CYTO-HISTOPATHOLOGICAL FINDINGS OF PRIMARY ANGIOSARCOMA IN THE THYROID GLAND: A CASE REPORT

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Introduction

Angiosarcoma of the thyroid gland is a very rare and aggressive mesenchymal tumor with destructive behavior, characterized by high mortality rates. It is cytopathologically described in a limited number of cases in Turkey. We presented the cyto-histopathological findings of an angiosarcoma case with a primary thyroid origin.

Case Report

A 39-year-old female patient from Turkey was presented with thyroid tumor appeared as hemorrhagic, un-encapsulated, with local cystic nodules. Histological appearance of the tumor included vascular-like spaces lined with large epithelioid cells. These vascular-like spaces contained erythrocytes. Immunohistochemical analysis indicated that neoplastic cells were diffusely positive for factor VIII-related antigen, vimentin, CD31, laminin and keratin peptides. Retrospective cytology of the case showed that malignant endothelial cells were arranged in loosely cohesive clusters, mixed with erythrocytes and neutrophils. These cells had abundant cytoplasm, distinct nucleoli, irregular contoured and hyperchromatic oval nuclei.

Conclusion

To the best of our knowledge, this is one of rare cases of primary angiosarcoma of the thyroid in a patient reported in Turkey and the first case showing macroscopic and histopathological findings with liquid-based cytopathology prepared by thinprep method. In examining the FNA findings of the malign tumors in thyroid, primary angiosarcoma should be considered in the differential diagnosis of anaplastic thyroid tumors. This diagnosis should include cytopathology and histopathology together to define the exact type of the tumor.

Anahtar Kelimeler: Angiosarcoma, fine needle aspiration cytology, histopathology, thyroid gland.