

## **ORAL CARE OF PATIENTS SUFFERING FROM DEMENTIA – FACTSHEET**

Irrespective of the nature of the dementia, it is important to stress that dementia, *per se*, will not result in disease to the teeth or other structures in the mouth or oral cavity. It is highly possible if not probable, however, that a person who suffers from dementia may develop dental (and perhaps oral) disease indirectly as a result of her/his dementia; this is predominantly associated with a loss of awareness of oral health measures. In order that this may be made clear to carers, it is necessary to explain the cause of the most common dental/oral diseases that affect all of us potentially.

In the interests of simplicity, dental disease affects the teeth and the bones and gums which envelop them. The most common dental diseases may be subdivided into:

- Dental caries or dental decay. This may involve the crown of the tooth or, in older patients, the root of the tooth. This involves a softening of the teeth by removal of calcium by acidic attack from plaque (see below) - this is called decalcification.
- Gingivitis or inflammation of the gums (this tends to be reversible).
- Periodontal disease. Here, the gingivitis has spread below gum level to involve the bone and the fibres tethering the tooth into the surrounding bone (periodontal membrane). Although this tends to occur in adults, a destructive form may occur in young patients. Although this disease may be treated and its progress checked, its effects are not reversible.

Dental disease occurs typically when 3 factors coincide:

1. A susceptible tooth surface. This is particularly true in older people where large fillings may be present or, equally, where gum recession and or periodontal disease has resulted in exposure of the cervical or root surface of the tooth as this surface is more porous than the crown surface (enamel) of a tooth and looks a bit like a tea bag. This may also explain the sensitivity some older patients feel to hot/cold drinks.

- 2. Bacteria in the mouth which, in conjunction with the next factor, facilitate the production of dental plaque.
- 3. A diet containing fermentable carbohydrates (sugars).

In susceptible tooth surfaces, in the presence of appropriate bacteria, sugary foods can readily be broken down and a film or pellicle forms on the teeth. Over time, this pellicle builds up, like barnacles on a ship and the effect of the breakdown products of the sugary foods may result in acidic attack of the teeth which may then cause decay or result in inflammation of the gums.

Over time and in susceptible individuals, the gingivitis may develop into periodontal disease.

Dental plaque may be removed by oral health measures such as tooth brushing and flossing and also by adjuncts such as mouthwashes such as Corsodyl which contain chlorhexidene.

To prevent or reduce the risk of dementia sufferers developing dental caries therefore, it is essential that carers ensure:

- that foods rich in fermentable carbohydrate are restricted (and sugary intake limited to mealtimes)
- that adequate oral hygiene procedures are carried out preferably after meals and certainly before the patient retires to bed at night.

that where the latter is more difficult to achieve, e.g. where the patient has had extensive dental work carried out (e.g. crowns, bridges or elaborate partial then the patient should dentures) attend her/his dentist or dental hygienist regularly to maintain oral health.

Many older patients have no remaining teeth and are termed edentulous. These patients may or may not be wearing full or complete dentures and complete denture wearing may be rendered more difficult with the advent of dementia. The reason for this is that successful (complete) denture wearing depends to a great extent of what is termed neuromuscular control (much like riding a bike). It is not uncommon, therefore, for carers of edentulous patients who are suffering from dementia to request that new dentures be made for such patients. In reality, new dentures may not result in an optimal outcome, although the concept of template or copy dentures makes it easier for patients to adapt to new dentures.

Sadly, in the case of patients with dementia, the only way a functionally acceptable outcome may be achieved is by the use of denture adhesives. These come in a variety of forms from powders to pads and from pastes to strips. It must be said that in the case of adhesives, a degree of trial and error is required as factors such as taste and consistency of the material will influence their usage as well as the need for carers to apply these adjuncts. In addition, all adhesives need to be removed and this may also prove distasteful to the carers yet may be clinically necessary if the patient is going to be able to eat and speak with some degree of comfort.

The edentulous patient is also prone to other oral conditions in addition to the fact that the status of her/his gums will gradually deteriorate with time. One of the most common is mouth ulcers as a result of rubbing of the denture against the soft tissues overlying the jaw bones. Most of us will appreciate how even small ulcers in our mouth can be painful. For this reason, carers should be aware of the need for denture-associated ulcers to be seen by a dentist; an analgesic paste may work short term but will certainly not cure the problem! Some ulcers, however, do not cause pain and this must be viewed with suspicion and dentist consulted immediately. Oral а cancer is not a common disease but it commonly presents as a long-standing

painless mouth ulcer, but, again, it must be stressed that most mouth ulcers are of a non-sinister cause and are readily treated.

Earlier on I mentioned the need to be careful about diet as dietary deficiencies and systemic conditions may be mirrored in the mouth, for example a patient with a cracked, beefy-red or coated tongue may be an indication that a medical/dental examination is required.

This short overview of dental matters is intended to indicate that although dementia can significantly affect many aspects of a dementia sufferer's day to day life, it has no direct on oral health, but loss of oral health in a patient with dementia will almost certainly influence her/his ability to eat and converse with comfort and clarity.

Fraser McCord, Professor of Restorative Care of the Elderly, School of Dentistry, University of Manchester

## PSSRU

Personal Social Services Research Unit



The views expressed in this factsheet are those of the author, not necessarily those of the NWDC.

For further copies of NWDC fact sheets contact the North West Dementia Centre on 0161-275-5682 or nwdc@manchester.ac.uk. Alternatively write to the Information Officer, North West Dementia Centre, Dover Street Building, The University of Manchester, Oxford Road, Manchester. M13 9PL.