*Materials of Conferences*

## THE RISK FACTORS OF TUBERCULOSIS OF CHILDREN IN REPUBLIC OF SAKHA

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The retrospective analysis medical documents of 208 children injured by tuberculosis who were in-patients in the course of tuberculosis of 3rd clinics of phtysiatry for the period of 2008–2010 was held.

It was pointed out that the most difficultly the tuberculosis infection takes place of cases with children after the sick people who were ill of drug-stable tuberculosis, family and relative contacts. And is characterized by expressive clinical [-rayed ground of primary tuberculosis. It has stable symptoms of intoxication, complicated stream of specific process.

During the last years the consequences of global economic crisis causes the falling of the level of life of population, the growing of migration processes and the grow of number of socially unprotected groups of population. These factors have negative influence on the children. This may be proved by the growth of epidemiological indexes of tuberculosis among children and teenagers.

The main threat for the child's health is living in the centre of tuberculosis infection. One of the main risk factors which cause the children infection and sickness is epidemiological contact to tuberculosis person at home, kindergartens and schools, with relatives and neighbors.

In this case in the period of tensed epidemiological situation among the conditions of tuberculosis growth with multiple medical stability of instigator, the study of epidemiological characteristics of tuberculosis infection among children are very actual and important problem in phtysiatry.

The aim of this work is to study social-epidemiological characteristics of children with tuberculosis infection in the conditions of Yakutia.

The research was done among ill people of their case reports who were in-patients in 3rd clinics of phtysiatry for the period of 2008–2010.

We studied 208 case reports of children who were sick with tuberculosis, who had tuberculosis contact in 70,9% of cases.

The data of epidemiological medical history was analyzed – the contacts of ill child with family. The frequency of contact of 132 in-patient children with local forms of tuberculosis made up 73%. Analyzing the national belonging, the predominance of children of yakut nationality must be noted – 60,8%, russian children – 36,8%, other nationalities – 2,4%.

As far is social factor is concerned, 68% of sick children lived in incomplete families where parents who worked in low-qualified labor, not infrequently with antisocial behavior and presence of harmful habits. Having many children families made up 76,1%, predominantly living in country sides, in the conditions of density and total absence of well-equipment only 32% of children were from well-being families where both parents had a constant job.

Families who lived in well-equipment conditions and partly equipped houses had 31% of children. 60% of sick people lived in non-equipped houses with kiln heating and absence of sewerage system, and 9% – in hostels.

The age group distribution gives evidence that 46,2% of sick children are of early ages, pre-school children made up 43%, and 10,8% – children-pupils of primary school.

The younger the children the more danger tuberculosis contact presents for them, especially in combination with hard material and everyday conditions and non-effectiveness of BCG vaccination. It should e noted that 51,7% of sick children were such called «often being sick». It may be seen from the table that the most wide spread additional diseases are angina, bronchial and allergic conditions, which served the background for the development of tuberculosis process.

The data of scope of BCG vaccination should that overwhelming number of children (99,8%) were vaccinated with anti-tuberculosis vaccine. One child wasn't vaccinated because of medical indexes and lots of anomalies of development. Since the early age he was in massive contact with drug-stable tuberculosis, which caused the development of generalized tuberculosis process. From the children who were vaccinated 56,2% were vaccinated effectively; BCG weal wasn't formed in 13,8% of cases, 30% of children weren't vaccinated effectively.

In 43,8% cases the patients were not protected enough and it caused the development of disease. Local forms of tuberculosis of children were pointed out by tuberculosis diagnosis in 74% of cases during the inspection of contact local tuberculosis, made up 17,4% appeal – 8,6%. It should be noted that preventive treatment of intoxicated and contacted persons was made in-patiently which development of disease. While the turn of tuberculosis reactions in 51,7% preventive treatment wasn't conducted.

Only 21,9% of children were isolated to antituberculosis sanatoriums, because of parent refusal of hospitalization of sick children. Among the dominate form of primary tuberculosis – tuberculosis of intra-thoracic lymph nodes (64,5%), generalized and complicated processes also were registrated, such as tuberculosis spondylitis, with total defeat of all groups of chest and lymphatic bundles. During the chronically going process with bronchial defeats, lymphhematogenous disseminations made up 20,3%.

