confirm it definitely in our two cases (2). Incidental finding of minute mengingothelioid bodies has no clinical significance, but it should be differentiated from tumourlet or even from carcinoid, assessed by biopsy only on the periphery. Oncocytic lung lesions should confirm oncocytic carcinoid and exclude metastatic processes from thyroid (3). Both our cases of typical carcinoid with Cushing' s syndrome caused by ectopic ACTH secretion metastasized to regional lymphnodes (4). This fact confirms at least to some extent the opinion that paraneoplastic syndromes, unusual in majority of carcinoids, may be connected with carcinoid metastases outside the lung. Moreover, the lungs are known to metabolize biologic active substances quickly. Erdheim-Chester disease and Langerhans' cell granulomatosis have been regarded as two different entities of monocyte macrophage lineage. Considering our patient and based also on some recent reports, the question arises, if there are really two autonomous entities or possible metachronous expression of the same disease (5).

CONCLUSIONS

Although WHO classification of lung tumors is based mostly on slides, stained by hematoxylin and eosin, in many cases additional immunohistology is required for correct and definitive diagnosis. Multiple pulmonary lesions with all differential diagnostic possibilities should be kept in mind to choose appropriate treatment.

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Genghis YASHAR[1]
Neli BASHESKA[1]
Irina PRODANOVA[1]
Nikola VASEV[2]
Slavica KRALEVA[2]
Ljube IVKOVSKI[1]
Katerina KUBELKA[1]
Snežana SMICHKOVA[2]
George ZOGRAFSKI[1]

[1]DEPARTMENT OF HISTOPATHOLOGY AND CLINICAL CYTOLOGY, MEDICAL FACULTY - SKOPJE, MACEDONIA
[2]INSTITUTE OF RADIOTHERAPY AND ONCOLOGY, MEDICAL FACULTY, SKOPJE, MACEDONIA

HER2/neu expression in breast cancer patients - Correlation with estrogen and progesterone receptor status, p53 and Ki-67 immunoreactivity and clinicopathological parameters

KEYWORDS: Breast Neoplasms; , HER2/neu; Immunohistochemistry

Although the role of HER2/neu status is still unsettled, its determination is valuable in selecting breast carcinoma patients for adequate Herceptin® therapy. The purpose of this study was to investigate the association between HER2/neu expression with estrogen (ER) and progesterone (PgR) receptor status, p53 and Ki-67 immunoreactivity, as well as with other clinicopathological parameters in breast cancer patients. HER2/neu, ER/PgR status, p53 and Ki-67 expression was determined in 169 postoperative stage I-III (UICC, 1997) breast cancer patients using the standardized DAKO HercepsTest® and by the immunoperoxidase technique, respectively. The results were evaluated by performing the standardized scoring system. The values of HER2/neu expression were correlated to ER/PgR status, p53 and Ki-67 immunoreactivity and to clinicopathological parameters (tumor size, histopathologic grade, nuclear grade, tumor type, and lymph node status and patients' age). The statistical significance was determined with $\chi 2$ and Fisher's exact test. HER2/neu expression was positive in 66 patients (37%). There was no significant association between the values of HER2/neu and ER/PgR status, p53 or Ki-67 immunoreactivity, neither with any other clinicopathological parameter. ER is associated with PgR, tumor size, tumor type and lymph node status ($p<0.01$); PgR with histopathologic grade, tumor type and lymph node status ($p<0.01$) and Ki-67 with p53 immunoreactivity, tumor size and patients' age ($p<0.01$). The results of the current study indicate that HER2/neu is an independent prognostic marker in differentiating a subgroup of high-risk breast cancer patients. Additional studies are required to adjust HER2/neu testing results to the clinical outcome.