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Research Article

**ANALYSIS OF DENTAL CARIES LESIONS IN PRIMARY  
TEETH WITHOUT OBVIOUS CAVITATION AMONG  
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**Abstract:**

**Introduction:** Caries diagnosis process has been more difficult in the last years due to the decline of caries progress observed in most countries.

**Aims and objectives:** The main objective of the study is to analyze the dental caries lesions in primary teeth without obvious cavitation among Pakistani children.

**Material and methods:** This observational study was conducted in de 'Montmorency College of Dentistry during December 2018 to April 2019. The data was collected from 50 patients who want to seek dental treatment. This involves the parents/careers in more than simply bringing children for appointments with the oral healthcare team. It includes the wider aspects of oral healthcare, such as providing the fundamental home-based caries preventive programmers of best tooth brushing practice and a healthy diet, as well as being role models for children in establishing good habits and attitudes.

**Results:** The data was collected from 200 patients. The imperative for effective caries prevention for children is that adult dental disease begins in childhood.<sup>4</sup> This means that prevention not only ensures children avoid the consequences of unmanaged dental caries (pain and infection), but that in addition, they can progress to adulthood with a healthy dentition, a positive attitude to taking on the responsibility for maintaining their dentition for themselves, and the ability to accept any necessary dental treatment without anxiety.

**Conclusion:** It is concluded that enamel lesions were treated through less invasive treatments. Radiographs influenced the decision, especially for the lesions that involved the inner half of dentin.

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**INTRODUCTION:**

Caries diagnosis process has been more difficult in the last years due to the decline of caries progress observed in most countries. With this decrease, demineralization develops more slowly, and therefore, caries lesions do not cavitate until later stages of the disease progression. Clinically, intact enamel hampers the visualization of occlusal and approximal caries lesions, complicating their detection [1]. Traditionally, caries detection has been performed with clinical and radiographic examination. Visual inspection has performed well in terms of specificity, but the method has presented low reliability and sensitivity values.

Radiographs have been indicated to increase the sensitivity of the caries detection process [2]. However, most studies have been performed in permanent teeth and there is a lack of studies about caries detection methods using primary teeth. Significant structural differences between primary and permanent teeth make it inaccurate to extrapolate the results obtained for one type of substrate to the other [3].

Dentistry for children is not the same as dentistry for adults. The effective prevention and management of dental caries in children presents the oral healthcare team with a different set of challenges (and opportunities), compared with providing care for adults. Although evidence-based techniques for preventing dental caries are available [4], and the delivery of these interventions might seem at first glance to be similar for children and adults, the reduced autonomy of children means there are important differences, and this article explores these. Similarly, the limited lifespan of the primary dentition before it is naturally shed presents the opportunity for a different approach to managing dental caries from that used for the carious permanent dentition [5]. A more 'biological', less 'surgical' approach can be used to slow or arrest caries progression in primary teeth such that the tooth exfoliates before causing the child pain or infection [6].

**AIMS AND OBJECTIVES:**

The main objective of the study is to analyze the dental caries lesions in primary teeth without obvious cavitation among Pakistani children.

**MATERIAL AND METHODS:**

This observational study was conducted in de'Montmorency College of Dentistry during December 2018 to April 2019. The data was collected from 50 patients who want to seek dental

treatment. This involves the parents/carers in more than simply bringing children for appointments with the oral healthcare team. It includes the wider aspects of oral healthcare, such as providing the fundamental home-based caries preventive programmes of best tooth brushing practice and a healthy diet, as well as being role models for children in establishing good habits and attitudes. Children also depend on the oral healthcare team to deliver the four-principal evidence-based preventive interventions of tooth brushing (toothpaste) advice, dietary advice, and fluoride varnish and fissure sealants.

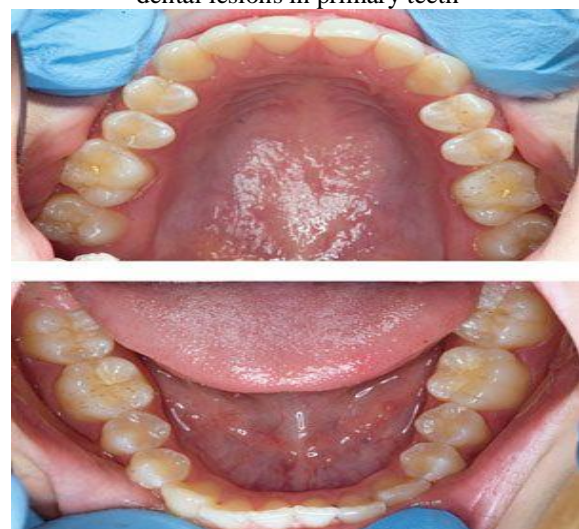
**STATISTICAL ANALYSIS:**

The data was collected and analyzed using SPSS version 21.0. All the values were expressed in mean and standard deviation.

**RESULTS:**

The data was collected from 200 patients. The imperative for effective caries prevention for children is that adult dental disease begins in childhood.<sup>4</sup> This means that prevention not only ensures children avoid the consequences of unmanaged dental caries (pain and infection), but that in addition, they can progress to adulthood with a healthy dentition, a positive attitude to taking on the responsibility for maintaining their dentition for themselves, and the ability to accept any necessary dental treatment without anxiety. This is the goal of all members of the oral healthcare team who provide care for children, be they dental hygienists, dental nurses, dental therapists, general practitioners, oral health educators or specialist dentists.

**Figure 1:** The healthy, caries-free and unrestored dental lesions in primary teeth



**DISCUSSION:**

Caries management for children differs from that for adults. For adults, the management of an active dentinal lesion is generally straightforward. The consequences of leaving the lesion unmanaged can be explained to the patient, who will then usually accept the necessary inconvenience of a restorative intervention for the expected benefit of improved function, aesthetics, and freedom from pain and infection in the future [7]. However, children (enviously), generally live in the present, and can have difficulty accepting the concept of 'let's sort it now, for benefit later. For the younger child, freedom from pain and infection is their priority, and if they are not currently in pain, then they do not see there is a problem to be managed. This compounds the difficulties faced by the oral healthcare team when providing conventional restorative care for the child [8]. For adult patients, it is accepted that best practice is to manage active dentinal caries lesions with some form of restoration. However, for 5-year-old children the Care Index (the proportion of carious teeth which have been restored) is 14% in England and 13% in Scotland, meaning that only around one out of eight carious primary teeth are restored [9]. For 12-year-old children, with their permanent dentitions, the figures are more positive: in England the Care Index is 47% and in Scotland 53.8%. How much this difference in the proportion of teeth being restored is attributable to the relative importance attached to permanent teeth over primary teeth, and how much is related to the difficulties in providing restorative care for children in primary care, or other factors, is debatable and contentious [10].

**CONCLUSION:**

It is concluded that enamel lesions were treated through less invasive treatments. Radiographs influenced the decision, especially for the lesions that involved the inner half of dentin.

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