TUBERCULOSIS IN PREGNANT WOMEN AND THE POSTNATAL PERIOD-PECULIARITIES OF EARLY DIAGNOSIS, ITS COURSE, AND TREATMENT

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ABSTRACT: *This study analyzes the ways of early diagnosis of tuberculosis in women of fertile age; in pregnant women with tuberculosis and in their postnatal period. The peculiarities of tuberculosis diagnostics, the course of its treatment during the pregnancy, and the principles of treatment specific at this stage, the outcome of the disease for both the mother and the child, the importance of knowing the risk factors for tuberculosis are specified. In this study, one of the factors of low tuberculosis detection during pregnancy may be the peculiarities of the course of pregnancy with toxicosis and some other circumstances (alertness of primary physicians and gynecologists, presence of internal and external discrimination in case of tuberculosis). Situations and cases of different forms of tuberculosis, both during pregnancy and in the postnatal period, are analyzed. The golden standard is defined for the prevention of tuberculosis in women of childbearing age, which is screening with fluorography. A key issues of tuberculosis in women are their family planning, training in contraceptive types, and methods.*

Key words*: pregnancy and tuberculosis, postpartum period, laboratory diagnostics, early diagnostics, mycobacteria of tuberculosis, exacerbation and relapse of tuberculosis, POP doctors, narrow specialists, tuberculosis of respiratory organs, extrapulmonary tuberculosis.*

Introduction: In all periods of the development of society, there were radically negative attitudes towards sick women with tuberculosis: that is, a sick girl did not have the right to marry, a married woman did not have the right to get pregnant, a pregnant woman with tuberculosis could not give birth, who gave birth did not have the right to feed a child. Since the middle of the twentieth century, with the invention of anti-tuberculosis drugs, attitudes towards sick women have changed. However, despite the stabilization of the epidemiological situation, the problem of pregnancy and tuberculosis still remains relevant. According to statistics, tuberculosis is 1.5-2 times more common during pregnancy and the first 9 months after childbirth, the increase in the incidence of tuberculosis among women is especially alarming for phthisiologists, gynecologists and epidemiologists, since close contact of sick women with children has a great epidemiological threat. Young children are a group at increased risk for tuberculosis.

The tuberculosis control program in the Republic of Uzbekistan is aimed at improving the epidemic situation of tuberculosis by increasing the effectiveness of detection, diagnosis and treatment of tuberculosis patients by improving the quality of anti-tuberculosis measures, strengthening the material and technical base of bacteriological and clinical diagnostic laboratories, training specialists and introducing a more advanced monitoring and evaluation system. The main goal of the national tuberculosis Control program (NTP) is to reduce the incidence and mortality from tuberculosis (TB), and, accordingly, reduce the social and economic costs associated with this disease by preventing the spread of tuberculosis infection, including its drug-resistant forms and cases of its combination with HIV infection [6]

The combination of tuberculosis of any localization of childbirth and pregnancy must be considered in two aspects: firstly, it is the influence of pregnancy, childbirth, the postpartum period and lactation on the course of the tuberculosis process; secondly, the influence of tuberculosis on the course of pregnancy, childbirth, the health of the newborn and the maternity hospital [3].

Knowledge, study, earlier detection and prevention of tuberculosis among women of fertile age by general practitioners and specialized specialists, the correctness of choosing tactics for maintaining or terminating pregnancy is an important and urgent problem today.

The pregnancy process is accompanied by a restructuring of the woman's immune system in order to ensure optimal conditions for the development of the fetus and its protection at the early stages of the formation of its own protective mechanisms against infection. In pregnant women, the state of cellular immunity, which is essential in tuberculosis, changes, which is accompanied by a decrease in the functional activity of T-lymphocytes [7]

The enrichment of the hormonal background of a pregnant woman with a massive glandular-endocrine organ of the placenta contributes to hormonal restructuring, which can often be the reason for the activation of a specific process.

Mobilization of trace elements into the blood in the form of "building material for the fetus, can lead to softening and disintegration of old healed calcified foci in the lungs and in the intracoracic lymph nodes. However, persistent forms of Mycobacterium tuberculosis are washed into the bloodstream with trace elements, which can cause exacerbation or reactivation of tuberculosis.

