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Tuberculous dactylitis (“spina ventosa”) in an infant – a case presentation
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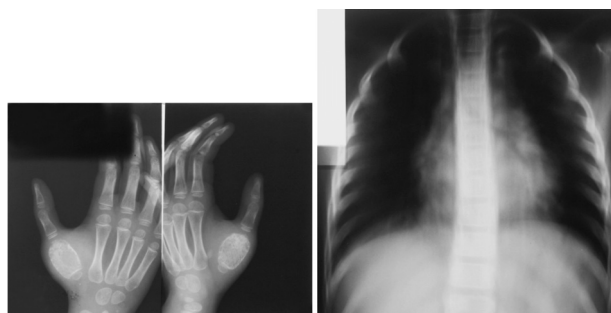
Tuberculous involvement of the metacarpals and phalanges is a rare manifestation of extrapulmonary tuberculosis.

An eleven months infant presented with mild temperature, dry cough and wheezing combined with painless swelling of the wrist and fourth finger of the left hand. Image investigations showed enlargement of the right tracheobronchial lymph nodes. The radiograph of the left hand revealed a fusiform expansion of the fifth metacarpal bone with cystic lesions (“spina ventosa”). Similar changes were seen in the middle phalange of the fourth finger of the same hand. The Mantoux test was positive. An open biopsy of the bone lesion confirmed tuberculous etiology of the process. Differential diagnosis and therapy of this rare condition are discussed.

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Pulmonary tuberculosis with associated tuberculous dactylitis-“spina ventosa”
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We report a case of pulmonary tuberculosis with associated spina ventosa in a 4-years female from lower class family. The girl presented with a prominent, painful tumor with inflammation over the first metacarpal bone of the left hand. Laboratory tests revealed anaemia, increased ESR; Mantoux -12mm. There is no family history of tuberculosis. On X-ray-cystic structure of first metacarpal bone with erosion of the corticalis. The child was admitted to traumatologia department for surgical treatment of a lesion diagnosed elsewhere as a chondroma. A biopsy was done after an operation with sequestration. Histopathology revealed a tuberculous granuloma. The middle tomography of the chest revealed enlarged bronchopulmonary granulomatous lymph nodes. The tuberculostatic treatment started.



After 4 months treatment there is a radiological regression of the enlarged lymph nodes. Chemotherapy continues.

References: 1. B Smith; Spina ventosa-tuberculous dactylitis; Archives of Disease in Childhood 2002; 86:206
2. Foasso MF, Hermier M.; Spina ventosa, a historic disease, Arch Fr Pediatr. 1985 May; 42(5): 385-7.

28. Difficult tuberculosis cases

E260**Medical and social risk factors of lung tuberculosis**

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Our aim was to work out the science-and-practical recommendations for destructive lung tuberculosis prediction basing on medical and social risk factors. We analyzed 1127 cases of various forms of lung tuberculosis from 9 cities. The force of isolated influence (η^2) of risk factors according the data of variance analysis was the following: medicobiological – “pancreatic (insular) diabetes” - η_C^2 – 4.18% ($p < 0.05$), “gastrointestinal tract chronic diseases” - η_D^2 – 3.97% ($p < 0.05$), “chronic nonspecific lung diseases” - η_B^2 – 3.26% ($p < 0.05$), “male gender” - η_A^2 – 3.05% ($p < 0.05$), “age of 20- 49 y.o.” - η_E^2 – 1.55% ($p < 0.05$). The force of isolated influence (η^2) of social-and-sanitary factors was the following: “poor living conditions” - η_C^2 – 9.01% ($p < 0.01$), “low income” - η_D^2 – 6.57% ($p < 0.01$), “incomplete family” - η_B^2 – 6.02% ($p < 0.01$), “absence of permanent job” - η_C^2 – 4.77% ($p < 0.05$), “contact with lung tuberculosis patient” - η_A^2 – 1.59% ($p < 0.05$). The force of isolated influence (η^2) of behavioral factors was the following: alcohol abuse - η_B^2 – 8.26% ($p < 0.01$), deficient intake of animal protein - η_D^2 – 5.34% ($p < 0.05$), smoking - η_C^2 – 4.48% ($p < 0.05$), low medical activity - η_E^2 – 4.36% ($p < 0.05$), emotional overstrain - η_A^2 – 1.36% ($p > 0.05$). The force of isolated influence (η^2) of industrial factors was the following (in descending): - “frequent supercooling” - η_D^2 – 4.59% ($p < 0.05$), “rough labour” - η_C^2 – 3.15% ($p < 0.05$), “neuropsychic punishment at work” - η_B^2 – 2.39% ($p < 0.05$), “adverse physical factors” - η_E^2 – 2.11% ($p < 0.05$) and “contact with chemical substances at work” - η_A^2 – 1.84% ($p < 0.05$).

