

Hall Technique for Crown Placement in Primary Molars: Foundational Articles and Recommendations

American Academy of Pediatric Dentistry. Pediatric Restorative Dentistry, 2021. Available at https://www.aapd.org/globalassets/media/policies_guidelines/bp_restorativedent.pdf?v=new. Accessed: Oct. 25, 2021.

BaniHani A, Duggal M, Toumba J, Deery C. Outcomes of the conventional and biological treatment approaches for the management of caries in the primary dentition. Int J Paed Dent 2018;28:12-22.

Boyd DH, Page LF, Thomson WM. The Hall Technique and conventional restorative treatment in New Zealand children's primary oral health care – clinical outcomes at two years. Int J Paediatr Dent 2018;28:180-8.

Innes NP, Ricketts D, Chong LY, Keightley AJ, Lamont T, Santamaria RM. Preformed crowns for decayed primary molar teeth. Cochrane Database of Systematic Reviews 2015, Art. No.:CD005512.

Innes NP, Stirrups DR, Evans DJ, Hall N, Leggate M. A novel technique using preformed metal crowns for managing carious primary molars in general practice - A retrospective analysis. British Dent J 2006;200:451–4.

Lakshmi SP, Sahana S, Vasa A, Madu GP, et al. Atraumatic restorative treatment vs. Hall technique for occlusoproximal lesions in primary dentition: An In vivo study. J Clin Diagnostic Res 2018;12:ZC09-ZC13.

Ludwig KH, Fontana M, Vinson LA, Platt J, Dean JA. The success of stainless steel crowns placed with the Hall technique: A retrospective study. JADA 2014;145:1248-53.

Santamaria RM, Innes NP, Machiulskiene V, Evans DJ, et al. Acceptability of different caries management methods for primary molars in a RCT. Int J Paediatr Dent 2015;25:9–17.

Schwendicke F, Krois J, Robertson M, Splieth C, Santamaria RM. Cost-effectiveness of the Hall technique in a randomized trial. J Dent Res 2019;98:61-7.

Tedesco TK, Gimenez T, Floriano I, Montager AF, et al. Scientific evidence for the management of dentin caries lesions in pediatric dentistry. A systematic review and network meta-analysis. Plos One 2018;e0206296.

Background

The Hall crown technique for placement of preformed metal crowns involves cementing the crown over a caries-affected primary molar without local anesthetic, caries removal, or tooth preparation. It is a less invasive caries management procedure for treating carious primary teeth, based on the concept

that caries under the crown will be arrested due to the sealing of the cavity from the oral cavity. The Hall crown technique originally gained popularity in the United Kingdom primarily for its use by general dentists.

IAPD Recommendations

- 1. Hall crown technique may be indicated for: (a) fearful or anxious children; (b) primary teeth with deep or multi-surface caries without pulp involvement; (c) treatment where equipment for conventional procedures is not available.
- Consensus-based statement > Global agreement 71%
- **2.** Disadvantages of the Hall crown technique may include the necessities for a prior visit to place separators, temporary open bite after placement, poorer adaption of the crown to tooth surface.

 Consensus-based statement > Global agreement 82%
- **3.** Retrospective studies show that the longevity of primary teeth restored using the Hall crown technique is comparable to the conventional techniques.
- Consensus-based recommendation > Global agreement 76%
- **4.** Conventional preparation for preformed metal crowns may be the preferred method to treat primary teeth with multi-surface lesions to ensure proper fit, better occlusion, and crown alignment.
- Consensus-based statement > Global agreement 70%