

ABSTRACT

THE ASSOCIATION BETWEEN EXPRESSION OF CD44 STEM CELLS CANCER WITH HISTOPATHOLOGICAL TYPE OF NASOPHARYNGEAL CARCINOMA WHO I, II, III

Indriyadevi

Objective : Tumor development was triggered by the excess population of stem cells. Expression of CD44 on cancer stem cells has a role in the increasing of metastasis, self-renewal, drug resistance and anti apoptosis. CD44 expression associated with tumors size, positively nodules and advanced tumor stage in NPC patients. High level of CD44 expression by immunohistochemical examination associated with the development and progression of tumors.

Study Design: Cross sectional.

Methods : Formalin-fixed paraffin-embedded biopsy specimens were obtained. The expression of CD44 was studied with immunohistochemistry using human monoclonal antibody CD44 (Cell Marque, USA). Assessment of the staining was performed by pathologist independent used immunoreactive score scale (IRS). The Spearman's correlation test was used to determine the correlation between expression of CD44 and histopathological type of nasopharyngeal carcinoma. Statistical significance was defined as $p < 0.05$.

Result: Total samples are 42 patients. The result of CD44 expression in NPC patients with histopathological type I WHO obtained 1 sample moderate positive and 2 sample strong positive. In patients with histopathological type II WHO obtained 10 samples moderate positive and 8 sample strong positive. In patients with histopathological type III WHO obtained 1 samples weak expression, 11 samples moderate positive and 9 samples strong positive. CD44 expression from all of patients there was 1 sampel (2,38%) weak positive, moderate positive was 22 sampel (52,38%), and strong positif 19 sampel (45,24%). There was no negative expression of CD44 of the whole sample. Statistical analysis using Spearman's test was obtained $p = 0,925$ with a correlation coefficient 0.015.

Conclusion : There was no association between expression of CD44 stem cells cancer with histopathological type of nasopharyngeal carcinoma.

Keywords : Nasopharyngeal carcinoma, expression of CD44 Stem cells cancer, histopathological type.