# Multidrug resistant tuberculosis associated with human immunodeficiency virus

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A 30 year old male with the antibodies to human immunodeficiency virus infection detected in July 2016 was registered in the Mures County Center for acquired immune deficiency syndrome. He refused antiretroviral therapy. The infection was associated with intravenous drug use for three years. Diagnosis was as follows: human immunodeficiency virus infection late stage (4 B), the progression phase in the absence of antiretroviral therapy. On admission he complained of high fever (40 degrees celsius), chest pain, cough, weakness, and weight loss. Clinical findings: submandibular and cervical lymph nodes were enlarged (0.7 cm), painless and dense. Frequency of respiratory movements was 20 per minute. During auscultation, wheezing was present. Heart sounds were rhythmical. Laboratory tests: erythrocytes - $6.6\times10^{12}$/l, hemoglobin - 129 g/l, leukocytes - $4.45\times10^{9}$/l, hematocrit - 38.9%, lymphocytes - 7%, basophils - 1%, platelets - $90\times10^{9}$/L, monocytes - 7.9%, neutrophils - 79.4%, eosinophils - 0.9%, cholesterol - 3.02 mmol/l, creatinine - 80 µmol/l, glucose - 3.99 mmol/l, albumin - 34.9 g/l, nromal iver enzymes, total bilirubin - 5 µmol/l, total protein - 79.8 g/l, urea - 5 mmol/l, polymerase chain reaction number of human immunodeficiency virus ribonucleic acid copies: 2390000 copies/ml, cluster of differentiation 3-39%, cluster of differentiation 3-8%, negative results for hepatitis B infection, blood culture was also negative. Results of sputum smear: mycobacterium tuberculosis was detected and resistant to isoniazid, streptomycin, rifampicin, capreomycin and kanamycin. Sputum cultures were all negative. Tests and scans were carried out by an ophthalmic and otorhinolaryngology scientists. He received treatment according to national guidelines[1]: intravenous standard regime (pyrazinamide, ethambutol, amikacin, levofloxacin, para-aminosalicylic acid and cycloserine). The male patient refused again antiretroviral therapy treatment. Died one month later from pulmonary complications.

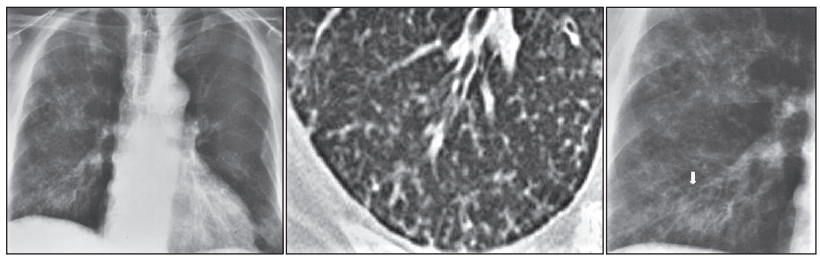

**FIGURE 1.** Chest X-ray of a 30 year old immunodeficiency virus positive male. Note in the left the peribronchial thickening. In the right hand film is a blown up image showing the peribronchial thickening more clearly (watch the arrow). The high resolution computed tomography (in the middle) render bronchiectasis, centrilobular nodularity (tree-in-bud) and mosaic attenuation in the same patient.

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## REFERENCE

1. http://old.ms.ro/documente/GHID%20Metodologic%20de%20implementare%20a%20Programului%20national%20de%20prevenire,%20supraveghere%20si%20control%20al%20tuberculozei%202015_15424_18333.pdf.