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LUNG CANCER TYPİNG - CONTRİBUTİON OF İMMUNOCYTOCHEMİSTRY TO THE SAFETY OF CYTOLOGİCAL EXAMİNATİON

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Objectives: The crucial discoveries in molecular biology diagnostics, advances in targeted therapy and endoscopic ultrasound patients come with previously incurable lung cancer in the focus of scientific interest. However, the reliable morphological typing on small biopsy and cytology is an indispensable requirement.

The present study aims to assess the safety of the immunocyto - / - histochemical pulmonary cytogenicity of these samples.

Materials and Methods: A total of 3419 patients was investigated over a five-year period including 1960 patients with primary lung cancer, 174 with tumors of other primary sites, and 441 patients with finally benign lesions. 1197 fine-needle aspirations (FNA), 435 scratch biopsies or imprint specimens, 212 effusions, 116 brush biopsies and 10 other cytology specimens were performed in patients of the primary lung cancer group. The immunostaining patterns of TTF-1, Napsin, CK7, CEA, p40, p63, CK5/6, CK5/14, CD56 and Synaptophysin(Syn) were correlated with the corresponding immunohistological findings and final diagnosis of the tumors.

Results: In 969 primary adenocarcinomas (ADC), final diagnoses of tumors according to the TTF-1 and CK7 immunocytological findings can be predicted in 86.5% and 95.8% respectively. Regarding CK5/6+CK5/14 and p40+p63 expression a correct diagnosis could be achieved in 90.3% and 52.1% of the 260 patients suffering from primary squamous cell carcinomas (SQC). In 268 primary neuroendocrine carcinomas (NET) TTF-1, CD56, and Syn produced the results with 76.9%, 85.0% and 60.3% for cytological analysis.

Conclusions: Our study shows that with the exception of the p40- / p63 antibody reaction, the majority of immunocytological staining leads to results comparable to immunohistochemistry and emphasizes

the high predictive value of cytological typing of lung carcinomas.

Anahtar Kelimeler : Lung cancer typing, Immunocytology