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Title: Visible tumour on bronchoscopy: Do we need cytology?

Dr. Muhammad 1318 Naeem muhammadnaeem.pk@gmail.com MD and Dr. Raja 1319 Reddy raja.reddy@kgh.nhs.uk MD . ¹ Respiratory Medicine, Kettering General Hospital, NHS Trust, Kettering, Northants, United Kingdom, NN16 8UY and ² Respiratory Medicine, Kettering General Hospital, NHS Trust, Kettering, Northants, United Kingdom, NN16 8UY .

Body: Introduction: Flexible bronchoscopy has a important role in diagnosing lung cancer. Where tumor is visible on bronchoscopy, it is common practice to carry out the full complement of Forceps biopsies, washings and brushings to enable histological/cytological diagnosis^{1, 2}. The aim of this retrospective study was to determine whether routine collection of cytology samples (washings & brushings) increase the diagnostic yield as compared to biopsy alone in cases where adequate biopsies (at least five) of bronchoscopically visible tumor were obtained. Method: We reviewed consecutive series of 278 bronchoscopies in which biopsies were done during period of 5 years from 2008 to 2012. A total of 148 bronchoscopies met the criteria of bronchoscopically visible tumor and in 145 of these the bronchoscopist felt adequate biopsies were obtained. All these patients also had washings and brushings carried out. Results: In the 145 cases where adequate biopsies were obtained, overall diagnostic yield was 99.3%. Histology was positive in 144 cases whereas cytology was positive in 98. Both were negative in one patient.

Table 1: Diagnostic yield of sampling method

Sample method	Total no of sample	Positive sample	Diagnostic yield (&)
Biopsy	145	144	99.3
Cytology (Washing+brushing	145	98	67.6

Conclusion: Additional cytology specimens didn't add to the diagnostic yield in bronchoscopically visible tumors where adequate biopsies were obtained. Omitting routine cytological sampling could yield significant cost savings as well as reducing bronchoscopy time. References: 1. Dobler CC, Crawford AB. Bronchoscopic diagnosis of endoscopically visible lung malignancies: should cytological examinations be carried out routinely? Intern Med J. 2009 Dec;39(12):806-11.