Aggressive Papillary thyroid cancer with rare morphological features: A case report

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Introduction

Papillary thyroid cancer (PTC) is the most frequently observed type of thyroid cancer. It usually shows favorable prognosis although some aggressive pathological subtypes have been defined. In this case report we present an aggressive form of PTC with previously non defined histological features.

Case Report

At initial evaluation the subject presented with a mass in the neck. Neck ultrasonography (USG) revealed a 49x 23mm hypo echoic nodule in the left lobe and multiple lymphadenopathies adjacent to the left thyroid lobe being suspicious for malignancy. The nodule had irregular edges and was hyper vascular in power doppler imaging (PDI). The patient underwent total thyroidectomy and ipsilateral central lymph node dissection. The pathology report was compatible with papillary thyroid cancer (PTC) and Hashimoto’s thyroiditis. The tumor was composed of 30-35% insular, 10% Tall-Cell and 55% anaplastic cells. The tumor was 45mm in size and showed pericapsular soft tissue invasion. Immunohistochemistry was positive for Thyroglobulin, TTF-1, NSE, Pan SK and CK 19. And negative for CEA, Calcitonin, chromogranine and synaptophysin. Ki 67 proliferation index was 5-6%. PET CT revealed multiple metastases in the liver, lungs, thoracic and lumbar vertebra. The patient is actively receiving chemotherapy at the Medical Oncology department in our hospital.

Discussion

Although PTC generally shows favorable prognosis the histomorphological features are variable and may not suit one of the previously defined PTC subtypes. Such cases as the one defined may clinically advance like anaplastic thyroid cancer.