## The Success of Emergency Pulpotomies in Primary Molars. GUELMANN M\*, FAIR J, TURNER C, COURTS F. University of Florida, Gainesville, Florida.

The purpose of this retrospective study was to assess the long-term success of pulpotomies when performed on an emergency basis and restored with a temporary restorative material. <u>Methods</u> Records were collected from 216 emergency pulpotomies performed in primary molars at the pediatric emergency dental clinic at the University of Florida between July 1999 and June 2001. The selection criteria included teeth with a positive history of pain, but with absence of clinical and radiographic signs of advanced pulp degeneration. Formocresol was the medicament used and the teeth were restored temporarily with a reinforced zinc-oxide eugenol material. The time interval between emergency and definitive treatment appointments, tooth-type, arch, age and gender were the variables analyzed in this study. Chi-square analysis was used to assess the effect of the different variables in the outcome of the treatment. *Results* 64 teeth were available for assessment in the twoyear period. A 53% success rate was observed within the first 90 days post-emergency treatment. A high failure rate was found after 365 days (69%). These results were statistically significant (p=0.016). When the early failures (<90 days) were eliminated, the increase failure rate after 365 days was highly significant when compared to the intermediary period (p=0.005). Patients younger than 6 years old showed statistically significant higher chances for success than older children (p=0.018). No significant differences were found for gender, type of tooth or arch. *Conclusions*. The low success rate during the first 3 months following emergency treatment may be attributed to the undiagnosed, subclinical inflammation of the pulp, while long-term failure may be associated with microleakage of the temporary restorative material.