FULL MOUTH REHABILITATION OF RAMPANT CARIES: A CLINICAL CASE REPORT

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INTRODUCTION

Rampant caries has been defined by Winter et al (1966) as a lesion of acute onset involving many or all of the erupted teeth rapidly destroying coronal tissue, often on surfaces immune to decay and leading to early involvement of dental pulp[2].

In a recent study, Tinanoff et al 1983 has defined it as those who have five or more new carious surfaces per year as having rampant caries[1,4].

Nursing Bottle Caries,also known as Baby Bottle Syndrome is a form of rampant caries in infants and children. It is mostly seen in children falling asleep with the feeding bottle in the mouth with milk or sugar substances. Also with infants with prolonged breast feeding (Kotlow 1977, Rugg-Gunn 1984)[13].

Pattern of rampant caries in primary teeth often relates to the order of eruption with the exception of mandibular primary incisors[3,2]. Initial lesion is seen in the labial surfaces of the maxillary incisors close to the gingival margin as whitish area of decalcification. In extreme cases it may be present also palataly (Pitts1927)[5].

Rampant caries may also be seen with teenagers with frequent intake of snacks and sweet drinks between meals[2]. Typically characterized by buccal and lingual caries in premolars and molars and proximal and labial caries in mandibular incisor[2,14].

The value of and effectiveness of preventive dentistry is a major emphasis of the infants and toddler dental examination. Preventive dialogue should include discussion of diet and feeding practices, tooth cleaning procedures and optimum fluoride use both systemic and topical[9].

PREVENTION

0-5 years

Dietary advice:	Good nursing teaching for parents.
Fluoride therapy:	Tooth Paste , tablets in unfluoridated area professional fluoride application every 6months.
Plaque control:	OHI, tooth brushing and parental supervision.

5-12 years

Dietary advice:	Parents and patients.
Fluoride therapy:	Tooth Paste, tablets up to 8 years in non fluoridated areas, mouth rinse
Plaque control:	OHI, tooth brushing without parental supervision, disclosing agent.
Fissure sealant:	3-6months recall.

Permanent dentition for 12 years onwards.

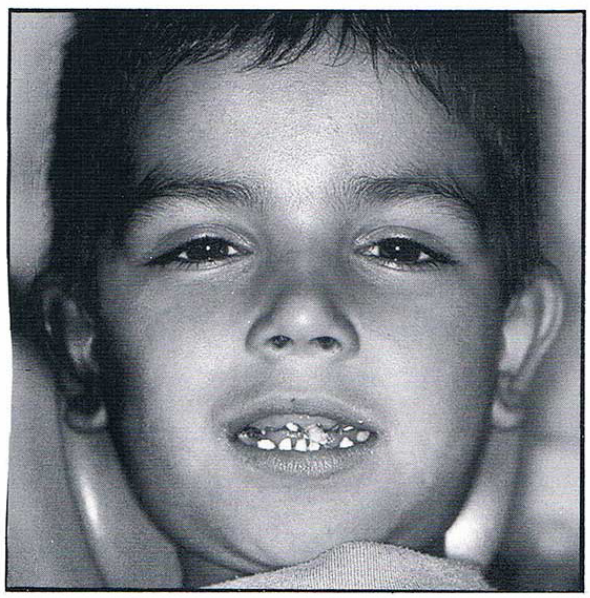
Dietary advice :	For parents and patients.
Fluoride therapy:	Tooth paste, mouth rinse professional application every 6 month.
Fissure sealant:	3-6months recall.

CASE REPORT

A 4 years old boy, Bipin Gyawali of Ramechap district was brought to the People's Dental College

& Hospital, Department of Pedodontics and Preventive Dentistry by his father who was concerned that his child was not eating properly and had difficulty in speech. The father also gave the history of the child having sporadic dental pain. The patient did not brush his teeth because he did not like it. He had never been taken to a dentist due to the lack of dental facilities in his hometown. His past medical and family history were unremarkable.

He appears alert and active and in no apparent distress. His physical examination is normal, except for the findings in the oral cavity.

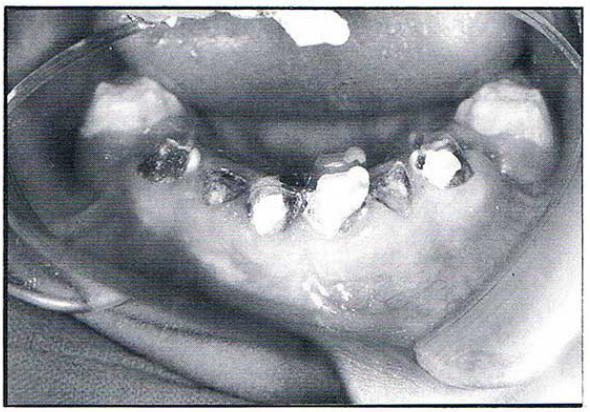


Extra oral view before treatment

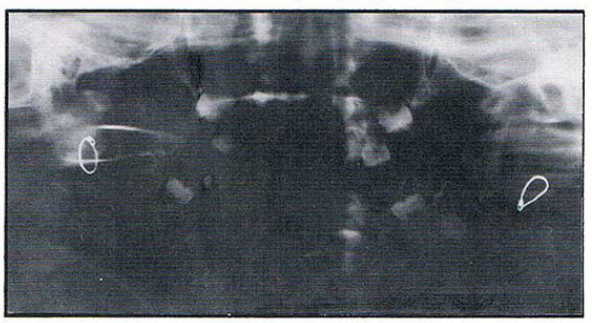
Intra orally, he had multiple caries with pulpal involvement. The gingival tissues were swollen and there were periapical abscess in relation to all four first primary molars.

