

Failure rates of restorative procedures following dental rehabilitation in children

Purpose:

The failure rates of restorative procedures for children undergoing dental rehabilitation, performed by sixth year dental students under supervision of faculty staff members, were evaluated in order to determine treatment outcomes and best practices.

Methods:

Retrospective review of 130 dental records of children receiving comprehensive dental treatment at Faculty of Dentistry, King AbdulAziz University in Jeddah between 2005-2006, were undertaken. Data regarding restoration outcomes were evaluated using chi square tests. Only records of patients who returned for follow-up at least one year after their rehabilitations were evaluated.

Results:

Stainless steel crowns (SSCs) had significantly lower failure rates than amalgams ($P < 0.0001$, $X^2 = 40.54$). The highest failure rates were seen in glass ionomers ($P < 0.0001$, $X^2 = 63.54$) and composites ($P < 0.0001$, $X^2 = 104.56$).

Conclusions:

SSCs are the most reliable restorations while glass ionomers are the least durable. Failure of restorations appears to be related to follow up length.