Title: The role of octreotate scan in discrimination of solitary pulmonary nodule

Body: Background Solitary Pulmonary Nodule (SPN) is one of the most controversial clinical findings in patients. The aim of this study is to use “Tc-EDDA/HYNIC-Octreotate scan” technique to evaluate nodules. Materials and methods From 2008 to 2010, 21 patients with SPN underwent OCT scan after the initial assessment with HRCT and then accurate histopathologic diagnosis was established by TTNB, VAT and thoracotomy. After demographic evaluations, specificity and sensitivity of this method was studied. Results Forty two patients were included in our study of which 24 were male and 18 were female. Their mean age was 45±14.3 years. 43% of the patients were symptom-free and in patients with pulmonary complaints, the most prevalent symptom was cough. Final histopathology tests proved that 28 cases (67%) were benign and 14 (33%) were malignant. The diagnostic technique used in our study had no false negative and there were only 6 cases of false positive. Sensitivity and specificity of this method are 100% and 79% respectively and the diagnostic accuracy is 86%. Conclusion OCT scan can be helpful in evaluating patients with SPN and to reach a sensible decision on the method of treatment.