E263**Superior vena cava syndrome caused by tuberculosis of the mediastinal lymph nodes: a rare presentation for tuberculosis**

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Superior vena cava syndrome (SVCS) is usually caused by malignant disease. Less frequently, superior vena cava obstruction results from a nonmalignant lesion such as mediastinal lymph node enlargement due to tuberculosis. We report a case of a 57 year old female patient who presented with SVCS and right pleural effusion accompanied by enlarged mediastinal lymph nodes. She has cough, shortness of breath, weight loss, loss of appetite, fatigue, night sweat for last 1 years. Physical examination revealed venous dilatation of the anterior chest wall and neck. Endobronchial pathology was not detected by using flexible bronchoscopy. Sputum, bronchial washing, pleural effusion analysed but any of the specific diagnosis did not proven before surgical diagnosis. Anterior mini thoracotomy was used for definite diagnosis. Patient has diagnosed as a tuberculosis by using histopathologic and mikrobiological examinations. She has planned to receive antituberculosis treatment for 6 months with isoniazid, rifampicin, ethambutol and pyrazinamide in a convenient doses. Radiological and clinical evaluations after 3 months showed dramatic improvement. Since tuberculosis is widely prevalent in our country, it should be thought of a possible cause in rare presentations like superior vena cava syndrome.

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Primary tuberculosis mimicking lymphoma clinical and radiological findings: a case report

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Pulmonary tuberculosis (TB) is a common worldwide lung infection. Classically, tuberculosis is divided into primary and postprimary. Primary disease and its complications are more common in children than in adults, leading to differences in clinical and radiographic manifestations. The diagnosis of bacteriologically negative tuberculosis in children is traditionally based on clinical criteria, such as a history of contact with a patient with TB, a positive tuberculin test suggesting TB infection and radiological TB changes.

We present a case of TB presenting as endobronchial tumor mimicking lung cancer on bronchoscopic examination. The 14 years old girl was referred to the hospital because of fever and weight loss. Tuberculin skin test was negative. Smear and culture of the sputum were negative for tuberculosis. Gastric washing was done for three times and the results were negative for Acid Fast Bacillus. In plain chest radiograph left hilum was prominent. Chest CT-scan performed and showed left upper lobe collapse and multiple mediastinal lymph nodes. Hepatosplenomegaly was detected in abdominal CT-scan. At last, histology of the tumor showed caseating granuloma. The detection of MBT DNA in the tissue by polymerase chain reaction (PCR) using a highly sensitive four-primed diagnostic kit was positive. The patient improved after anti TB treatment.

Primary TB is difficult to diagnose, usually established by indirect signs of low epidemiological specificity, symptoms, chest radiography and the intracutaneous tuberculin test. We suggest that in children with no specific sign and symptoms of TB, tuberculosis always should be considered in differential diagnosis.

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Bronchus lesions frequency in patients with pulmonary tuberculosis

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The aim of the investigation: to compare fibrobronchoscopy results in patients with pulmonary tuberculosis during time of epidemic (631 patient – I group) and before the epidemic (146 patients – II group).

Results: the changes in bronchus were revealed in 93% patients of I group and in 78% in II group. Nonspecific endobronchitis was revealed more frequently ($p < 0.01$). At the time of epidemic this pathology was more often (77.5%). More frequently bronchus were affected in patients with infiltrative and disseminated forms of tuberculosis and in patients with tuberculous pleurisy. Tuberculosis of bronchi prevailed in patients with infiltrative and disseminated forms, oncopathology and nonspecific bronchitis in patients with infiltrative form and with tuberculous pleurisy.

Bronchus pathology and nonspecific endobronchitis increase in patients with tuberculosis during the epidemic is particular feature of TB pathomorphism. Fibrobronchoscopy must be obligatory investigation in patients with infiltrative and disseminated forms of tuberculosis and with tuberculous pleurisy.

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Influence of pulmonary tuberculosis on the main important spheres of a patient's life

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Pulmonary tuberculosis leads to desadaptation of personality in different spheres of life.

Purpose: To estimate influence of pulmonary tuberculosis (PT) on the main important spheres of a patient's life such as work, public life and leisure, domestic relations.

