

**PP-163****The immunostainings of apoptosis-related antigens for the giant cell tumors of bone****M. Kanamori***University of Toyama, Toyama City, Japan*

Introduction: Recent studies have suggested that apoptosis is one of the pathogenetic mechanisms in giant cell tumors (GCT). For further identification of apoptosis-related proteins appearing in GCT, we approached the mechanism of apoptotic process.

Methods: Immunohistochemical stainings for the proliferative markers were performed on separate formalin-fixed, paraffin-embedded, 5-mm serial sections cut onto coated slides. Thirteen surgical specimens from 11 patients with GCT were obtained at the time of surgical resection. For indirect immunostaining, the sections were exposed to the primary antibodies: bcl-2, PCNA, cyclin D1, p53 and p21.

Results: There was a significant increase of bcl-2 in multinucleated cells, compared with stromal cells, but no significant difference of P53 expression was detected. The majority of those cells with positive bcl-2 was mainly infiltrating lymphocytes (mononuclear cells) located in perivascular areas (Table). Stromal cells strongly showed the PCNA expression. Moreover, Bcl-2 expression in giant cell might contribute to the aggressiveness of GCT.

Discussion: In GCT, These results indicate that apoptosis in GCT is strongly associated with the expression of bcl-2, but not PCNA, cyclin D1, P53 nor p21.