

Immunohistochemical Expression Of Yap-1 And P53 In Papillary Thyroid Carcinoma

Thesis

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By

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summary

Thyroid cancer is the most prevalent endocrine tumor, accounting for 1% of all newly diagnosed cancers. The most common malignant form of thyroid cancers is papillary thyroid carcinoma (PTC). It accounts for roughly 80% of all thyroid cancer cases. It is commonly detected in the third to fifth decades of a patient's life, with an average age of 40. The prevalence of PTC rises with age, and women are affected more frequently than men, in ratios ranging from 2:1 to 4:1.

The most common presentation of thyroid cancer is an asymptomatic thyroid mass or a nodule that can be felt in the neck (Baldwin. 2014). A few patients may present with cervical lymphadenopathy. In addition to conventional (classic, common or usual) type PTC, 14 variants were listed in the new WHO classification of thyroid tumors.

With the exception of some more aggressive histologic variants, papillary carcinoma has an excellent prognosis. The overall 5-year survival rate is 90–95% and 10-year survival rate is 80–95%. Fine needle aspiration and cytology is the method of choice in the diagnosis of PTC.

YAP1 and P53 pathways are critical protectors of genomic integrity in response to DNA damage. Their co-expression has been never explored in thyroid cancer. The present study examined YAP1 and P53 expressions in 60 cases of PTC tumors, and assessed the associations of their expressions with clinicopathologic risk factors.

YAP1 expression was observed in 70% of papillary thyroid carcinoma cases. A statistically significant relation was observed between YAP1 expression and tumor size, tumor stage, tumor focality, lymph node metastases and extrathyroidal extension (P values were 0.001, > 0.001, 0.037, 0.025 and 0.006) respectively. P53 expression was observed in 85% of papillary thyroid carcinoma cases. A statistically significant relation was observed between P53

expression and tumor size ($p=0.001$) and tumor stage ($p> 0.001$). A statistically significant relation was noticed between YAP1 and P53 expression (P value= 0.009).

YAP1 expression was found to be associated with many high-risk clinicopathologic characteristics in patients with papillary thyroid carcinoma and with P53 expression, thus it seems that YAP1 may have a specific impact on patients' outcome.