

**PERBANDINGAN EFEKTIFITAS MINUMAN ISOTONIK, RINGER
LAKTAT, ORALIT DAN SUSU SEBAGAI MEDIA PENYIMPANAN GIGI
AVULSI**

ABSTRACT

Background: the epidemiology of maxillofacial trauma has been studied in various parts of the world. The etiology of maxillofacial trauma causes vary depending on the age of the patient in question as well as socio-cultural factors and the economy. Among the causes of the occurrence, the most common are trauma due to accidents (fall of from bike, a car accident, and motorcycle), daily activities and at the time of exercise, as well as falling from a height. In dentistry, avulsion was a lot of trauma cases occurring in children. The ideal storage medium for teeth avulsion is Hank's Balanced Salt Solution (HBSS). But the difficulty of getting the ideal media as dentist avulsion storage medium causes a large number of alternative media storage such as dental avulsion electrolyte solution and pasteurized milk. **Purpose:** Among alternative media isotonic beverage, ringer lactate, oral rehydration therapy and the pasteurized milk which is more effective for a storage medium. **Methods :** by using BHK-21 fibroblasts cells as periodontal ligament, carried out a test of toxicity of each media using the MTT assay. So it brings significant differences ($p < 0.05$) on the respective media except on ringer lactate and oral rehydration therapy. **Conclusion:** pasteurized milk is the most ideal storage medium for teeth avulsion because milk contains a lot of nutrients and ions needed for BHK-21 cells regeneration. While the drink isotonic beverage medium that is not ideal for the storage of avulsion teeth because it does not contain nutrients and citric acid which is contained can destroy BHK-21 cells.

Keyword : avulsion teeth, storage medium, isotonic, pasteurized milk