

*Mehrnaz Shekarchian*

**DENTAL FILLING MATERIAL FOR CARIOUS LESION IN PRIMARY DENTITION**

*Supervisor: PhD, associate professor Klenovskaya M.*

*Department of Pediatric Dentistry*

*Belarusian State Medical University, Minsk*

Nowadays in advanced countries despite of nutrition, environment and life style we can observe many decays in primary dentition in children.

Beside of recommendation to the parents and child, elimination of risk factors and preventing of carious lesion we should consider best treatment for these lesions.

Once carious lesions are identified in the primary dentition, dentists and dental auxiliaries have various options available to restore the decayed tooth's structure.

Different filling materials needs different techniques for restoration of carious lesion [American Academy of Pediatric Dentistry. Guideline on pediatric restorative dentistry. 2014].

Amalgam requires preparation of retentive undercuts that its requirement for suitable restoration because of its ability to releasing from the cavity this kind of preparation help to the adherence. The Resin composite uses an adhesive system to forge a micro-retentive bond with the tooth's structure, although the choice of bonding agent may require additional tooth surface pretreatment before placement and it takes time [Gururaj M. et all. 2013].

Glass ionomer cements chemical adhesion bonds the material to the tooth structure without requiring additional adhesive or cavity pretreatment. At the other end of the aesthetic restoration spectrum, Glass ionomer cement chemically bond to the tooth structure, and are less susceptible to moisture contamination compared to resin-based materials; however, these materials show lower fracture resistance compared to resin-based materials and amalgam. Glass ionomer cements doesn't need special device for preparation and it has nearest shade to the tooth structure and do not take time to select an appropriate shade for the exact tooth [Lefebvre C. et all, 2011].

Therefore, according to the performance of these different materials has been assessed in different investigations, it is still preferable to use Glass ionomer cement for primary dentition for aesthetic, convenience use and ability to releasing Fluoride and prevention for secondary carious despite of limitation of working time with children.