While the entering of in-patients 31,1% of sick persons had tuberculosis of intra-thoracic lymph nodes and primary tuberculosis complex in the phase of infiltration, 42,3% – phase of resolve and compression, 26,6% – phase of calcification. That is, 68,9% of inpatient children entered with revealed overdue diagnoses.

The character of tuberculosis contact, its intensify duration, presence of bacteriological secretions, directly influence the course of specific process of children.

Sick the children with tuberculosis infection were divided into groups:

1. Sick children who were intoxicated with tuberculosis from family and related contact-71 (53,8%).
2. Patients who had multiple contact – 33 (25%).
3. Two cases of illness from death hotbed – 1,5%.
4. Accidental contacts – 26 (17,4%).
5. Contact with medically-stable TB – 65 (35%).

Non-established contacts made up 76 cases what testifies of presence of unknown anti-tuberculosis sources of TB infection.

We studied contacts by the degree of relationship: contact to mom made up – 15,6%, with father – 10,3%, with grand mom – 10,3%, granddad – 3,5%, other relatives – 32,7%, multiple contact – 7,1%, after death contact – 4,2%.

The main attention was pointed to analysis of tuberculin sensitivity on the Mantoux reaction with 2 TU PPD-L of sick children from different hotbeds should that while the entering the hospital hyperergic reaction often with necrosis, was observed of 100% children with multiple contacts. Accidental contact had positive reaction of medium intensify made up 46,7%, strongly expressed – 15,4%, hyperergic – 7,7%. Children who had in-family contacts had strongly expressed – 44,2% and hyperergic reactions, that is more than half of children had high degree of sensibilization of organism to TB infection.

55,2% of children from massive in-family TB contact had strongly expressed symptoms of TB intoxication. 23,9% of children had complicated course of TB process, but children with unknown source of infection made up 4,4% of complicated course.

The study of course of the local forms of primary tuberculosis should that slow positive dynamics on the background of specific treatment in the condition of hospital made up 17,2% of children with drug-stability.

During the study of period of in-patient treatment of active tuberculosis taken with individual regime of chemotherapy it was pointed out that more durable and intensive phase were given to child from multiple family TB contact, the duration of which made up 9 month. From the hotbeds of drug-stability the duration of chemotherapy made up 1 year and more.

That is, the presence of fight, long contact in family with relatives who had stable tuberculosis in connection with harmful factors drive to development of complicated processes of children and they may be characterized with torpeed course and slow positive dynamics. In the connection with it the received data dictate the necessary of revision and perfecting the methods of organization.

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## HOME ENTERAL NUTRITION IN PATIENTS WITH A SMALL BOWEL

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Nowdays, because of development of surgical techniques and reanimatology a lot of patients with a shot bowel survive after operations – shot bowel syndrome (in cases of big bowel resections). But then patients need metabolic correction for a long period. More than 75% of patients with shot bowel syndrome have malabsorbtion (Pironi et al., 1991; Lochs et al., 2006) and need home care enteral feeding. There are 10 times more patients on home parenteral feeding in the USA than in Europe, and it is the same for enteral feeding (H. Lochs, D.R. Thomas,2005).

In Moscow the number of patients with shot bowel syndrome (according to reports taking from the main specialists in gastroenterology of the Moscow medical Department) who need in metabolic treatment with using a parenteral and enteral feeding increased steadily throughout 2006, picked up in 2009 and then onwards stabilized from 2011. The investigations give information about patients needing nutrition support in different Moscow regions: the SouthWest Region has lower number of patients whereas the NorthEast administrative region has risen, and the North administrative region has a higher figure. Summarizing the information by selecting the main features we can make comparisons where relevant to organize medical nutrition support. The second problem is when does malnutrition become a risk? Malnutrition is difficult to diagnose in outpatients, especially in patients with short bowel syndrome. For patients with a small bowel length less 50 cm we prefer the preventive hospitalization one time a half year.

In the article we wanted to up the problem of more effective supporting home parenteral and enteral feeding for patients with a shot bowel.

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