

# Pediatric Crown Rehabilitation with Edelweiss: A Case Presentation

University of Guadalajara / CUCS

\*Aldana Rubio Leslie Noemi, \*García de la Torre Dulce Mariana, \*\*Nalleli Guadalupe Macías Lamas, \*\*Solórzano Aguirre Adriana, \*\*Ortiz Casillas Marsol Ivani  
\*Resident of the Pediatric Dentistry Specialty of CUCS, University of Guadalajara, \*\*Professor of the Pediatric Dentistry Specialty of CUCS, University of Guadalajara

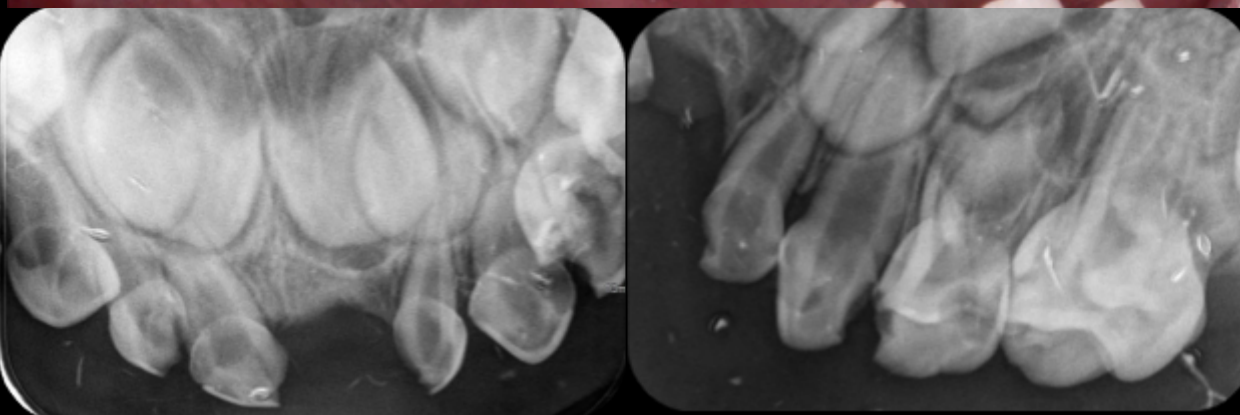
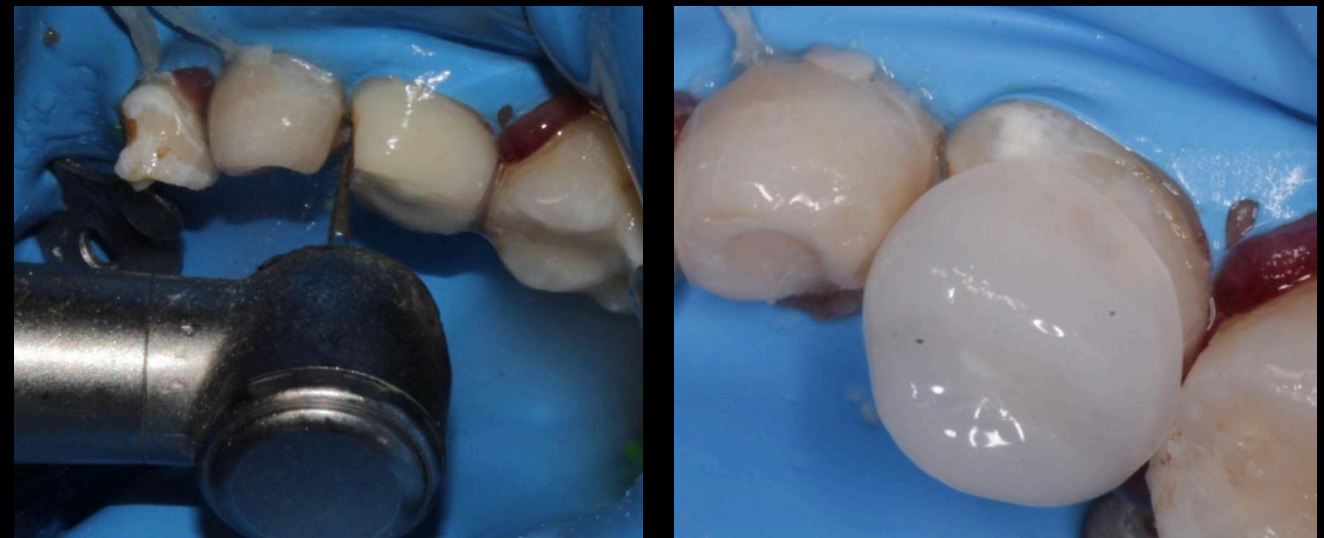


## INTRODUCTION

Caries is a multifactorial disease that causes demineralization of hard dental tissue by acidic by products of bacterial fermentation<sup>1</sup>. It is common in childhood and can begin to develop when the tooth begins to erupt; it is considered a public health problem. Pediatric crowns are full coverage restorations intended to restore function, seek durability, peripheral sealing, and esthetics<sup>2</sup>. Recently, nanohybrid composite crowns have been developed with supragingival preparations that facilitate their adhesion<sup>3</sup>. Other advantages of these bonded restorations are: restoring function with bioesthetics and physiological attrition.

## CASE PRESENTATION

A three-year old female patient came to the Pediatric Dentistry Department of the University of Guadalajara with the following reason for consultation: "Toothache and inflammation". Upon clinical examination, facial cellulitis and sinus tract were observed in OD 54 and 61, as well as carious lesions ICDAS 5 in OD 51, 52, 53 and ICDAS 6 in OD 62 and 64, which also had clinical and radiographic signs of compromised pulp.



## CASE DESCRIPTION

Based on the clinical history, OD 54 and 61 were extracted, and direct conventional resins were placed on OD 53 and 63. OD 62, 64, as well as 51, and 52 were pulpectomized and restored with Edelweiss size M crowns. All of which were done by following the placement protocols.



## CONCLUSIONS

The anatomy of the Edelweiss crowns are conical in incisal direction, and their adaptation to the clinical crown is more similar to zirconia crowns rather than minimal preparation as promised. However, the final result was very pleasing to the eye in terms of color and finish, which is an advantage offered by this new treatment option. Additionally, the ease of wear is facilitated by the combination of conventional resin and cementation, which provide adaptation and strength.

## BIBLIOGRAPHY

- Selwitz RH, Ismail AI, Pitts NB. Dental caries. Lancet. 2007 Jan 6;369(9555):51-9. doi: 10.1016/S0140-6736(07)60031-2. PMID: 17208642.
- Shrestha, S., Koirala, B., Dali, M. y Birajee, G. (2020). Coronas anteriores en odontopediatría: una revisión. *Revista de la Asociación Nepalesa de Odontología Pediátrica*, 1 (1), 32-38. <https://doi.org/10.3126/jnapd.v1i1.41404>
- Cannon M. L. (2003). Advances in pediatric esthetic dentistry. *Compendium of continuing education in dentistry* (Jamesburg, N.J. : 1995), 24(8 Suppl), 34-62.
- Lampl, S. (2020). Instrucciones de uso Edelweiss Pediatric Crowns. Wolfurt, Austria; Edelweiss Dentistry Products GMBH. <https://www.edelweissdentistry.com/wp-content/uploads>