

Immunohistochemical examination of cytological differentiation in osteosarcomas

Type:

Article

Abstract:

In this immunohistochemical examination, the expression of Runx2, Notch1, Delta and Osteopontin peptides were detected in neoplastic cells in 10 Japanese cases of osteosarcoma. Immunohistochemically Runx2 peptide expression appeared in the cytoplasm of almost all neoplastic cells of the 10 cases examined. However, Notch1 peptide expression appeared in the cytoplasm of neoplastic cells in the localized and comparatively well-differentiated area of osteosarcoma, which osteoblastic and chondroblastic containing osteoid and/or chondroid tissues. No expression of Notch1 peptide was detected in the fibroblastic and poorly differentiated areas. Delta peptide appearance was nearly the same pattern of Notch1 peptide. Expression of Osteopontin peptide appeared in almost all cells and the strength expression was shown in the area of comparatively well-differentiated tissues. Therefore, these results suggest that Runx2, Notch1, and Delta peptides are closely related to cytological differentiation or acquisition of tissue specific characteristics in neoplastic cells in osteosarcomas.

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