dren with risk factors, particularly examination of contacts with TB patients, were found 29 children (39,18%). Among the children active detected, in 18 cases (24,32%) were found clinical signs present or long time, in 3 cases were even hemoptysis, but only after laboratory investigations of suspecting tuber-culosis, appeared the "concern" of parents about health of children. Only 11(14,86%) children at the time of hospitalization had no acute clinical signs.

The presence in family of an adult patient with pulmonary tuberculosis were found in 65 cases (87,83%) and 39 (60%) of these were already MDR confirmed, as a consequence of transmission of resistant strains from adults. By performing the tuberculin test with 2 TU were determined hyperergical reaction at 25 (33,78%) children with drug-resistant TB, in 36 (48,65%) cases determined normergical and at 13 (17.56%) children with drug-resistant TB TST Mantoux 2 TU were «negative.»

The result of treatment in children with resistant forms of tuberculosis was always positive.

**Conclusions:** Drug-resistance in children and teenagers frequently is primary, as a consequence of transmission of resistant strains from adults. TB drug resistance at children and teenagers require special attention and immediate action, because drug-resistance has a negative impact on TB treatment efficiency. MDR TB speaks of recent transmission in the community and therefore it is a failure of TB control program.

Key words: Mycobacterium tuberculosis, tuberculosis, resistance to drugs, children, diagnosis.

# DETECTION OF TUBERCULOSIS IN YOUNG CHILDREN

### Ribnova N.

Academic adviser: Vilc Valentina, M.D., Ph.D., Professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chisinau, Republic of Moldova

Introduction: About one million children develop tuberculosis (TB) annually worldwide, accounting for about 11% of all TB cases. The presence of TB in children is an important indicator of the overall status of health in a particular country. Children are highly susceptible to tuberculosis. Young children under 3 years have an immature (weak) immune system which is unable to control severe infections. A vast number of children infected remain undiagnosed – creating a reservoir of future adult disease. Diagnosis is difficult at children and often fatally delayed – early symptoms and signs of tuberculosis at children are common and easily missed. Knowledge on the factors that influences TB at children is of utmost importance to evaluate transmission in communities and to adjust TB control activities.

The main **purpose** of the present study is to establish the risk factors in the development of TB at children <3 years old, to ensure optimization of early detection methods and improvement of control activities for TB.

**Objectives:** Determining the efficiency of early detection of TB at children;

Evaluations of risk factors whitch are conductive to TB infection in children.

**Methodology and materials:** Retrospective study about all cases of primary TB at children <3 years, hospitalized in the Phthisiopneumology Hospital Chisinau, Moldova, between 2006-2010. The patients have been classified into two samples based on the principle of detection: groupI- 122 children diagnosed through active case finding (prophylaxis examinations) and group II - 47 children diagnosed through passive methodology (through addressing with symptoms characteristic to TB). The discriminator analyses have been applied to determine the risk factors that are conductive to development of TB in children.

99

#### State Medical and Pharmaceutical University Nicolae Testemitanu, Chisinau, Republic of Moldova

The statistical analyses of the study results was done based on computer software applying variation analyses in specialized applications (Microsoft Excel 2002 for Windows).

**Results**: The highest share of TB has been registered in the 2 - 3 age group and it was the same for both samples ( $42,6 \pm 6,7\%$  vs  $42,6 \pm 7,5\%$ , p>0,05). The structure of the clinical forms in both samples show a higher degree of presence of TB of intrathoracic lymph nodes, the share reaching higher values in sample I (1,5 times higher) ( $85,2 \pm 4,8\%$  vs  $55,1 \pm 7,6\%$ , p<0,001).

Advanced forms of TB with complications more often have been registered when addressing and consulting doctors in  $31,9 \pm 7,1\%$ , p<0,01 compared with  $8,2 \pm 3,7$  registered in prophylaxis examinations. A small share of children were under surveillance of phtiziopneumologists or family doctors before diagnosed with TB in  $60,7 \pm 6,6\%$  in sample I and in  $29,8 \pm 6,9\%$  in sample II (p<0,05), which demonstrates an inefficient work in high risk groups. As a rule, the source of infection represented the parents, either mother or father, nearly in equal proportions; rarely grandmother, grandfather or other relatives, neighbors.

The analyses showed that the highest canonic correlation of risk factors is the following: contacts with TB patients; unsatisfactory life conditions; non-appliance of chemoprophylaxis; associated diseases; irregular administration of chemoprophylaxis; incomplete families; lack of vaccination or low quality of BCG vaccination; TB death outbreaks; parents abusing alcohol.

**Conclusions:** Active TB case finding in children is predominant – 72,19%. Control of TB in children requires identification and treatment of all sources of TB among adults. To improve the early detection of TB in children it is necessary to increase the awareness at family doctors and physicians on the etiology of the diseases; conducting a more profound analysis of anamnesis data; increase knowledge on TB symptoms which can take the mask of other diseases and ensuring timely examination of risk groups.

Keywords: tuberculosis; children; detection; diagnosis

# **COPD ASSESSMENT TEST - NEW TOOL FOR EVALUATION OF COPD**

## **Slutu Victoria**

Academic adviser: Corlateanu Alexandru, M.D., Ph.D., Associate Professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chisinau, Republic of Moldova

**Background:** A short, easy-to-use health status questionnaire is needed in the multidimensional assessment of chronic obstructive pulmonary disease (COPD) in routine practice. The COPD assessment test (CAT) is a short, easy-to-complete health status tool that has been developed to help patients and their clinicians assess, quantify the symptoms and impacts of COPD and enable better communication between patients and physicians about these consequences of their disease. It was demonstrated that it has good measurement properties, is sensitive to differences in state and should provide a valid, reliable measure of COPD health status.

The aim of this study was to detect the factors that can predict HRQL in patients with COPD.

**Methods:** Into the study were enrolled 60consecutive COPD patients. They were analyzed age, gender, anthropometric, pack years, spirometry, BODE index. Health-related quality of life was assessed by the CAT and the St. George Respiratory Questionnaire (SGRQ).

**Results:** 60 COPD patients were studied, mean age was 60.2±7.5 years, mean FEV1, % was 34.6±11.3%. Patients across all stages GOLD/ATS/ERS classification had similar age and pack/years (p>0.01). Pearson correlation coefficient analysis demonstrates in COPD patients a significant positive correlation be-

100