

Fluoride as Obturating Material in Primary Teeth

Authors : Syed Ameer Haider Jafri

Abstract : The primary goal of a root canal treatment in deciduous teeth is to eliminate infection and to retain the tooth in a functional state until it gets physiologically exfoliated and replaced by permanent successor. Important requisite of a root canal filling material for primary teeth is that, it should resorb at a similar rate as the roots of primary tooth, be harmless to the periapical tissue and to the permanent tooth germ, resorb readily if pushed beyond the apex, be antiseptic, radio-opaque, should not shrink, adhere to the walls, not discolor the tooth and easy to fill & remove, if required at any stage. Presently available, commonly used obturating materials for primary teeth are zinc oxide eugenol, calcium hydroxide and iodoform based pastes. None of these materials so far meet the ideal requirement of root canal filling material. So in search of ideal obturating material, this study was planned, in which mixture of calcium hydroxide, zinc oxide & sodium fluoride and mixture of calcium hydroxide & sodium fluoride was compared clinically and radiographically with calcium hydroxide for the obturation of root canals of 75 carious exposed primary mandibular second molars of 59 children aged 4-9 years. All the three material shows good results, but after a follow-up of 9 months mixture of calcium hydroxide, two percent sodium fluoride & zinc oxide powder closely follow the resorption of root, mixture of calcium hydroxide, two percent sodium fluoride follow resorption of root in the beginning but later on majority of cases shows faster resorption whereas calcium hydroxide starts depleting from the canal from the beginning even as early as 3 months. Thus mixture of calcium hydroxide, two percent sodium fluoride & zinc oxide found to be best obturating material for primary tooth.

Keywords : obturating material, primary teeth, root canal treatment, success rate

Conference Title : ICD 2017 : International Conference on Dentistry

Conference Location : London, United Kingdom

Conference Dates : February 16-17, 2017