Childbirth itself also affects the course of the tuberculosis process. In the second half of pregnancy, due to a significant increase in the uterine body, the ratios in the abdominal and thoracic cavities change, there is a high diaphragm position, which creates the effect of a natural pneumoperitoneum. However, immediately after childbirth, due to lowering of the diaphragm, the so-called "abdominal decompression" occurs, which contributes to the destructive

processes of aspiration of caseous masses into healthy parts of the lungs and the development of bronchogenic insemination. In addition, hypertension in the small circulatory circle develops during childbirth, which poses a threat of such severe complications as pulmonary hemorrhage and spontaneous pneumothorax [3].

It should be remembered that in pregnant women, even in the presence of active tuberculosis, there is a discrepancy between the state of clinical well-being and sometimes significant pathomorphological changes in the lungs, especially in the VII-VIII months of pregnancy [5], when high diaphragm position often leads to relative stabilization of processes.

Some authors [2] believe that it is preferable to start treatment after 12 weeks of pregnancy, others point to the inadmissibility of postponing treatment, especially during pregnancy, when an exacerbation of the process is most often observed (6-12, 20-28, 38-40 weeks) [5]

The aim of the study is to study the methods of early diagnosis of tuberculosis in pregnant women and the postpartum period, the features of the course and the choice of treatment tactics with termination or continuation of pregnancy.

Materials and methods: we conducted a retrospective analysis of 58 medical histories of pregnant and postpartum women in the Samarkand Regional Tuberculosis Dispensary for 2013-2018. 42 of them are residents of rural areas (72.4%).

All women underwent a tuberculosis screening algorithm. Survey radiographs with a leaded apron were used for pregnant women from X-ray examination methods to protect the fetus. In laboratory diagnostics, such pathological materials as sputum, purulent discharge from the wound, biopsy and surgical materials were studied. Each pathological material underwent the following laboratory research algorithm: luminescent microscopy method, bacteriological method. molecular genetic express methods were effectively used with simultaneous determination of sensitivity to antimycobacterial-santomatized analysis based on the polymerase chain reaction XpertMTB/RIF (Xpert); since

2018 (Xalu test GenoTypeMTBDRplus (GenoTypeMTBDRplus, GenoTypeMTBDRplus 2.0 with MBT).

Results and their discussion: Our study revealed two situations: tuberculosis detected during pregnancy in 15 (25.8%) and 43 (74.1%) cases of patients with tuberculosis in the early (up to 3 months) and long-term postpartum period (up to 9 months). Rural residents prevail 42 (72.4%). There are 37 more young women (63.8%). No bad habits have been identified. In social status, all the sick women were with secondary and specialized secondary education, housewives.

The standard of living in 27 (46.6%) patients from category c of low-income families.

The age group of patients: from 20-29 years 37 (63.8%), from 30-35 years 16 (27.6%), from 36-40 years 5 (8.6%). The majority of 39 (67.2%) patients were treated for tuberculosis of the respiratory system, of which: infiltrative tuberculosis with decay 31 (79.5%) and disseminated tuberculosis 8 (20.5%) patients. 5 (8.6%) patients with tuberculous meningitis in the postpartum period, the first 9 months; with tuberculosis of the spine 7(12%) of patients. Basically, there was a multiple organ lesion, several adjacent vertebrae: thoracic lumbar and cervical-thoracic sections.

One patient (1.7%) was admitted in the sixth month after childbirth, with severe tuberculosis of the lumbar spine, which was complicated by tuberculous meningitis. The intensive therapy conducted for the 1st category of this patient did not have an effect, due to the superstition of the nursing sister, who regularly interrupted treatment and secretly conducted spiritual rituals. In this patient, in the second month of inpatient treatment, a severe course of meningoencephalitis developed, followed by a fatal outcome.

1 (1.7%) patient with abdominal tuberculosis was hospitalized with signs of peritonitis on 20-21 days after delivery with initially diagnosed tuberculosis, in the form of poly organ damage, disseminated pulmonary tuberculosis under acute course and intestinal tuberculosis complicated by perforated ulcers in the

abdominal cavity with further development of peritonitis, which H served as a reason for hospitalization. Two (3.4%) in the second period of pregnancy, in the form of extrapulmonary tuberculosis, tuberculosis of the peripheral lymph nodes.

The most rare form of tuberculosis is tuberculosis of the medial surface of the right breast 1 (1.7%), without pulmonary lesion. A young woman of 24 years old, the second pregnancy for a period of 23-24 weeks. The disease was detected in an oncological dispensary and confirmed by histological studies. 3 (5.2%) women in the early (2-4 months) postpartum period with resistant pulmonary tuberculosis, both from contact with a low social standard of living.

