



MANAGEMENT OF TOOTH SURFACE LOSS IN A TEENAGER PATIENT WITH MEDICAL PROBLEMS - A CASE REPORT

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INTRODUCTION

- Tooth wear is recognized as a major problem in children and adults.
- Furthermore, prevalence data indicated that tooth wear is increasing over time in young people¹.
- Tooth wear can cause irreversible damage to the permanent teeth and may compromise the dentition for the entire lifetime if untreated.
- Therefore, knowledge of the etiological factors, early diagnosis, appropriate prevention and management are crucial.

CASE REPORT

- A 15-year-old Caucasian girl came to dental clinic complaining of the appearance of her front teeth. She was a very anxious patient.
- **Medical history:** She was an asthmatic patient and was being managed by beta-2 agonist and steroid inhaler. In addition, she had migraine every second day usually followed by vomiting and nausea.
- **Diet history:** consumed excessive quantities of acidic beverages: carbonated drinks and diluting juice.
- **Clinical examination:** erosion was found at the mesial and palatal surfaces of maxillary incisors.
- **Management:** Active prevention advice and conservative treatment with no tooth preparation:
 1. Composite restoration at mesial surfaces of the maxillary incisors.
 2. Nickel chrome veneers at palatal surfaces of the maxillary incisors.



Figure 1A Occlusal view of the maxillary arch



Figure 1B Anterior view of teeth in occlusion



Figure 1C Occlusal view of the mandibular arch

Figure 1: Pre-treatment appearance of the dentition



Figure 2A View before treatment



Figure 2B Isolation under rubber dam



Figure 2C View after treatment

Figures 2: Composite built up on 11 and 21 teeth



Figure 3A Pre-operative view



Figure 3B Nickel chrome palatal veneers



Figure 3C Isolation with rubber dam



Figure 3D Post-cementation view

Figure 3: Cementation of the palatal veneers

Conclusion

- It was a great challenge to manage this patient as she tended to get migraine easily especially when in stressed.
- She was still on treatment for her medical condition and her intrinsic acid source for erosion was still active.
- Conservative treatments with no teeth preparation for the palatal veneers are the preferred management for this patient.
- The increased occlusal vertical dimensions are well accepted by the patient.

References

1. Nunn, J.H., P.H. Gordon. "Dental erosion -- changing prevalence? A review of British National childrens'." *Int J Paediatric Dent*, 2003; 13(2): 98-105.
2. Al-Dlaigan YH, Shaw L & Smith AJ. Is there a relationship between asthma and dental erosion? A case control study. *Int J Paediatr Dent*, 2002; 12: 189-200.
3. Nohl FS, King PA, Harley KE, Ibbetson RJ. Retrospective survey of resin-retained cast-metal palatal veneers for the treatment of anterior palatal tooth wear. *Quintessence Int*, 1997; 28(1):7-14.
4. O'Sullivan, E. and A. Milosevic. UK National Clinical Guidelines in Paediatric Dentistry: diagnosis, prevention and management of dental erosion. *Int J Paediatr Dent*, 2008; 18 Suppl 1: 29-38.



Anterior view after 6 months of palatal veneers cementation

