یک پژوهش در مورد افزایش اکسپرسیون SOX در سلول‌های موزاییکی می‌باشد.

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SOX

Investigating on Over-Expression of SOX² in
Human Esophageal Squamous Cell Carcinoma using immunohistochemistry

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Abstract:
Esophageal cancer is the 6th most common cause of cancer death in the world. SOX2 is an important member of the Sox gene family which are expressed in a wide variety of tissues, and play important roles in the regulation of organ development and cell type specification. This protein is major transcription factors related to the stem cell self-renewal and differentiation. Cancer cells, especially in poorly differentiated tumors, have been characterized by many phenotypic traits similar to undifferentiated embryonic cells. These similarities suggest the expression of genes determining cell renewal/stemness. In present study, the expression of SOX2 was investigated on cancer and normal tissues of esophageal tissue using immunohistochemistry. Results revealed that SOX2 was Overexpressed in cytoplasmic site by a large number of cells in all tumour samples. Furthermore, no significant difference in SOX2 expression was found between cancer and normal tissues. Accordingly, it could be concluded that the presence of adult stem cells in esophageal tissue not only supports the extensive renewal of this tissue, but also makes that susceptible for malignant transformation under pathologic conditions.

Keywords: SOX2 protein, esophageal cancer, stem cell, immunohistochemistry.