'Silver Tooth': Are Stainless Steel Crowns Still Recommended in Children? Hussain U*, Solaiman A, Eow J (4th year Dental Science students, Dublin Dental University Hospital, Trinity College Dublin)

Background: Stainless steel crowns (SSCs) have been used in paediatric dentistry since 1947. While having excellent success rates, we discuss if their use is still warranted.

Purpose: To assess if SSCs are still the gold standard in paediatric dentistry compared to recent direct restorative material advances and patient preferences towards aesthetic restorations.

Methods: MEDLINE database was searched to identify relevant studies between January 2010 to January 2018 using a developed search strategy. Case reports and in-vitro studies were excluded. Snowballing of included studies was conducted to identify further relevant publications. 244 studies were initially identified, and 20 studies remained in the final qualitative analysis to be critically appraised.

Results: The literature suggests SSCs are the best restoration following pulpotomy, produce better gingival health and are the best restorative material under GA. Hall crowns are highly successful, superior to direct restorations, well tolerated by patients and a useful alternative for children with uncooperative behaviours. Moreover, pre-veneered SSCs are effective and recommended if aesthetics is required. Better designed long term studies are warranted to establish the ideal cement to be used with SSCs.

Conclusions: This literature review provides a detailed summary of the evidence for the continued use of SSCs in paediatric dentistry. SSCs have the advantage of being long lasting and easy to place with little effort from both the patient and clinician. While Hall crowns have their recognised indications, pre-veneered SSCs, such as NuSmile, show promising results as they have comparable success rates, are well tolerated and are aesthetically pleasing.