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*Streptavidin-Biotin Immunohistochemistry*

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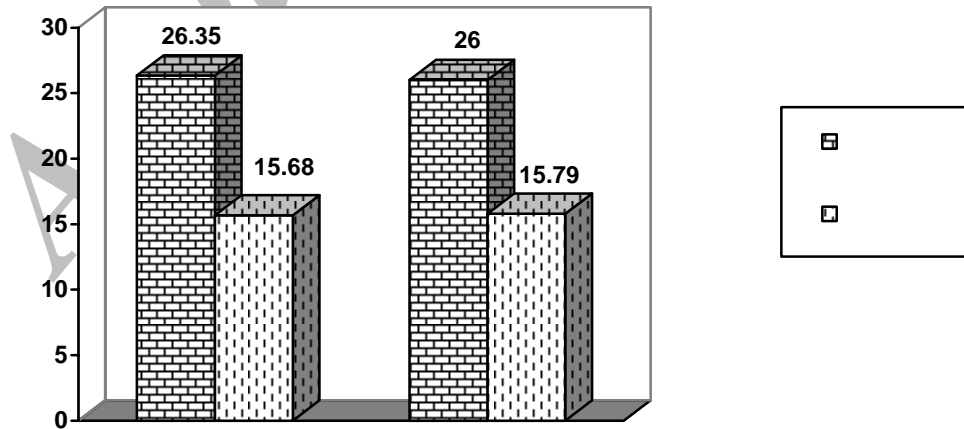
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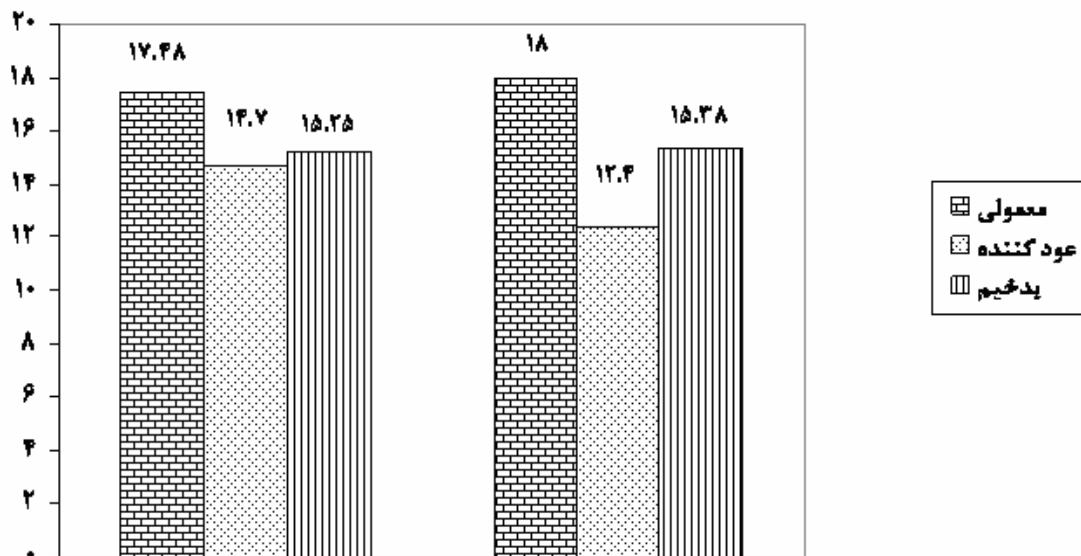
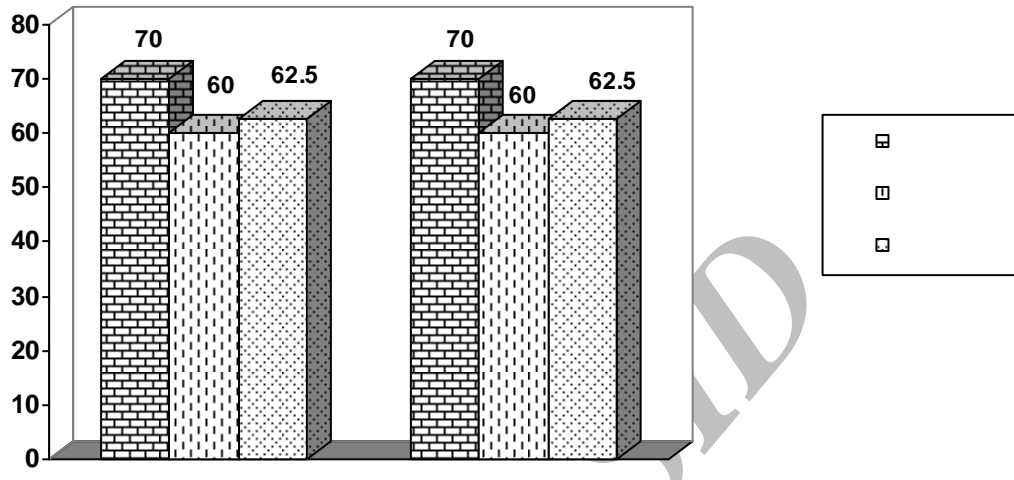
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Polymerase Chain Reaction (PCR)

