Expression of thyroid transcription factor-1 (TTF-1) in endometrial carcinoma

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Introduction: TTF-1 is a helpful marker for primary lung adenocarcinoma and is considered as a reliable marker to distinguish between primary and secondary lung carcinoma. However, some studies showed that TTF-1 also can be expressed in extrapulmonary adenocarcinomas. The data on TTF-1 expression in endometrial cancer is limited and conflicting. The aim of this study is to evaluate the immunoexpression of TTF-1 in primary endometrial adenocarcinoma.

Materials and methods: Tissue microarrays were prepared from archival of endometrial carcinoma obtained from the Department of Pathology at King Abdulaziz University Jeddah, Saudi Arabia. Tissue sections were immunostained using monoclonal antibodies to TTF-1. The immunohistochemical stains were scored semiquantitatively from 0 to 5+

Results: The categories of endometrial adenocarcinoma include 78 grade I endometrioid, 17 grade II endometrioid, 12 grade III endometrioid, 7 serous, 2 clear cell. TTF-1 immunoexpression was detected only in 2 carcinoma (1 serous and one endometrioid type) and in both cases the staining score was 1+

Conclusion: TTF-1 is a reliable marker for lung carcinomas; however, in patients with focal TTF-1 immunoexpression, endometrial carcinomas should be considered when evaluating patients with adenocarcinoma of unknown origin and in patients with a history of endometrial adenocarcinoma.

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