Results: 142 patients were inspected. It is established that professional work became the most vulnerable sphere of life; the relations at work changed into a negative side in 105 (73.9%) patients. Patients consider that the disease became the principal reason of impossibility to work or study. It is related with a prolonged medical treatment and fear of loss of work. 90 (63.38%) patients are considered that PT impacted their public life and leisure. It is related with disgraceful attitude of society toward PT as to the disease that is dangerous to surrounding people requiring a special isolation of a patient. Patients express fear, that surrounding people will begin to avoid them, to treat them scornfully. Desadaptation of social life caused by the disease is experienced more sharply than violation of physiologic functions. 82 (57.74%) patients consider that PT impacted their domestic life. It is related with the fact that patients are afraid of infecting the members of the family and are afraid of disintegrating of the family.

Conclusions: PT is a severe chronic disease that significantly changes the whole situation of a person's development. It changes the level of his psychic abilities to perform the activities, leads to limitation of contacts with surrounding people, very often, due to objective or subjective causes leads to restriction of his activities as a whole, i.e. changes an objective place occupied by a person.

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The coexisting pulmonary tuberculosis and diabetes mellitus

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Tuberculosis commonly occurs in association with systemic disease or condition. The presence of diabetes mellitus (DM), which may alter immune responsiveness, plays an important role in the development of pulmonary tuberculosis (PTB) and also, it has been reported to modify the presenting clinical and radiological features of PTB. We investigated the prevalence of coexisting DM among patients with active PTB by the time of admission and the differences of both radiological and clinical features in them. The records of patients with active PTB who were admitted to our clinic between 1999 and 2004 were retrospectively analyzed. The prevalence of coexisting DM was 17.7% among active PTB during 5 years period. There was no statistically significant difference in gender in those patients with who had DM compared with who did not ($p=0.108$). Mean duration of DM was 8 ± 4.6 years. The mean age was statistically higher ($p<0.0001$) and radiological extension was more prominent in the patients with DM ($p=0.031$). The proportion of sputum smear positive cases was 72.7% in diabetics as in non-diabetics. Although, 72.3% of patients with DM had cavitary lesions in chest X-ray, which tend to get on the right upper zone, no radiological difference was observed between the patients who treated with insulin or oral anti-diabetics. We determined that both the frequency of side effects was slightly higher and the hospitalization period longer in the patients with DM. The distribution of symptoms was similar among those who had DM and who did not. These data show that DM, except the radiological extension, does not significantly affect the presenting features of PTB.

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Choroidal granuloma presenting during anti-tuberculous chemotherapy administration

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We present a case of choroidal granuloma occurring in a 26 year old male patient who had been started on anti-tuberculous chemotherapy 2 months previously for fully sensitive mycobacterium tuberculosis infection of the mediastinal lymph nodes. He was treated successfully with high dose oral steroids on the assumption that the anti-tuberculous chemotherapy had caused a paradoxical non-infectious enlargement of a pre-existing asymptomatic choroidal lesion.

It is well recognised that tuberculosis infected lymph nodes can enlarge during or after anti-tuberculous medication via non-infectious processes.¹ There is only one reported case in the literature of a choroidal tuberculoma presenting after the initiation of anti-tuberculous chemotherapy, although this was thought to be secondary to treatment failure and the affected eye was eventually enucleated.² Our case demonstrates the importance of considering a paradoxical, non-infectious cause in event of worsening disease, particularly in cases where sensitivities are known and compliance to medication is assured. In these situations, a change of anti-tuberculous medication is likely to be deleterious, and the use of steroids may avoid potential morbidity or mortality in treating lesions whose site is of concern.

¹ Carter, E.J. *et al. Chest* 1994;106: 1896-8

² Lyon, C.E. *et al. Ophthalmology* 1985;92: 845-50

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Interstitial pulmonary disease and mycobacterium interjectum

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We describe the case of a woman 55 years old, smoker, admitted at our department for haemoptysis and epistaxis, in well-being obvious. X-ray chest showed a moderate bilateral nodulation, worsening in 2 week. Bronchoscopy revealed bleeding from upper right lobe: the control after one week was negative. Moreover: growth of pneumococcus in B.A. with AFB (and PPD) negative, nasal venoses ectasy. Perform therapy with amox.+ac.clav. For the cultural growth of AFB, PCR negative, the patient was submitted to pulmonary biopsy: granulomatosis to epithelioid and giant cells, Z-N negative. The identification through biochemical molecular techniques typified a Myc. Interjectum (M.I.). One month later, the X-ray chest showed a great and spontaneous improvement with disappearance of the nodulation. The favourable outcome of the clinical picture with the unforeseen discovery of the M.I. in absence of a specific treatment had doubted about the real lung pathogenetic of NTM under discussion. In literature the M.I. is indicated occasionally as pathogen in cervical adenitis, in chronic destructive lung disease, in AIDS patients, and for some animal species, even if until now it is unknown epizootic cases. The patient is now in tight follow-up.

