

## **IMMUNOHISTOCHEMICAL INVESTIGATION OF EPIDERMAL GROWTH FACTOR (EGF) IN ODONTOGENIC CYSTS AND TUMORS**

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### ***ABSTRACT:***

The expression of epidermal growth factor (EGF) was investigated in odontogenic cysts and tumors through an immunohistochemical study. Twenty cases of odontogenic cysts and 17 cases of odontogenic tumors were studied using monoclonal antibody to epidermal growth factor receptor. The odontogenic cysts included radicular cysts, keratocyst, Gorlin cyst and dentigerous cyst while the odontogenic tumors included in the study were mainly ameloblastomas, both benign and malignant. The immunohistochemical study of the epidermal growth factor receptor in odontogenic cysts and tumors using the Avidin biotin complex method revealed expression of E.G.F.R. in keratocyst, Gorlin cyst and to a lesser extent in radicular cyst, while in odontogenic tumors some cases showed expression of E.G.F. and some cases showed expression of E.G.F.R. which seemed to be related to keratinization. The expression of E.G.F.R. may be the cause for keratin formation while the absence of its expression in some cysts and tumors may explain that those cysts and tumors are independent in their growth from E.G.F.

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