



On the Issue of Clinical and Epidemiological Features of Tuberculosis in Children

1. Mamatkhujayeva Gulnarakhan Najmidinovna
2. Ikramov Azizbek Fozilovich
3. Khakimova Ruzikhon Abdurahimovna

Received 27th Jul 2021,
Accepted 29th Aug 2021,
Online 04th Oct 2021

^{1,2,3} Andijan State Medical Institute,
Uzbekistan

Abstract: The article presents the results of a survey of 903 (523 boys and 380 girls) children with tuberculosis aged 2 to 10 years who are being treated at the Andijan regional tuberculosis dispensary.

Clinical forms of respiratory tuberculosis in children were mainly represented by tuberculosis of the intra-thoracic lymph nodes.

Tuberculosis in children developed, as a rule, during the first year after contact with the bacterial excretory agent, both with the presence of drug sensitivity of the pathogen and with its multidrug resistance.

Keywords: Tuberculosis, children, tuberculosis of intra-thoracic lymph nodes

On a global scale, tuberculosis remains one of the serious medical and social problems. The increase in the incidence of tuberculosis and the deterioration of its structure is influenced by unfavorable socio-economic, environmental and demographic factors, etc. (1,2, 3)

According to WHO, the incidence of tuberculosis among children remains high in most countries of the world.

Diagnosis of tuberculosis in children is a difficult task due to rare cases of bacterial excretion (4,5, 6).

The protection of the health of children and adolescents is one of the priorities of state policy in our country. And increasing the level of prevention and providing the younger generation with high-quality and timely medical care is an important area of healthcare in the Republic of Uzbekistan. Meanwhile, finding out the conditions for the formation of tuberculosis in children will allow us to develop an early diagnostic algorithm and optimal treatment, which determines the relevance of this study.

The purpose of the study:

The purpose of this study was to study the risk factors for the occurrence and development of tuberculosis in children.

Material and methods of research:

As an object of research, in accordance with the set goal, 903 (523 boys and 380 girls) children with tuberculosis aged 2 to 10 years who are being treated at the Andijan regional Tuberculosis dispensary were examined

The diagnosis of tuberculosis was made on the basis of a comprehensive examination (laboratory tests of blood, urine, instrumental methods, biochemical methods of research).

Results and discussion:

Clinical forms of respiratory tuberculosis in children were mainly represented by tuberculosis of the intra-thoracic lymph nodes.

More than half of children with tuberculosis had a specific pathological process detected when seeking medical help, 17.6% of them were bacillary patients. Upon re-admission to the hospital, children with pulmonary tuberculosis had a more severe structure of clinical forms with a large volume of lesion.

We believe that a decrease in the number of tuberculosis patients with bacterial excretion among the adult population has contributed to a decrease in the incidence rate among children and adolescents by eliminating potential sources of infection.

During the survey, it was found that among the surveyed there are a large number (36.3%) of children from single-parent families, orphans with tuberculosis, which is associated with social status and epidemiological problems. We found that unfavorable living conditions, bad habits of parents and their low sanitary literacy in 17.8% of cases led to the development of active tuberculosis in a child. It was revealed that the greatest epidemic role among the child population falls on children from low-income families who had contact with tuberculosis patients (34.7%).

Tuberculosis in children developed, as a rule, during the first year after contact with the bacterium, both with the presence of drug sensitivity of the pathogen and with its multidrug resistance.

From the anamnesis of children, it was found that BCG vaccination covers 99% of children, and revaccination 67%, in the future 50% - 70% of these children become infected with *Mycobacterium Tuberculosis*.

It was revealed that the chance of developing acutely progressive tuberculosis in revaccinated children is 1.5 times lower than in children vaccinated with BCG once. This, apparently, is due to the greater activity of the phagocytic link and the T-cell pathway of the immune response, affecting the differentiation of the tuberculosis process.

According to the literature, with a widespread tuberculosis process in children, there is a decrease in cellular immunity and an increase in humoral, in turn, with a limited process, in most cases, immunological indicators are comparable with similar indicators in healthy children (6).

As noted earlier, in the structure of childhood morbidity, the vast majority of cases are due to tuberculosis of the intra-thoracic lymph nodes. It is worth noting that the predominance of primary forms of tuberculosis was and remains characteristic for children, and tuberculosis of the intra-thoracic lymph nodes remains the most common form.

The detection of bacterial excretion correlates with a decrease in the effectiveness of tuberculosis treatment in children of all ages.

According to the results of our study, among the newly identified patients, almost all children were in the foci of infection before the disease was detected, respectively, the spectrum of drug resistance in the sick child coincided with the spectrum of the source.

On the territory of the Andijan region, in connection with the introduction into practice of screening for tuberculosis of children from 7 to 17 years with the help of a tuberculosis recombinant allergen, the detection of common and complicated processes in children and adolescents has decreased.

During the coronavirus pandemic, it was the child population that became even more vulnerable to tuberculosis, since one of the features of the epidemic process is the familial foci of infection. When children live in contact with a tuberculosis patient, the risk of progression of latent tuberculosis infection depends on the massiveness of bacterial excretion and increases under unfavorable social conditions and close contact.

Conclusion:

Thus, the importance of the problem of childhood tuberculosis is high due to the preservation of the reservoir of tuberculosis infection on the territory of all countries. It seems relevant to assess the patterns of development of pulmonary and extra pulmonary tuberculosis in children, to study the structure of clinical forms, the presence of bacterial excretion, complications over a long period of time in a region with a high prevalence of tuberculosis, which will allow to systematize the available fragmentary analytical information on tuberculosis in children concerning short time intervals and individual territories differing in the level of epidemiological well-being.

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