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Intrathoracic tuberculous lymphadenitis (Analysis of 60 cases)

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Introduction and aim: Tuberculosis bacilli usually enter the human body via the respiratory tract and reaches regional lymph nodes after. This study aimed to evaluate clinical features, diagnostic methods and treatment outcome of patients with mediastinal tuberculous lymphadenitis.

Methods: Sixty patients with intrathoracic tuberculous lymphadenitis were reviewed retrospectively for the study.

Results: Twenty-seven patients were women, 33 patients were men and mean age was 31.33 (range 14-71).

The most common symptom was cough (63%), followed by weight loss (48%), fatigue (41%), chest pain (36%), night sweats (35%), dyspnea (30%), appetite loss (26%) and sputum (23%). Only 3 patients were asymptomatic and 1 patient had a growing cervical mass as symptom. Tuberculin skin test was performed to 52 (86.7%) of the patients and was read as positive (>10 mm) in 43 (82%) of them. Five patients had positive mycobacterium tuberculosis sputum cultures, 3 of them had endobronchial lesions. Diagnosis was obtained in 25 (41.6%) patients by mediastinoscopy, in 16 (26.6%) patients by bronchoscopy (bronchial biopsy specimens in 14 patients and transbronchial needle aspiration in 2 patients), in 3 (5%) patients by excisional biopsy of cervical lymph nodes, in 2 (3.3%) by positive mycobacterium tuberculosis sputum cultures, in 1 (1.6%) by anterior mediastinotomy and in 13 (21.6%) patients based on clinical and radiological findings. All patients received antituberculous therapy.

Conclusion: Despite maximum efforts using both noninvasive and invasive procedures, obtaining a definitive diagnosis might not be possible in some cases. These patients should be followed up carefully if there is not enough evidence to start anti-TB treatment.

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Miliary tuberculosis in patient with Crohn's disease

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A 53-year old lady presented with a 6-week history of fever, weakness, cough and weight loss, but no abdominal pain or diarrhea. Initial antibiotic treatment was not successful and symptoms became more serious. She suffered from Crohn's disease for 5 years and has been taking azathioprine for last year and anti-TNF last three months. On examination, her temperature was 39.8°C but no abnormal signs in pulmonary and cardiovascular system. Blood test showed elevated ESR and CRP, leukopenia ($3.5 \times 10^9/L$) with marked lymphopenia (7%), moderate anemia, hypokalemia, hypoproteinemia with hypoalbuminemia. Tuberculin skin test and the finding of AFB in a sputum smear were negative. HIV infection was serologically excluded. The ECG and spirometry were normal. Arterial blood gases showed normoxemia, hypocarbia and respiratory alkalosis. The diffusing capacity for CO was reduced. Chest x-ray displayed soft uniformly distributed fine nodules through both lung fields which size vary from 2 to 3 mm which were confirmed on CT scanning and none show any cavitation. Abdominal ultrasound and CT confirmed hepatosplenomegaly and enlarged paraaortic lymph nodes. She underwent bronchoscopy which was normal and small amount of biopsy material revealed only some non-specific inflammatory changes. Bone marrow biopsy was negative for granuloma or malignancy with no abundant tubercle bacilli. The sputum culture (Bactec) established the diagnosis of TB. The patient was started on isoniazid, rifampicine, pyrazinamide, ethambutol, streptomycin and six weeks later her condition was improved as well as x-ray findings. In conclusion, risk factor for miliary TB in our patient was cellular immunodeficiency due to gastrointestinal disease and immunosuppressive drugs.

E272

The forecast of treatment of a tuberculosis of bodies of breath

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Studying various parameters at 36 patients with a different outcome of a tuberculosis of bodies of breath is lead. The data describing the social and labour status of patients, results of their clinical, radiological, laboratory and bacteriological inspections, treatment in a hospital and ambulance stations have been used. As has shown our research, at patients with social broken adaptation, before staying in prisons and idle before disease, the lethal outcome most was frequently marked. In turn treatment from a tuberculosis was observed at patients, with the safe social status, having before disease a permanent job is more often.

Besides it, treatment of a tuberculosis was marked at patients with a feebly marked intoxication and the small size destruction. By us it has been revealed, that at these patients was present poor or moderate bacterioexcretion, there were no accompanying diseases of bodies of breath and drug-resistant mycobacteria

tuberculosis to antibacterial preparations was not defined. At adverse current of a tuberculosis sharply expressed intoxication, the significant size destruction in easy, plentiful bacterioexcretion with drug-resistant mycobacteria a tuberculosis to the antibacterial preparations, accompanying diseases of bodies of breath was marked. Among the attributes describing the medical help by the patient, the greatest value for treatment of a tuberculosis had quality of carrying out of chemotherapy in out-patient conditions. Patients with adverse current of a tuberculosis were not treated in an ambulance station more often.

