

# Carries

YOUNG ADULT – A PERSON AT HIGH CARIES RISK?

## Two months maintenance visit

The patient reported that she only occasionally drank soft drinks and mostly drank white coffee without sugar or just water. Oral examination revealed that the early buccal lesions were not as white as on initial examination (a sign of remineralization), however the patient noticed slight darkening of the buccal part of her lower teeth. After discussion with the patient it was decided to leave it for another three months and see whether some remineralised lesions require aesthetic restoration. The previous sensitivity problem had subsided and the patient was happy with the outcome. She was advised to stop the high fluoride toothpaste and go back to brushing with a regular strength fluoride toothpaste. The "spit no rinse" method was recommended as well as to keep leaving toothpaste on the affected surfaces after brushing. The 46 with a fissure sealant was not giving her any trouble and it was recommended that bite-wings would be taken 12 months after those taken during the initial visit.

## Three months later maintenance visit

Patient reported no symptoms. Fissure sealant was still intact. New dietary habits seemed to be well established. Next regular check-up visit was advised in six months and the patient requested to be sent a reminder card when she was due for the next check-up.

## Comments:

The presented case management contains a number of common assumptions made during dental examinations and they need further explanation.

- Good gingival health is only an indication of brushing skills and habits and not use of fluoride. Lack of investigation of types of toothpaste used may lead to incorrect assumptions regarding fluoride intake. A clinician should always check what type of toothpaste is being used and advise accordingly.
- "Cooking at home" does not mean well-balanced diet. Young people moving out of home and starting to live independently face a variety of challenges such as home duties, cooking for themselves and different social life arrangements. All this puts a lot of pressure on time management, therefore relying on fast as well as convenience food is probably not that uncommon. If these habits persist for a prolonged period of time that may have some adverse effects not only on dental, but general health as well. Intake and frequency of sugar should always be investigated.
- Possibly changing social life. Moving out of home often brings greater independence and changes in the social environment of an individual (eg no reminders about dental check-ups or oral hygiene, staying up late with friends and not brushing before bed, snacking and other dietary problems). These changes need to be investigated for all individuals as they impact on the individual's caries risk level.

■ *A dental clinician dealing with young adult patients faces many challenges in dealing with considerable changes in patients' home, social and work environment. Patient management is usually complex and success depends on thorough understanding of all factors involved and appropriate treatment planning. It is important to remember that prevention is always better than treatment.*

## Patient Details:

Twenty-year-old female patient, who had not visited a dentist since leaving school at age 17.

## Presenting problem:

Patient was concerned about the 'unusual look' of the mandibular anterior teeth. Sensitivity to sweet foods/drinks was also present.

## Past dental history

On leaving high school the patient had good dental health, only one filling and no new caries lesions diagnosed for some time. Her periodontal health has also been good. She has always looked after her teeth and said that she had not expected to have any trouble with her teeth. As her gums appeared to be healthy the patient's brushing habits and use of fluoridated toothpaste were not investigated. It was noticed that she is left-handed.



Figures 1 and 2 Teeth and bite-wings on presentation

## Further information

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**COLGATE CARIES CONTROL PROGRAM**

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## Dietary history.

The patient's studies were very demanding and often involved late nights. She had developed a habit of drinking lots of cola-type soft drinks while studying. She also liked to hold cola in front of her mouth to experience the "bubbles" as it degased. Her overall diet appeared to be well balanced and not high in refined carbohydrates.

- Disclosing solution showed good plaque control except for the upper and lower left front area (area often found to be difficult to clean for left-handed people).
- Gums and other soft tissues were healthy and no loss of attachment was detected.

## Risk assessment

- High caries risk due to dietary pattern.
- Past history of low caries experience and frequent and regular toothbrushing suggest high motivation and generally good oral habits.
- Patient willing and able to follow recommendations in order to overcome her decay problem. Therefore, potential for recovery and prognosis for future dental health were good.

## Social history:

At the age of 19 the patient started university and moved out from home. Since then she has been sharing a house with two other students. At the beginning she found it challenging to manage her finances as well as look after a house and cook for herself. At present things are a bit more settled.

## Oral examination

(see charting, Figure 3)

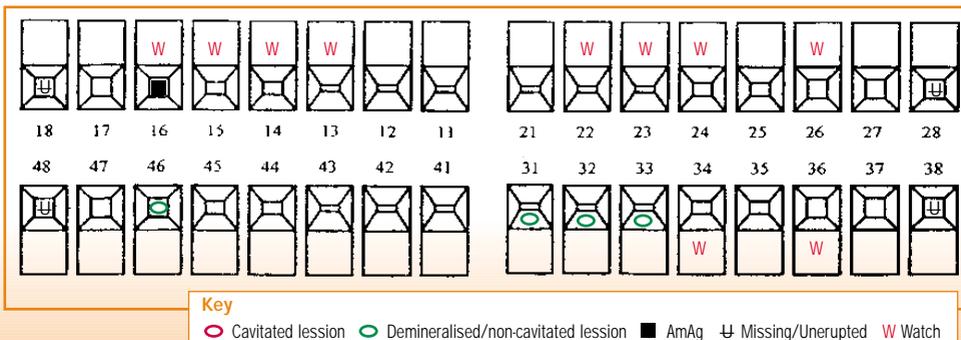
- Buccal early carious lesions were found on the lower left anterior teeth (Figure 1). These were white, but still not cavitated (dental explorer not used to avoid accidental breaking of the fragile surface of lesions).
- No decalcification was evident on maxillary teeth.
- Bitewing radiographs showed early occlusal caries on 46.

## Management plan

### Dietary counselling

The importance of controlling the consumption of soft drinks was emphasised to the patient, in particular their prolonged retention in the mouth. Some healthier alternatives were presented to the patient, but she was also invited to contribute to the discussion with some other options. All of the alternatives were discussed and the patient chose to replace cola drinks with coffee flavoured milk drinks.

Figure 3  
Patient's caries chart



Additional questions that you would ask to complete the examination:

1. Your recommendation on dietary matters
2. Your recommendation on method of dealing with white spot lesions
3. Your recommendation on fluoride therapy
4. Your recommendation on timing of next dental examination

## Home fluoride therapy

To hasten remineralisation the clinician opted to recommend high fluoride toothpaste rather than mouthrinses.

- The patient was instructed to use high fluoride toothpaste (5000 ppm) for regular brushing instead of the toothpaste she was using.
- She was also asked to gently put the high fluoride toothpaste onto the surface of the demineralised teeth twice daily (after brushing) for two months.

## Caries management.

- The patient was made aware that the first signs of remineralisation could be observed within the next two months. It was explained that at the end of this process some of the lesions might still require restorations to be done for aesthetic reasons. The patient was comfortable with all the explanations.

- An appointment was made for a preventive resin restoration on 46 occlusal.
- Effective method of plaque control on the left front area was explained to the patient.

## Restorative appointment

Occlusal surface of 46 was intact. Previous dental records were not available to the treating clinician, therefore, it was not clear whether the lesion was active or inactive, how long ago it started and how quickly it had progressed. Considering the patient's generally good oral hygiene, good motivation and use of fluoride, it was decided to place a fissure sealant on 46 and observe.

The patient reported that dietary changes were progressing well, but the end of semester exams were coming up and she was not sure whether she would be able to sustain those changes. Another visit was organised in two months time.