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Title: X-ray aspects in treatment of destructive tuberculosis with valve lung volume reduction

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Body: Valval lung volume reduction (VLVR) in treatment of destructive lung tuberculosis (DLTB) is rather effective (A. Levin, 2009; Y.Tseimakh, 2010; N.Yakushenko, 2012). The effectiveness hesitates from 67,7% to 90,5%. Now there are no accurate radiological criteria in selection of patients for VLVR. The aim – development of radiological criteria in selection of patients for VLVR. Material: 30 patients aged from 18 to 65 with DLTB. Data of lung CT-scans before the valve installation, in 2 and 6 months after is analysed. Location of destructions in lung segments: S1, S2 - 19(63,3%); S3 - 3(10,0%); S6 - 8(26,7%). Pleural adhesions are revealed in 25 (83,3%) cases. Results: In 2 months full atelectasis of blocked zone was reached in 8 cases, partial – in 4. By 6 months closing of destruction was reached in 19(63,3%) cases. S3-cavities were closed in 100,0% (3) cases, S1, S2 – in 63,2%(12), and in S6 50,0%(4) filling and cavity reduction with tuberculoma forming was noted. Closing of destructive cavities in C6 with formation of a cicatrix wasn't noted. In the presence of radiological signs of atelectasis (full or partial) in 2 months closing of destructions with formation of a cicatrix was registered in 83,3% (10). Only in 9(50,0%) cases without atelectasis signs closing of cavity is noted, of which 7(77,8%,)with tuberculoma forming. Pleural adhesion and pulmonary tissue fibrosis didn't influence atelectasis formation. Conclusions:Radiological signs of atelectasis in 2 months allow to predict high VLVR effectiveness. VLVR of upper lobe processes is significantly more effective than of lower lobe(P <0,05). Pleural adhesions and pulmonary tissue fibrosis are not absolute contraindication for VLVR.