

# ameloblastomas: correlation with clinical and histological parameters in 54 cases from Kenya

Ong'uti, MN; Cruchley, AT; Howells, GL; Williams, DM

## Abstract:

The aim of this study was to assess the cell proliferation in ameloblastomas and to correlate this with clinical features and histology. Immunohistochemistry with Ki-67 monoclonal antibody was performed on fresh tissue from 54 ameloblastomas. A labelling index (LI) was calculated by expressing the percentage of Ki-67 positive cells. There was no significant correlation between LI and clinical features: age, sex or tumour size. Follicular ameloblastomas had significantly higher LI (5.0 +/- 0.5; mean +/- SEM) than plexiform tumours (3.2 +/- 0.6;  $P < 0.05$ ). Plexiform ameloblastomas from the anterior mandible had a significantly lower LI (1.8 +/- 0.5) than those from the posterior (3.9 +/- 0.8;  $P < 0.05$ ). LI was higher in squamous arcades (6.4 +/- 3.1%) than in epithelial cords and cysts (1.4 +/- 1.3%;  $P < 0.001$ ). These results suggest that LI correlates most closely with the histological pattern of the epithelium of ameloblastoma, both within and between different tumours.