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Primary endobronchial tuberculosis in 2 years old child

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Introduction: A primary endobronchial tuberculosis (EBTb) is a Mycobacterium tuberculosis (MTb) infection involving the bronchial tree. An early diagnosis and treatment are essential to prevent bronchial stenosis or bronchiectasis.

Case presentation: A 2 year-old girl with a 2-months history of cough and wheezing not responsive to bronchodilators and corticosteroids (CS), presented with a chest X-ray (CXR) showing a left lung hyperinflation. A CT scan showed a left main bronchus (LMB) narrowed and a subcarinal lymphadenopathy. She underwent to a fiberoptic bronchoscopy (FB) that revealed a polypoid mass obstructing the LMB lumen. A bronchial biopsy and bronchial aspirate were performed, both resulting positive for MTb. A four-drugs treatment (Isoniazid, Rifampicin, Pyrazinamide, Ethambutol) was started along with CS therapy.

Discussion: The EBTb diagnosis is often missed or delayed because in children it may mimic asthma or foreign body aspiration. A late diagnosis may contribute to a cicatricial stenosis and bronchiectasis despite an anti-Tb therapy. A direct examination with FB is important for an EBTb diagnosis. The treatment of EBTb with lymphadenopathy is a four-drugs regimen and CS therapy.

Conclusion: This case highlights some suggestions: 1) the wheezing doesn't mean asthma everytime, 2) the CXR and CT scan are relevant for the evaluation of persistent wheezing, 3) The Ebtb should be considered in differential diagnosis of unilateral lung hyperinflation, 4) The FB is important in the management of these patients because it allows to guide the use of CS therapy and may indicate a surgical resection or an interventional bronchoscopy treatment.

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Endobronchial tuberculosis: clinical and bronchoscopic features

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Endobronchial tuberculosis (EBTB) is defined as tuberculosis infection of the tracheobronchial tree. Diagnosis is difficult in this form of tuberculosis when the lesion is not evident in the chest radiography. The aim of our study is to evaluate the clinical, radiological, microbiological and bronchoscopic features of EBTB. Our study included 9 cases of endobronchial tuberculosis diagnosed between 2003-2006 in our clinic (F/M:5/4, mean age:47.22±20.93). Cough was the most common symptom and localized wheezing was found only in one case. Radiology demonstrated parenchymal infiltration (n:2), mass/atelectasis (n:2), pleurisy (n:1), interstitial infiltration (n:2) in cases. In bronchoscopic examination, lesions were evaluated as tumorous in 5 cases, caseating in 2 cases, granular in 2 cases. Positive results were found in 3 cases by bronchial lavage sample and in 3 cases by bronchial lavage cultures for acid-fast bacilli. The diagnosis could be established in 2 cases by repeated bronchial biopsy. This condition caused delayed diagnosis. The cases were treated by anti-tuberculosis therapy for 6-12 months. Bronchoscopy was repeated in four cases at the end of the therapy. One of the 3 cases of tumorous EBTB, resolved completely, the other one showed no changed and the third case changed into non-specific bronchitic EBTB while completely resolution was seen in one case of caseating subtype of EBTB. Four cases were cured, four cases completed treatment and the treatment still continues in one case.

In conclusion, in endobronchial tuberculosis clinical and radiological features is not spesific, broncoscopy is essential for rapid diagnosis and follow-up.

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The lung capillary blood circulation at the patient by a tuberculosis with accompanying non-specific bacterial infection

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119 patients with new cases of tuberculosis were surveyed. The sputum was expose microbiological research with definition of sensitivity M. tuberculosis and non-specific bacterial flora to antibacterial drugs.

Lung capillaries microcirculation was research by a method of radioisotope pul-monoscingtigraphy.

At 41 men (1 group), in sputum in diagnostic titles were found microorganisms being basic pathogens of the lowest part of respiratory tract: S. pneumoniae, H.influenzae, S. aureus, K. pneumoniae, M. catarrhalis, Ps. aeruginosa; At 78 cases (2 group) was observed absence of growing of secondary flora in the analysis, or detection unpathologist microbes, colonized the upper part of respiratory tract.

The drug resistance of *M. tuberculosis* was observed at the patients whose sputum contains pathological not-specific microbes - 41,9%, against 17,6% in control group ($p < 0,05$ much more often), at 9,7% of the patients of 1 group was revealed the multi-drug resistance.