The presence of somatic diseases was revealed in a large percentage: in the form of chronic gastritis in 19 (32.7%), pyelonephritis in 24 (41.3%), hepatitis B in 4 (7.3%) patients. Chronic forms of polydeficiency anemia: mild 15 (27.2%), moderate 28 (50.9%), severe in 12 (21.8%) patients out of the total number of polydeficiency anemia, which was observed in 55 patients (94.8%). There was a combination of somatic processes: gastritis and anemia in 42 (72.4%); anemia, gastritis and pyelonephritis in 9 (16.3%), anemia and hepatitis B in 4 (7.3%) cases. According to the order of the Ministry of Health of the Republic

Uzbekistan (No. 383 dated 10/24/2014), various methods of TB prevention in pregnant women and in the postpartum period are being introduced throughout the republic and in our regional Samarkand tuberculosis dispensary. The widespread introduction of innovative laboratory diagnostic methods, the use of short-term combined treatment regimens, taking into account the preservation or termination of pregnancy, significantly reduce disability and mortality among women of fertile age. Rapid molecular biological methods of TB diagnosis, which are based on the detection of mutacins in the genes of Mycobacterium tuberculosis (MBT) with the phenomenon of drug resistance (LU), provide great opportunities for early diagnosis of tuberculosis.

Taking into account the adverse effect of pregnancy on the development and course of tuberculosis, according to Order No. 383 of the Ministry of Health of the Republic of Uzbekistan, in case of suspected tuberculosis of the respiratory

system and extrapulmonary tuberculosis, mandatory diagnostic examination methods were carried out with further consultation by phthisiologists. The treatment of pregnant women with tuberculosis and in the postpartum period was carried out according to the therapeutic categories of patients, under the supervision of a gynecologist and a therapist.

The treatment package, depending on the concomitant disease and complications, included: antianemia drugs, antacids; hepatoprotectors; metabolites for parenchymal organs; endocrine drugs that improve microcirculation of placental and uterine vessels; restorative therapy. Basically, the patients were admitted initially, who were treated with the 1st therapeutic category, with medicinal- stable forms of DOTS+.

The use of contraception in tuberculosis:

- Initial beta-chorion gonadotropin test for all women of childbearing age with tuberculosis (pregnancy test)
- If the result is negative, it is necessary to recommend the use of contraception throughout a course of treatment especially with (multiple drug-resistant tuberculosis) MDR-TB
- It has been proven that the use of Isoniazid and its analogues improve the general condition of the body and patients report increased sexual desire
- Patients With drug-resistant forms for tuberculosis, it is undesirable to use COCs (combined oral contraception), taking into account the decrease in detoxification function of the liver and a number of other reasons
- In drug-sensitive tuberculosis, oral contraception is allowed, but if there is a treatment regimen Rifampicin, it is worth strengthening the protection of condoms, since this drug reduces the protection of unwanted pregnancy [2].

In the question of continuation or termination of pregnancy, the patient's condition and her desire were primarily taken into account. Given the possibility of a rapid course of a specific process after abortion, in patients with pulmonary forms of tuberculosis, in this case, the patients did not have abortions. The specific process mainly proceeded with infiltrates and dissemination with decay.

However, against the background of treatment, there was a cessation of mycobacterium secretion, closure of decay cavities and a favorable kind of resolution. In these cases, streptomycin and fluoroquinolone drugs were not used. Termination of pregnancy was performed in 2 (5.1%) patients with rigid cavities on the tops of the lungs (out of the total number of respiratory tuberculosis).

Conclusion: Summing up our study, it should be emphasized that a relatively small percentage of patients diagnosed during pregnancy explains the similarity of the symptoms of tuberculosis intoxication with the symptoms of pregnancy toxicosis, and this is reflected in our study. Also, X-ray examination methods were not carried out for diagnosis, taking into account adverse events for the fetus, there was no differentiated approach to blood tests and the general condition of patients. Undoubtedly, there is such a factor as the presence of internal and external discrimination in tuberculosis, which have their ancient roots as a social problem. Contacts with tuberculosis patients, the low standard of living of patients, and the presence of chronically ongoing somatic diseases are not taken into account. Sick women were diagnosed mainly in the postpartum period, when there was a complicated course, sometimes with an unfavorable outcome.

The vigilance of general practitioners and doctors of narrow specialties in tuberculosis and close cooperation with phthisiologists is of great importance in the prevention, early diagnosis and treatment of both pulmonary and extrapulmonary tuberculosis in pregnant women and women in the postpartum period. Timely detection and proper treatment is the key to the health of the younger generation and the recovery of women, since the health of the nation directly depends on the health of women. Proper and timely treatment of pregnant women with tuberculosis leads to improved prognosis and stabilization of epidemiological indicators.

