



## Dental History

Four restorations were placed when at primary school and patient had experienced considerable pain during the procedure. The local anaesthesia given before the procedure had not worked and was very painful. He had avoided dental visits since and had developed an extreme fear of injections and drilling.

## Diet

Currently a very unhealthy and unbalanced diet. He drinks over three litres of sugared soft drink that he sips throughout the day. His meals are irregular and usually based on junk food. The amount and frequency of sugared drinks were identified as the major dietary cariogenic factor in this case.

## Fluoride Exposure

Fluoride exposure was not investigated but patient admitted to not brushing for a few months.

## Risk Assessment

Based on oral examination that revealed many teeth with active decay, presence of dietary risk factors as well as insufficient fluoride exposure, patient was classified as a high caries risk patient.

## Management plan

1. Relief of pain.
2. Discuss dietary problem with patient.
3. Cover decayed buccal surfaces with fluoride containing temporary restorations using atraumatic technique.
4. Topical fluoride treatment and weekly self-application of 0.2% NaF mouthrinses.
5. Recommend six monthly reviews until the cariogenic factors are reduced and remineralization balance restored.

## Outcome of preventive counselling

The patient did not seem motivated enough to control the cariogenic dietary factors, despite the long-term dental consequences being explained. All he seemed to be interested in was to have the front teeth fixed.

The patient understood the role his diet played in his teeth problems and agreed to try to replace the soft drinks with artificially sweetened drinks and to reduce the frequency of drinking them. As an immediate measure, the patient was urged to concentrate on toothbrushing and was advised to use a high fluoride concentration toothpaste (5000ppm) after every meal.

Figure 2



Grossly decayed buccal surfaces of many teeth showing various stages of caries activity.

Some of the fluoride products available	Why would you use it	Why wouldn't you use it
Professional fluoride applications		
Low-fluoride concentration rinses		
Higher-fluoride concentration rinses		
Fluoride gels/foams		
High-fluoride concentration toothpaste		
Fluoride tablets		

**Your preferred fluoride product for this case management and why?**

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He was also told to use the 'brush no rinse' technique to ensure the prolonged topical effect of fluoridated toothpaste.

Because of concern about the patient's motivation no other additional fluoride vehicles were employed. The approach to firstly place temporary (glass ionomer) fillings to protect pulp, stabilise, and to reverse some of the damages was explained to the patient. After some hesitation regarding additional cost, the patient recognised the long-term benefit of such an approach and consented to the treatment plan.

Over a number of visits all initial temporary conservative treatment was completed. During each of those visits brushing and dietary issues were discussed and motivation built up. It was also revealed that he was interested in the appearance of his front teeth for social reasons, but he also realised that the preventive methods he was adopting were helping all of his teeth and not just the front ones. As the treatment progressed, he became free of pain in his front teeth and his appearance improved. He has changed his mind and requested that his back teeth receive the same treatment.

■ ***Understanding a patient's motivation for seeking dental care, incorporating that knowledge into a strategy for a desirable behavioural change, and providing adequate and easy to understand dental messages will help a patient to achieve a better oral health outcomes.***

## **Six month monitoring visit**

The patient had successfully changed to mostly drinking artificially sweetened soft drinks and reduced their frequency and amount. The patient reported that he follows the recommended brushing regime, but he finds it difficult to brush during the day (while at work) therefore he stopped doing this some time ago. All the recently placed temporary restorations remained intact and there were no signs of new lesions. There was also no sensitivity to cold or brushing reported. The patient has also asked whether he could have his front teeth fixed with different material to further improve their appearance. As caries risk factors appeared to be reduced and balance tipped away from decay and towards health all six upper front teeth were filled with a LCR to match the colour of patient's teeth. Patient was happy and agreed to a further six-month review. He was also advised that although at that stage, all other temporary restorations were sound, the material was not very strong and the restorations should be replaced within the next six months.

## **Twelve month monitoring visit**

Oral examination revealed that oral hygiene was still good, otherwise little change had occurred with only some of the temporary restorations showing signs of wear. It was decided that patient can stop using the high fluoride toothpaste and go back to using a regular (1000ppm) toothpaste. Due to financial constraints (patient at that stage had become unemployed) only some of the posterior temporary restorations were replaced and patient was advised of the availability of government dental services. Also for the same financial reason the patient was not keen on further review appointments. He said that when he was in a better financial position he would return for a check-up.

### **Further information**

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