I. et al. Doppler ultrasound diagnostics in the clinic. – M.;Ivanovo: MIK Publishing House, 2004.-496 p.
- 10.Ratner A.Yu. Late complications of birth injuries of the nervous system.- Kazan, 1990.- S.310.
- 11.Sugak A.B., Dvoryakovsky I.V., Sudarova O.A. //Ultrasound diagnostics. - 1998.-No. 1.- C. 35–41.
- 12.Trubacheva A.N., Guzeva V.I., Kovelonova M.V. et al. // IV International Congress "Ecological and social issues of protection and health protection of the young generation on the way to the XXI century": Sat. mater., 1–4 June. - St. Petersburg, 1998.- C.380-382.
- 13.Shakhnovich A.R., Shakhnovich V.A. Diagnosticsdisorders of cerebral circulation. Transcranial dopplerography. - M., 1996. - 446 p.
- 14.Bode H. Pediatric application of transcranial Doppler sonography. Vienna; N.- Y.: Springer-Verlag, 1988. -R. 108.
- 15.Hegedus K., Molnar P. // Clin. neuropathol. -1989. Vol. 8. - R. 92-97.
- 16.Martin P. J., Evans D.H., Naylor A. R. // Stroke. -1994. Vol. 25. – P. 390–396.
- 17.Shambal S., et al.//Fortschr. Neurol. Psychiatr. -2003. Vol. 71, No. 5.-R.271-277.
- 18.Tuor U.I., Grewal D. // Am. J Physiol. - 1994. -Vol. 267. - R. 2220-2228.