Usually the patient rarely respond to the dental approach due to fear in his first visit. The dentist's role is to access the preparedness of a patient to change and coach them through this process. To achieve this, we took an interview of the patient on the first visit and gave him a tooth brush for him to play with. The patient was given an oral hygiene instruction and taught how to brush his teeth to gain the patient's confident and to build a rapport with the family[8,15].

Extraction was the treatment of choice for the teeth with advanced decay and furcation involvement with periapical abscess[3,4]. Thus those teeth were extracted under conscious sedation[12].



Intra oral view after pulp therapy

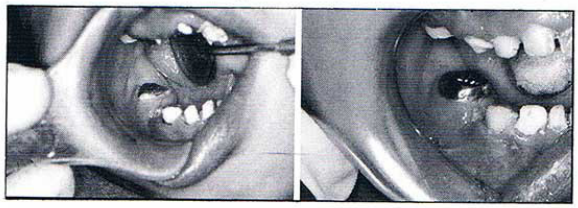


OPG radiograph

Pulpectomy was performed in the pulpally involved teeth and restorations were done in the required teeth[10,2,11].

0.8 mm wire used as post for core built up

In the anterior teeth, 0.8 mm gauze wire was used as the posts were built up with composites and GIC after the completion of pulp therapy.



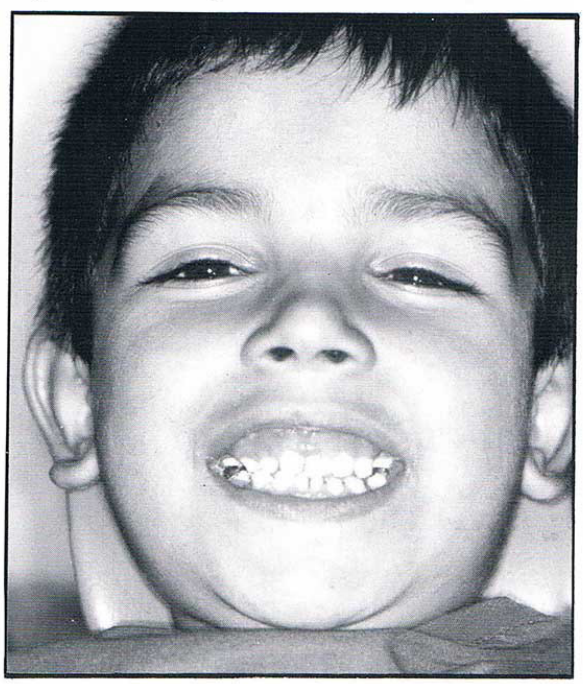
Restoration of 85 before crown placement *Crown placement on 85*

Full coverage of the stainless steel crowns was done in the lower primary second molar to bring the teeth into functional occlusion.

Crown & loop space maintainer *Short band & loop space maintainer of U/L arch*

Short band and loop and crown, band and loop space maintainers were placed in all four second primary molars to maintain the extracted spaces of the first primary molars[11].

APF-Gel (Fluoride) application was done and was instructed to brush the teeth with fluoridated toothpaste twice daily after meals under the supervision of the parents[10,2,3].



Extra oral view after treatment

Improvement in the patient's smile and behavior was seen soon after the treatment.

DISCUSSION:

There is a general agreement that a marked reduction in caries prevalence among children and young adults has occurred in most of the developed counties in recent decades (Petersson and Bratthall 1996) It is assumed that the reasons are related to the use of fluorides, to improvements in oral hygiene, or to a change in microbial host and salivary factors, or to dietary changes (Marthaler 1984). It is suggested, however, that the most probable reason is related to the increase use of fluoride (Marthaler 1984, Bratthall et al 1986) while according to Renson et al. (1985), the organized availability of dental resources and oral health education programs may be one explanation. On the otherhand, the developing nation like our is seeing the rise in the caries rate mainly due to easy availability and consumption of refined sugar but lack of oral health awareness. Added to this, the low socio-economic status, ignorance about the importance of maintaining the milk teeth unavailability of the dental professionals in the peripheral area have compounded to the complexity of the problem[16,5,7,17].

There is a definite need to promote oral hygiene in a country like ours through effective oral health education.

CONCLUSION:

Thus, we should promote prevention and affordable dental treatment for the happy, healthy smile and the legacy of good oral hygiene for our future generation.

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