



Increased expression of DCLK1 in early stage Gastric Cancer subtypes

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Abstract

Introduction and Aims: The present investigation was designed to assess the expression levels of DCLK1 as a distinguished intestinal cancer stem cell marker in gastric malignancy and its clinical significance in a series of Gastric Cancers (GC).

Methods: DCLK1 expression was examined in a well-defined series of 96 gastric tissues, including 68 (71%) of intestinal and 26 (29%) of diffuse subtypes, which were embedded in tissue microarray (TMA) blocks using immunohistochemistry. The correlation of DCLK1 expression with clinicopathologic parameters was also assessed.

Results: Among 96 gastric cases, higher immunohistochemical expression of DCLK1 was detected in 63% of intestinal and 42% of diffused subtypes. Univariate analysis showed an inverse significant difference between DCLK1 expression with GC subtypes ($P=0.05$) and tumour differentiation ($P= 0.001$), indicating the higher level of DCLK1 expression in intestinal subtype and well differentiation cases.

Conclusion: Our observation showed that the higher level of DCLK1 expression was not detected in highly aggressive growth form of gastric cancer. These findings warrant further investigation of DCLK1 to understand its value as a target for the development of new therapeutic strategies in human GC.

Keywords: Gastric cancer, Tissue microarray, Immunohistochemistry, DCLK1.