Special attention is required to examine the risk group for tuberculosis, these are women with such somatic diseases as: chronic nonspecific lung diseases; various forms of chronically current forms of anemia; chronic gastritis; diseases

of the endocrine system (thyrotoxicosis, diabetes mellitus), diseases of the urinary system.

Conclusions:

- the need to prevent tuberculosis in women of fertile age, which requires regular fluorographic preventive examination,
- increasing the alertness of general practitioners and doctors of narrow specialties for tuberculosis,
- primary care training in methods of detecting tuberculosis in women of fertile age and performance monitoring;
- when diagnosing tuberculosis in women, it is necessary to pay attention to risk factors: poor financial security and low standard of living, contact with a bacterium separator, diseases, the presence of chronic somatic
- proper etiotropic and pathogenetic treatment of tuberculosis is a guarantee of the birth of a healthy child and the cure of the patient, or the stabilization of a specific process;
- family planning and the birth of a desired child;
- increasing knowledge about the types and methods of contraception in women of fertile age.

Literature

1. Borisova M.I., Stakhanov V.A., Kayukova S.I. The use of phenazide in pulmonary tuberculosis in women in the postpartum period and in patients with toxic reactions to zoniazid // Mater. 14 of the National Congress on Respiratory Diseases. M., 2004. - C.385. [1]

2. Buinovo L.N., Sidorenko N.B. The relevance of counseling HIV-positive women on contraception, including during tuberculosis treatment. Member of the Board of NP "E.V.A." website http://evanetwork.ru / [7]

3. Clinical lectures on phthisiology, lecture course part II / Edited by T.P. Maslauskene Irkutsk: RIO IGIUVA, 2006.-109c. [2]

4. Koretskaya N.M. Tuberculosis and pregnancy. The journal "Siberian Medical Review" 2012. Section: Clinical Medicine [3]

5. Tuberculosis in children and adolescents: a guide Edited by O.I. Korol, M.E. Lazovsky. St. Petersburg, 2005.-432c. [5]

6. Guidelines for monitoring and evaluation of TB care in the Republic of Uzbekistan. Tashkent 2014. 5s. [6] 7. Tuberculosis in children and adolescents: a guide for doctors / Ed. by E.N. Yanchenko, M.S. Greimer. ed. 2nd, reprint. and an additional one – St. Petersburg.: Hippocrates, 1999. - 336 p.[4]

7. Pardaeva U.D., Kim A.A., Asatullayev A.F. Integration of Uzbekistan's educational system into global globalization. Thematic Journal of Education. 2022.

8. Pardaeva U.D. Aspects of modern pedagogical technologies at the stage of training a qualified medical specialist. Pedagogy and Psychology of Innovation. 2019.

9. Pardayeva U.D. Intensive transformations in the field of medicine in Uzbekistan. Scientist of the XXI century. 2021.72 (1.1). 18-22.

10. Mamatova N.T., Pardaeva U.D. et al. Features of pulmonary tuberculosis in children with helminthiasis. Web of Scientist: International Scientific Research Journal. Vol. 3. №11. P.643-651.

11. Pardayeva U.D. Modern views on the course of tuberculous meningitis Vol. Science and Education Том3 №11 С. 205-212.

12. Pardaeva U.D. Intensive transformations in the field of medicine in Uzbekistan Journal scientist of the XXI century 2021/1 Volume 72 No. 1-1 P. 18-22

13. Khodzhaeva S., Adzhablayeva D., Anisimova T., Pardaeva U., Mamatova N., et al. - Data from electrocardiographic studies in respiratory tuberculosis. Journal of the Doctor's Bulletin, 1(4), 127–128.

14. Pardaeva U. D.. Uzbekistan on the path of integration in the field of higher education in the world society - in the context of globalization 2020 No. 16 (100) P. - 53-64

15. Adzhablaeva D., Gorbach L., Khodzhaeva S., Pardaeva U Features of tuberculosis in children during the COVID-19 pandemic Journal of hepato-gastroenterological research 2 (3), 32-36

16. Pardaeva U.D. ASPECTS OF MODERN PEDAGOGICAL TECHNOLOGIES AT THE STAGE OF PREPARATION OF A QUALIFIED MEDICAL SPECIALIST Journal of Pedagogics and Psychology Innovations - 2019