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Enamel hypoplasia in primary dentition: a case report

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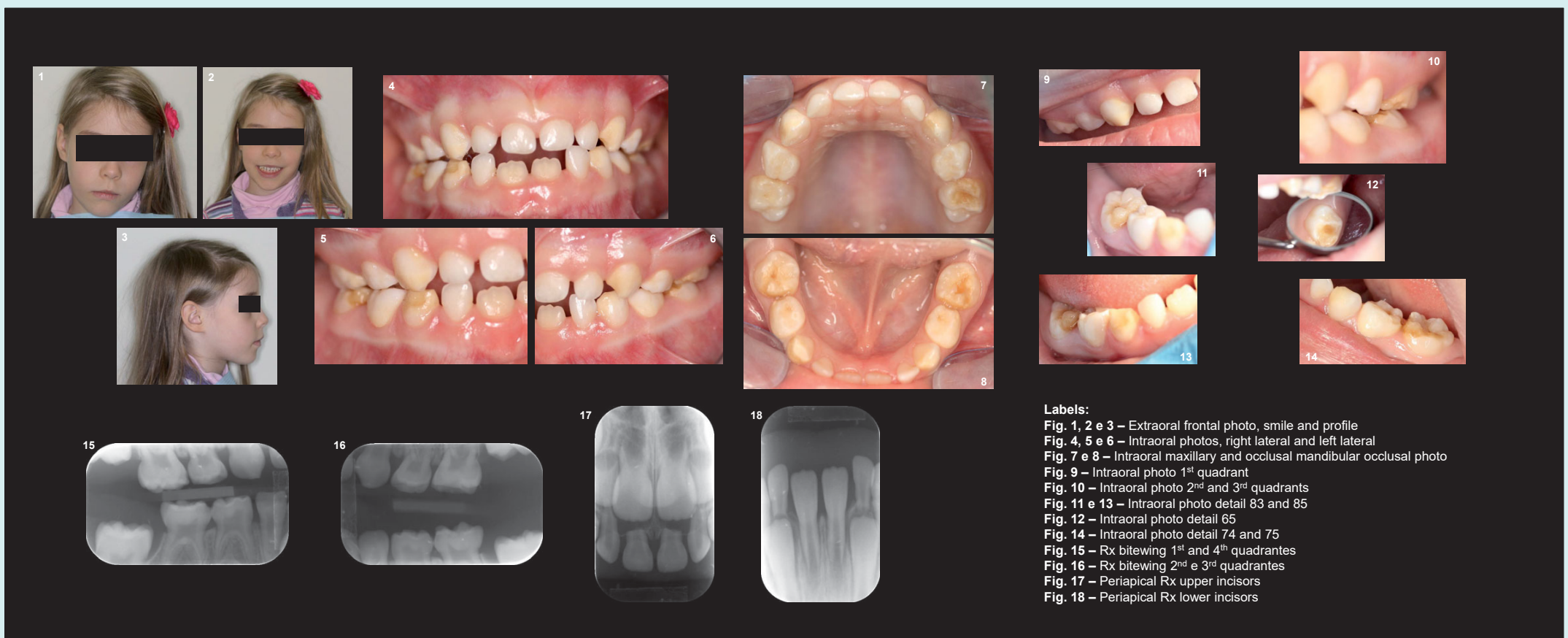


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Key words: ameloblasts; amelogenesis; differential diagnosis; enamel; hypoplasia; enamel matrix.

Case description

A 5 year old girl, with a history of varicella and no known pathologies, call on to a routine appointment. The pregnancy was uneventful and drug-free. At the clinical examination, moderate oral hygiene was observed and lesions compatible with enamel hypoplasia (EH) diagnosis were detected in 6 of the 20 deciduous teeth. None of the lesions were softened. Radiographically, there was a thinner enamel in some of the affected teeth. Motivation and oral hygiene instructions were given and it was applied topical fluoride and control appointments were scheduled every 3 months, with topical fluoride varnish application every 6 months.



Discussion

EH is defined as an incomplete or defective formation in the organic matrix, leading to enamel quantity decrease^{1,2}. In the primary dentition, the etiology includes genetic, systemic and environmental factors, that occurred in the prenatal period or during the early childhood^{1,3}. Poor nutrition and hypovitaminoses A, C and D during pregnancy, premature or low birth weight, hypocalcemia, bacterial or viral infections are examples of etiologies⁴. It can affect only one, several or all the dental elements. It affects the permanent dentition more frequently, but can also reach the primary dentition. The enamel presents with irregular thickness, with depressions in its surface and the color can vary from normal to white or yellowish^{2,3}. In addition to aesthetic consequences, it may be responsible for increased risk of caries and dental sensitivity². It is necessary to carry out the differential diagnosis between EH and other enamel development defects, namely, diffuse opacities, fluorosis, enamel hypomineralization and imperfect amelogenesis^{4,5}.

Conclusions

it is highlighted the relevance of monitoring during pregnancy and early childhood by the pediatric dentist, to prevent etiological factors of EH in the primary dentition, due to its functional and aesthetic importance. According to the severity of EH lesions, caries preventive interventions should be implemented.

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