At the 1 group patients were registered more often the extensive infringements of microcirculation, occupying two zones of pulmonoscintigramme: 46,3% and three zones: 19,5%.

Standard antituberculosis therapy has given faster effect in control 2 group, where the sputum bacterial conversion in the relation to *M. tuberculosis* was observed in 89,1% of cases, and only in 74,1% in 1 group.

At repeated lung perfusion study, made in 3-4 months from a beginning of treatment, among the patients having an accompanying secondary pathological infection was more cases with progressing deterioration of microcirculation in a area of a tubercular localization - 60,8%.

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Categorization of problems characterizing difficult cases of pulmonary tuberculosis

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Purpose: Establish a system of various categories of difficult TBC-cases from the point of view of clinical outcome

Material-Method: 50 TBC patients were selected out of a total of 136 non-HIV cases hospitalized from 1997 to 2000. The main problem considered as the cause of aggravation was chosen to characterize the group

Results: We established 12 groups of difficult cases of tuberculosis according to the particular problem encountered (diagnostic, therapeutic, social)

Groups (patients): A) multiresistance to anti-TBC drugs (12), B) delayed response to the treatment due to non compliant patient (8), C) concomitant severe disease (14), D) severe social problems (3), E) Unavailability of certain anti-TBC drugs (5), F) difficulties concerning the isolation of the patients (5), G) difficulties in establishing the diagnosis - "therapeutic criterion" (7), H) pulmonary TBC imitating other lung diseases (10), I) cases with atypical manifestation, curious coincidences (3), J) extrapulmonary TBC (7), K) serious side effects of anti-TBC drugs (7), L) fatal TBC (9).

Conclusions: a) A 36.76% of our TBC cases presented diagnostic or therapeutic problems, some of them more than one problem.

b) the overall of these difficult cases showed a 3fold mortality in comparison to that of all TBC patients

c) the categorization we propose aims to make more accurate the analysis of the difficult cases of tuberculosis which remain a major challenge for the managing physician.

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Sarcoidosis or tuberculosis?

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Similarity of clinical, radiological and histopathological features of tuberculosis (TBC) and sarcoidosis causes diagnostic difficulties.

We report 5 cases of patients in whom doubtful diagnosis of either TBC or sarcoidosis raised.

All patients are female with a mean age of 48 years old. 4 patients complained of coughing, weakness and loss of weight. One patient had recurrent cervical lymphadenopathies. Chest imaging revealed enlarged mediastinal lymph nodes in all patients, with bilateral micronodules. A pleural effusion was observed in 1 case. Sputum acid fast bacilli was negative on direct microscopy in all patients. The fiberoptic bronchoscopy revealed diffuse endobronchial inflammation in 3 cases. The LBA showed lymphocytic predominance in all cases with a mean value of 36% and a mean CD4+/CD8+ ratio of 2.45. Endobronchial and transbronchial specimens revealed non-caseating granuloma in all cases. All patients had extra-pulmonary manifestations (cutaneous, cardiac, hepatic, neurological) which revealed non-caseating granuloma at biopsy. Detection of mycobacterial DNA by PCR in 2 cases was negative. The sputum culture was positive for *M. tuberculosis* in 2 cases.

All patients underwent anti-TBC treatment associated to oral corticosteroids.



Our cases focus on the complexity of the aetiology of sarcoidosis. The possibility of an infectious disease has been postulated but recent data suggest that sarcoidosis is caused by environmental antigens in genetically susceptible individuals.

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Characteristics of pulmonary cavitory lesions in patients with pulmonary TB

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Radiological manifestation of pulmonary TB depends on multiple factors including duration of disease, history of previous infection, Immunological status, etc. In this study, we consider the characteristic findings of cavitory lesions in recently diagnosed (new case), smear positive pulmonary TB. This descriptive study was performed during the 1st half of year 2002. 97 suspicions cases of pulmonary TB who had no previous history of treatment or any other underlying diseases such as HIV, CHF, CRF, etc were included, sputum smear was positive for AFB, and sputum culture was positive as well. CT scan was performed for all cases and was reported by 2 separate radiologists and final results were reported. From 97 cases, 70 cases (72%) had cavitory lesions in 54 of them (87%) there was more than one cavity. In 51 cases (52%) cavity was detected in one lung in 19 cases (20%) bilaterally. Mean diameter of cavities were 11cm with median of 4cm. In 53 patients (83%), the inner wall of cavitory lesions were smooth in 55 cases (57%) ill defined inner wall was reported. In 62 cases (63%) thick inner walls were evident. The most common location for cavity formation was RUL (45%) the least common was RML lingula (6.2%). Cavitory lesions occur in a high ratio of smear positive pulmonary TB patients, mostly unilateral. Inner wall is generally smooth and not all of patients have thick walls. CT scan demonstrates the detail of pulmonary involvement in tuberculosis.

