

Research paper 2

Tall cell subtype of papillary carcinoma thyroid; a clinicopathological analysis of 18

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Introduction and objectives: The tall cell subtype of the papillary carcinoma of the thyroid (TC-PTC), as per the WHO classification of thyroid tumours, 5th edition, is defined as a tumour with more than 30% of cells being three times tall as wide. In this study, we reviewed the clinico-pathological features of 18 cases of TC-PTC and studied their treatment response and outcome.

Methodology: All the cases of TC-PTC diagnosed between 2021-2024 were retrieved from the archives. The slides were reviewed by two pathologists and the diagnosis was confirmed. The clinico-pathological data, treatment data and follow-up data were obtained from the patient files.

Results: Eighteen cases of TC-PTC were found, accounting for 10.3 % of all PTCs and 5.5 % of all thyroid tumours. The age ranged from 27 - 77 years with a median age of 41.5 years. The female:male ratio was 14 :4. The tumor size varied from 0.3 to 9.5 cm. Lymphovascular invasion was found in eight cases. Perineural invasion was not seen in any of them. Fifteen cases showed lymph node metastasis. The number of lymph nodes involved ranged from 5-68 (mean 19.8). Extranodal invasion was present in five. The tumour stages at presentation were stage 1 (n=2), stage 2 (n=5), stage 3 (n=8), and stage 4 (n=3). The patients underwent total thyroidectomy (n=16), subtotal thyroidectomy (n=1) and hemithyroidectomy (n=1) with neck dissection and radiotherapy. Seven patients had died within two years of diagnosis and 11 were alive.

Discussion and conclusions: In comparison to the conventional PTC, TC-PTC showed a higher age at presentation, female preponderance, a higher incidence of lymphatic invasion and lymph nodal metastasis and a higher stage at presentation accounting for the poorer overall prognosis.

Keywords: papillary carcinoma, thyroid, tall cell

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