

## Comparison of ThinPrep and Conventional Preparation of Bronchial Washing Cytology

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The liquid based cytology method in mucoid and hemorrhagic specimens such as respiratory secretion is considered as equivalent or even superior cellular preservation, better nuclear chromatin morphology and more uniform distribution of cells, and clear background than the conventional direct smear method. The diagnostic accuracy of the both cytology methods is evaluated in the bronchial washing cytology specimens. A total of 67 cases were enrolled. Both the direct smear and ThinPrep slides were made from each case using split sampling method. Cytology preparation was adequate in 80.6% of direct smear and in 95.5% of ThinPrep. The cytologic diagnosis was categorized as benign, suggestive of malignancy, and malignancy. The direct smear slides exhibit degenerative and autolytic change in more than half, whereas, the ThinPrep slides demonstrate good cellular preservation with adequate cellularity on clean background. The cytologic diagnosis of both methods were matched in 86.6%(58/67). Cytologic and histologic diagnosis was correlated in 41 cases. The sensitivity, specificity, false positive rate, and false negative rate were 37.5%(6/16), 100%(25/25), 0%(0/25), and 62.5 68.8%(11/16), 96.0%(24/25), 4.0%(1/25), and 31.2 and 75.0%(12/16), 96.0%(24/25), 4.0%(1/25), and 25.0 higher sensitivity and lower false negative rate.