Differential expression of Survivin, BRAF, Notch1 in benign and malignant thyroid tumor and its correlation with serum index

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To study the differential expression of Survivin, BRAF, Notch1 in benign and malignant thyroid tumor and its correlation with serum index. Methods: A total of 100 thyroid cancer patients and 100 thyroid adenoma patients were enrolled, mRNA and protein levels of Survivin, BRAF, Notch1 were assayed by Real-time PCR and Western-blot; VEGF content were assayed by elisa. Results: Survivin, BRAF, Notch1 mRNA and protein levels of thyroid carcinoma tissue were higher than those of thyroid adenoma; as TNM stage became worse, expression of Survivin, BRAF, Notch1 were higher; serum content of VEGFA, VEGFB VEGFC in thyroid carcinoma were higher than those of thyroid adenoma patients; multiple linear regression showed that VEGFA, VEGFB, VEGFC were positively correlated with Survivin, BRAF, Notch1. Conclusion: Survivin, BRAF, Notch1 are highly expressed in thyroid carcinoma tissue and have good correlation with serum angiogenesis index VEGF.

[KEY WORDS] Thyroid carcinoma; Survivin; BRAF; Notch; Vascular endothelial growth factor