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Ultrastructural

## **REFERENCES**

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1. Neville BW, Damm DD, Allen CM, Bouquot JE. Oral and maxillofacial pathology. 2<sup>nd</sup> ed. Philadelphia: W.B. Saunders. 2002; PP: 610-20.
2. Regezi JA, Sciubba JJ, Jordan R. Clinical pathologic correlation. 4<sup>th</sup> ed. USA: Saunders. 2003; PP: 267-74.
3. Reichart PA, Philipsen HP, Sonner S. Ameloblastoma: biological profile of 3677 cases. Eur J Cancer B Oral Oncol 1995; 31: 86-99.
4. Pinheiro JJ, Freitas VM, Moretti AI, Jorge AG, jaeger RG. Local invasiveness of ameloblastoma: role played by matrixmetalloproteinase and proliferative activity. Histopathology 2004; 45: 65-72.
5. Lodish H, Berk A. Molecular cell biology. 4<sup>th</sup> ed. Freeman. 2000; PP: 969-71.
6. Garnet PR. Oral cells and tissues. 1<sup>st</sup> ed. Quintessence. 2003; PP: 101-5.
7. Takeichi M. The cadherins: cell-cell adhesion molecules controlling animal morphogenesis. Development 1988; 102: 639-55.
8. Nagafuchi A, Takeichi M, Tsukita S. The 102 kd cadherin- associated protein: similarity to vinculin and posttranscriptional regulation of expression. Cell 1991; 65: 849-57.

9. Nagafuchi A, Ishihara S, Tsukita S. The roles of catenins in the cadherin-mediated cell adhesion: functional analysis of E-cadherin- $\alpha$ -catenin fusion molecules; *J Cell Biol* 1994; 127: 235-45.
10. Gumbiner BM. Cell adhesion: the molecular basis of tissue architecture and morphogenesis. *Cell* 1996; 84: 345-57.
11. Luning C, Rass A, Rozell B, Wroblewski J, Obrink B. Expression of E-cadherin during craniofacial development. *J Craniofacial Genet Dev Biol* 1994; 14: 207-16.
12. Zhou YN, Xu CP, Chen Y, Han B, Yang SM, Fang DC. Alpha-catenin expression is decreased in patients with gastric carcinoma. *World J Gastroenterol* 2005; 11: 3468-72.
13. Kumamoto H, Ooya K. Expression of E-cadherin and  $\alpha$ -catenin in epithelial odontogenic tumors: an immunohistochemical study. *J Oral Pathol Med* 1999; 28: 152-7.
14. Zhong M, Li ZJ, Yue YL, Bao G. The study of the invasive biologic behavior of ameloblastoma. *Zhonghua Kou oiang Yi Xue Za Zhi* 2004; 39: 45-8.
15. Kumamoto H, Ooya K. Immunohistochemical detection of Beta-catenin and adenomatous polyposis coli in ameloblastomas. *Oral Pathol Med* 2005; 34: 401-6.
16. Palacios J, Benito N, Berraquero R, Pizarro A, Cano A, Gamallo C. Differential spatiotemporal expression of E-cadherin and p-cadherin during mouse tooth development. *Inl J Dev Biol* 1995; 39: 663-6.
17. Andreadis D, Epivatianos A, Pouloupoulos A, Nomikos A, Christidis K, Papazoglou G, et al. Immunohistochemical detection of the expression of the cell adhesion molecules, E-cadherin, desmoglein 2, beta 4- integrin, ICAM-1 and HCAM(CD44) in Warthin's tumor of the parotid gland. *Oral Oncol* 2005; 41: 799-805.
18. Shimoyama Y, Hirohashi S. Expression of E- and P-cadherin in gastric carcinoma. *Cancer Res* 1991; 51: 2185-92.
19. Nagatsuka H, Han PP, Tsujigiwa H, Siar CH, Gunduz M, Sugahara T, et al. Heparanase and protein expression in ameloblastoma : possible role in local invasion of tumor cells. *Oral Oncol* 2005; 41: 542-8.
20. Downer CS, Speight PM. E-cadherin expression in normal, hyperplastic and malignant oral epithelium. *Eur J Cancer B Oral Oncol* 1993; 29: 303-5.
21. Williams HK, Sanders DS, Jankowski JA, Landini G, Brown AM. Expression of cadherins and catenins in oral epithelial dysplasia and squamous cell carcinoma. *J Oral Pathol Med* 1998; 27: 308-17.
22. Kumamoto H. Detection of apoptosis-related factors and apoptotic cells in ameloblastoma: analysis by immunohistochemistry and an in situ DNA nick end- labelling method. *J Oral Pathol Med* 1997; 26: 419-25.