

البحث السادس

دراسة مناعية هستوكيميائية لل " هستون إتش ١,٥ " بالمقارنة بالخصائص الإكلينيكية والباثولوجية لسرطان الثدي

An immunohistochemical study of Histone H1.5 in correlation with clinicopathologic features of invasive duct carcinoma (NOS)

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بحث جماعي

Abstract

Background: Breast cancer is a leading cause of malignant mortality and morbidity in women worldwide. Histones is a family of linker proteins that are located in the nucleus. Histone H1.5 is one of that family that is involved in stabilization of chromatin structure and gene regulation. It exhibits altered expression and mutation in different types of human cancer.

Objectives: The study aimed at evaluating immunohistochemical expression of Histone H1.5 in invasive duct carcinoma in relation to pathologic parameters including histologic tumor grade, pathologic staging and molecular subtyping

Materials and methods: A retrospective study was carried on 60 samples of invasive duct carcinoma, not otherwise specified (NOS). Immunohistochemical staining with Histone H1.5 antibody was done.

Results: HH1.5 positive expression was observed in 70 % of the cases (42 of 60 cases). There was a statistically significant correlation between increased HH1.5 positive immunohistochemical expression and each of increased tumor size, increased lymph node positivity and tumor histologic grade. There was a statistically significant association between the presence of lymphovascular invasion and high HH1.5 score. Among ER, PR, and HER2/neu scores, only Ki67 labelling index showed a significant positive correlation with HH1.5 score. There was a highly significant difference between cases with different HH1.5 scores as regards molecular types.

Conclusion: The high expression of HH1.5 was associated with poor prognostic factors, including its differential expression in the carcinoma molecular types. Further characterization of HH1.5 role in breast carcinomas should be investigated for the development of novel targeted therapies in this type of cancer.