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Appreciation efficiency of standard and alternative antituberculosis preventive therapy in children from different tuberculosis infection sources

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Comparative analysis of dynamics of tuberculin sensitivity on background of standard antituberculosis preventive therapy (PT) (izoniazid 8-10 mg/kg) in children from different tuberculosis infection sources with remained sensitivity (143 children) and with multidrug resistance (53 children) demonstrated decrease of tuberculin sensitivity in 40,6% children from infection source without drug resistance of *M. tuberculosis* (MBT) and only in 17% children from source with drug resistance ($p < 0.01$). Increase of tuberculin sensitivity in drug resistant sources was detected in 24,5% children and only in 7,6% children from sources without drug resistant ($p < 0.01$). Specific gravity decrease of hyperergic tuberculin tests was reached only in children from sources without drug resistant MBT: from 4,9% to 0,7% ($p < 0.05$). Preventive therapy with 2 preparations (izoniazid and pyrazinamid/rifampicin) reduced tuberculin sensitivity in 34 from 35 children with hyperergic tuberculin test; respiratory organs tuberculosis was revealed by computed tomography in the remained child. Drug resistant tuberculosis forms were registered more often in children from drug resistant sources received standard antituberculosis therapy with izoniazid (29,4%) than in children who didn't receive standard PT (17,5%); all the children had resistance to izoniazid and worse treatment results.

Conclusion: contamination of children living in contact with patients with resistant tuberculosis, MBT strains resistant to main antituberculosis drugs makes non-effective the traditional PT and doesn't prevent severe and generalized tuberculosis forms in children from such sources.

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The clinical picture and diagnosis of lung and skin tuberculosis at the present stage

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Aim: To study the clinical flow and diagnosis of skin tuberculosis at the present stage.

Material and methods: 55 patients with lung and skin tuberculosis (39 males, 16 females) aged from 18 till 60 have been examined.

Results: The patients to recover from tuberculosis or to combine with others form of tuberculosis at 67,3±7,7% cases. The colliquativ skin tuberculosis was found at 31 patients, papulonecronic – at 11, erythema induratum or Bazin's disease – at 4, papulonecronic with colliquativ skin tuberculosis – at 9 patients. The main local symptoms were discharge pus from wound (60,0%), external fistula (49,1%), pruritus of skin (40,0%). At 82% cases the papulonecronic skin tuberculosis located on the face, at 75% - on the floor of the auricle and on the back, and in the one case – the focal lesion of skin were on the buttocks. The skin tuberculin test with 2 TU was positive in 29,3%, Koch's test with 50 TU – in 71,4% cases. The mycobacterium tuberculosis were found by bacterioscopic at 73,2% patients, by bacteriological – at 33,3%, by polymerase chain reaction (PCR) – at 66,7%.

Conclusion: In this time to predominate patients with colliquativ skin tuberculosis (56,4%) and men were more (70,9%) than women. The skin tuberculosis were

diagnosis at 78,2% cases after year since start of disease. The Koch's test with 50 TU, observation the pus on mycobacterium tuberculosis by bacterioscopic and by polymerase chain reaction are the very important in diagnosis skin tuberculosis.

E282**Recurrent pulmonary cavitory lesions in immunocompetent woman**

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BB, a 56 year woman without history of chronic respiratory diseases, was submitted to a routine chest X-ray in October 2003 during a hospitalization due to E. coli hemorrhagic cystitis. X-ray showed a cavitory lesion in left upper lobe. Ziehl-Nielsen stains of 2 BAL with coltures and PCR identified a *Mycobacterium avium*. HIV test, T and B serum and BAL lymphocytes levels, serum immunoglobulin were normal. She started therapy with clarithromycin, rifampin, ethambutol but, 2 months later, despite she was well and put on weight, a chest HRCT showed improvement of the old lesions and the onset of new lesions in other chest areas. Repeated BAL with stains, coltures and PCR for mycobacterioses and tuberculosis and all interstitial lung diseases tests were negative. Ciprofloxacin was added, and stopped 3 months later because the patient claimed chest pain and asthenia with new cavitory lesions. A new antitubercular therapy with rifampin, ethambutol, isoniazid, pyrazinamide was started and 3 months later HRCT showed lesions in different areas of the chest and bronchiectasies. In November 2004, she was hospitalized due to evening fever and started a therapy with ceftazidime, rifabutin and clarithromycin for 10 days. As hemocultures, urino-cultures and Widal-Wright serodiagnosis were negative, therapy was stopped and 3 days later fever disappeared. Since then the patient, without any therapy, has been well except for rare episodes of chest pain and fever; and she put on 8 Kg from the diagnosis to now. Nevertheless repeated HRCT evidence cavitory lesions which appear and disappear in different areas of the lungs despite further research on tuberculosis, mycobacterioses, interstitial lung diseases have always been negative.

