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## Characterization of the surface of the healthy primary enamel after different etching times with 15% hydrochloric acid

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The resin infiltration of initial caries lesions is an innovative, non-invasive treatment method to stop caries progression. It has been used instead of cavitation and restaurations that cause greater tissue destruction. Currently, a low viscosity resin has been developed which penetrates and blocks the porosities of the lesion that act as acid diffusion pathways, therefore slowing or even stopping lesion progression. The resin penetration is possible due to the enamel surface conditioning with 15% hydrochloric acid (HCl). However, this product is indicated in permanent teeth, and there is very little information on its use in primary teeth. So it is important to consider the changes that may occur in the structure of the enamel and to know the etching pattern that provides better penetration. The chemical attack effect of 15% HCl for 120 seconds suggested by the manufacturer would produce a deep dissolution of the prism nuclei, and the dissolution of the inter and intraprismatic areas. Unlike the permanent teeth, the primary ones are covered by aprismatic enamel that can prevent the capillary penetration of the resins in the body of the lesion and reduce its mechanical retention. Because or the previously mentioned the objectives of this study were to evaluate the structural changes in the surface of primary enamel after the appplication of 15% HCL at different times and to determine an etching pattern that allows better penetration of resin using perfilometer and SEM.

### **Biography**

Rodriguez Olvera Carlosis a resident of the Master's Degree in Pediatric Dentistry at the Benemérita Universidad Autónoma de Puebla, Mexico. He is the author of type II imperfect dentinogenesis- case report in the Mexican Academy of Paediatric Dentistry. He is the co-author of the manual "Management of Patients Systematically Committed" in the Postgraduate Pediatric Dentistry Program of Benemérita Universidad Autónoma de Puebla. He has made a presentation at the College of Dental Surgeons of the State of Puebla, as well as at the International Congress of the Benemérita Universidad Autónoma de Puebla.

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