Title: The role of number of lymph node passes and methods of pathological examination in the adequacy specimens of EBUS-TBNA in the verification of mediastinal lymphadenopathy

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BACKGROUND: The role of EBUS-TBNA in the verification of isolated mediastinal lymphadenopathy (IML) is now being actively discussed. Some papers showed, the relationship of adequacy specimens of EBUS-TBNA and number of lymph node passes it is not significant (Ting Ye, 2011). The role of pathological examination of TBNA- specimens is unclear. AIM: To determine the role of number of lymph node passes and methods of pathological examination of TBNA- specimens in the verification of IML. METHODS: Prospective clinical trial of 72 consecutive patients with IML. MATERIAL: EBUS-TBNA of bifurcation lymph nodes was performed. Less than five passes through lymph node were made in Group (Gr.) 1 (22 patients/31%). Five and more passes were made in Gr. 2 (50 patients/69%). VTS biopsy of paratracheal lymph nodes as gold standard was performed. After procedure material were divided in 3 groups of pathological examination of specimens: Gr. “C” - only cytology (16/22%), Gr. “CB” - cytoblock (12/17%), Gr. “MIX” (44/61%). RESULTS: TBNA-specimens from 60 patients were accepted pathologically adequate (83.3%). In Gr. 1- 64%, Gr. 2 – 92%. (p<0.05). Adequacy TBNA-specimens in Gr. “C” - 62,5%, Gr. “CB” -100%, Gr. “MIX” - 84%. Comparison of groups: Gr. “C” and Gr. “CB” (p<0,05), Gr. “CB” and Gr. “MIX” (p>0.05). CONCLUSIONS: EBUS-TBNA have a high diagnostic accuracy in the verification of IML. Performance five and more passes of bifurcation lymph node and the creation of cytoblocks – are more preferable. But of course, additional trials are necessary.