E283**Association of pulmonary tuberculosis and Hodgkin's lymphoma**

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Pulmonary tuberculosis is frequent in immunodeficient patients occurring more often than not after chemotherapy. The occurring of a Hodgkin's lymphoma in the course of a pulmonary tuberculosis treatment is rare and its diagnosis is difficult because of symptoms' similarity.

We report three cases of patients presenting an association of a pulmonary tuberculosis and a Hodgkin's lymphoma. The first patient presented an axillary adenopathy when the diagnosis of the pulmonary tuberculosis was established and which size increases during tuberculosis treatment. The second patient developed a pleural effusion at the end of 5 months tuberculosis treatment with persistent peripheral adenopathies. In the two cases, the Hodgkin's lymphoma's diagnosis was confirmed by adenopathy biopsy.

The third patient, with a Hodgkin's lymphoma presented pulmonary tuberculosis after the fourth cure of chemotherapy. He died after 20 days of tuberculosis treatment in a respiratory distress syndrome.

The clinical course of this association depends on early diagnosis and treatment.

E284**Caseous pneumonia in females of fertile age**

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Forty-five females with caseous pneumonia (CP) aged from 18 to 49 have been analyzed. Of them 30 (66,7%) patients were diagnosed for the first time. The leading signs of disease were febrile and tectic fever of a body, sharp weakness, wasting nocturnal sweat, decline of appetite up to anorexia, loss of body mass (up to 20 and more). Of the broncho-pulmonary manifestations patients often complained of a cough with discharge of mucous-purulent phlegm, pains in the breast and hemoptysis. Such symptoms as short breath, tachycardia, acrocyanosis, evidencing respiratory insufficiency have been also revealed.

Of 30 patients were diagnosed for the first time 15 (50%) were admitted into medical net's institutions at the beginning of disease. Of them in 3 (20%) patients diagnosis of CP was established during 7-14 days following admission into hospital, in 4 (26,7%) – on days 14-20 and in 8 (53,3%) - to the end of the first month.

In 41 (91,1%) females CP was developing against a background of concomitant diseases. Anemia noted to be in 34 (75%) patients, diseases of GIT and liver – in 10 (24,4%), chronic non-specific pulmonary diseases – in 6 (14,6%).

Analysis of an efficacy of treatment showed that positive dynamic was found in 7 (15,6%) patients, an insignificant positive dynamic – in 7 (15,6%), without dynamic - in 5 (11,1%) and 1 female was discharged from the hospital with aggravation of state. Lethality of CP patients accounted for 25 (55,6%).

Therefore, analysis of clinico-röntgenologic manifestations in CP females exhibited that process in the lungs had a distributed character with extensive destructive changes and a massive discharge of bacteria.

E285**Small cell lung cancer and active lung tuberculosis in an old patient**

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A 65 year old woman was admitted to our hospital with cough, mucus, hemoptizia, dyspnea and weight loss. In the chest X-ray, there was a right massive pleural effusion. In the thorax CT; there was a paracardiac mass with 7 x 10cm sizes in the right lung invasive to right atrium and mediastin, containing a cavity. In the FOB, there was seen a fragile lesion in intermediary bronchus of the right lung. Bronchial lavage and sputum ARB were found negative. The bronchial mucosa biopsy was estimated as a small cell lung carcinoma. First of all, we have started antituberculosis therapy with 4 agents including H,R,E and Z. After fifteen days, cisplatin-eposide chemotherapy with %25 reduced dose were given to her. Antituberculosis and cytostatical therapy were executed at the same time and the patient tolerated this combination well. After one-month, it was seen that sputum ARB became negative. After 2 cures of chemotherapy, there was a regression of nearly %90 of the mass in the thorax CT and the clinic became better. Although pulmonary tuberculosis can coexist with lung cancer, few cases of SCLC and pulmonary tuberculosis have been reported together. SCLC's cytostatical therapy can have an immunosuppressive effect that would have a negative progress for active tuberculosis and antituberculosis therapy can increase the chemotherapy's toxicity at the patient. Also, there is a few information about the way of therapy used at this situation in the editions. With a rarely seen togetherness of these diseases, a good tolerance of cytostatic and antituberculosis therapy despite the high age and a perfect clinical and radiological response as a result, we think it is proper to present this case with literature information.