00534 Comparing 4.0-mm and 5.9-mm bronchoscope with endobronchial ultrasound and guide steath - Is larger the better?

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<B>Introduction:</B> Thin bronchoscopes are better in their reach during biopsy than that of thicker ones, whereas specimens obtained with them are smaller. So far, however, it is unclear whether specimens from a thin bronchoscope can yield as accurate diagnosis as those from conventional thicker ones.
<B>Study objective:</B> The purpose of this study was to compare the diagnostic accuracy of malignant peripheral pulmonary lesion (PPL) between a thin and conventional bronchoscopes with the assistance of Virtual bronchoscopic navigation (VBN) and endobronchial ultrasound (EBUS) with guide steath.
<B>Methods:</B> From October 2010 to September 2013, a total of 207 consecutive subjects with small PPLs (30 mm or less in diameter) were received bronchoscopy with conventional (1T260; 5.9 mm in external diameter, Olympus Ltd., Japan) (n = 19) or thin bronchoscope (P260; 4.0 mm in external diameter, Olympus Ltd., Japan) (n = 188) with the assistance of VBN and EBUS with guide steath in our hospital. One hundred thirty one patients were finally diagnosed as malignant diseases during the study period. We retrospectively compared the diagnostic yield between each of the bronchoscopes. We also compared the diagnostic yield between each of the bronchoscopes in the cases in which EBUS was located within the PPLs.
<B>Results:</B> Among 131 patients who were diagnosed as malignant PPLs, 11 were diagnosed with 1T260 and 120 were with P260. The diagnostic yield were 54.5% by 1T260 and 70.8% by P260 (p=0.262). In 60 patients to whom EBUS were located within their PPLs, the diagnostic yields were 83.3% (1T260) and 85.2% (P260; p=0.904).
<B>Conclusions:</B> The diagnostic yields were similar between conventional (1T260) and thin (P260) bronchoscopes when specimens were obtained inside PPLs with the assistance of VBN and EBUS.