

البحث السابع

التعبير المناعي الهستوكيميائي لل "سى دى سى ٢٠" فى آفات الغدة الدرقية يحتمل أن يكون تشخيصيا لسرطان الغدة الدرقية الحليمى

The immunohistochemical expression of CDC20 in lesions of thyroid is potentially diagnostic for papillary thyroid carcinoma

Authors: Hala M. El-hanbuli, Mostafa A. Abou Sarie and Mona S. Abdelmagid

The medical journal of Cairo University. 2016. 84 (2):393-398

بحث جماعى

Abstract

Background: Papillary thyroid carcinoma is the most common histologic subtype of thyroid carcinoma. The distinction between benign and malignant thyroid tumors is critical for the management of patients with thyroid lesions. CDC20 is considered one of the major regularity components of the cell cycle. Its high expression has been reported in various malignancies and plays a vital role in tumorigenesis and progression.

Aim of the study: To examine the immunohistochemical expression of CDC20 in papillary thyroid carcinoma, follicular adenoma and multinodular goiter and analyze the relationship between CDC20 expression and clinicopathological factors of papillary thyroid carcinoma.

Materials and Methods: Sixty-three paraffin-embedded archived samples were used for CDC20 immunohistochemistry, including sixteen multinodular goitre, twenty-two follicular adenoma and twenty-five papillary thyroid carcinoma.

Results: Only 2 cases of follicular adenoma group stained with CDC20, and only 1 case of multinodular goiter group stained with CDC20, while 14 cases in papillary carcinoma group (total=25) stained with CDC20. There was no significant difference regarding the immunohistochemical expression of CDC20 between the follicular adenoma group and the multinodular goiter group while its expression in papillary carcinoma group was significantly higher as compared to follicular adenoma and multinodular goiter (P value <0.001). The sensitivity was 56% and specificity was 92.1%. No significant relation between CDC20 expression and the available clinicopathological characteristics of the patients.

Conclusion: We concluded for the first time that CDC20 is a specific marker for differentiation of papillary thyroid carcinoma from benign thyroid lesions.