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Non-Invasive Techniques for Management of Carious Primary Dentition Using Silver Diamine Fluoride and Moringa Extract as a Modification of the Hall Technique

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Abstract : Treatment of dental caries in young children is considered a great challenge for all dentists, especially with uncooperative children. Recently non-invasive techniques have been highlighted as they alleviate the need for local anesthesia and other painful procedures during management of carious teeth and, at the same time, increase the success rate of the treatment done. Silver Diamine Fluoride (SDF) is one of the most effective cariostatic materials that arrest the progression of carious lesions and aid in remineralizing the demineralized tooth structure. Both fluoride and silver ions proved to have an antibacterial action and aid in the precipitation of an insoluble layer that prevents further decay. At the same time, Moringa proved to have an effective antibacterial action against different types of bacteria, therefore, it can be used as a non-invasive technique for the management of caries in children. One of the important theories for the control of caries is by depriving the cariogenic bacteria from nutrients causing their starvation and death, which can be achieved by applying stainless steel crown on primary molars with carious lesions which are not involving the pulp, and this technique is known as Hall technique. The success rate of the Hall technique can be increased by arresting the carious lesion using either SDF or Moringa and gaining the benefit of their antibacterial action. Multiple clinical cases with 1 year follow up will be presented, comparing different treatment options, and using various materials and techniques for non-invasive and non-painful management of carious primary teeth.

Keywords : SDF, hall technique, carious primary teeth, moringa extract
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