

Huntington's Disease Association



The Importance of Dental Care in HD

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It should be stated at the outset that the teeth of people with Huntington's disease are no different from those of other people. They are not innately more susceptible to tooth decay or gum disease but people with Huntington's disease do present clinically with more dental problems. For the dentist, treatment of patients with advanced Huntington's disease is difficult. They can be faced with a patient who, needing a number of fillings, cannot open his mouth widely, or cannot sit still, or both. Possible financial difficulties, transport problems, access to dental surgeries, and apathy or resentment in the patient and/or the family, all contribute to the fact that treatment is frequently neglected.

It is possible that a person with such rampant decay would often be advised to have all teeth removed and full dentures constructed; but for the Huntington's patient this can be the beginning of more problems. Initially a full denture stays in by suction, but more important is the pull of the facial muscles forcing the dentures into place. This muscle activity is automatic but in Huntington's disease such low-level muscular activity is often overridden by uncontrolled involuntary movements that can frequently and spontaneously eject a denture from the mouth. Eating for these people affected by HD can be a real trial, further aggravating their dysphagia (difficulty in swallowing). For the patient with no teeth and no denture an attractive facial appearance is destroyed by loss of cheek and lip support. Consequently, there is a lowering of self-esteem apart from the lack of function.

Specific dental problems and their causes

The problems are twofold. Firstly, the Huntington's disease patient usually lacks the dexterity to use a toothbrush efficiently, if at all. Secondly, the diet of the Huntington's disease patient tends to cause decay. Simply, decay of a tooth is caused by sugar (from food) being processed by bacteria (in the plaque) into acid. The acid then dissolves the tooth under the plaque. The tooth can be considered to have a threshold (varying from person to person) of the number of times a day that it can withstand acid attack without decaying. (The tooth can recover by re-mineralization between attacks). If this threshold is exceeded for many days then the surface of the tooth will be disrupted and an irreversible lesion will have occurred. As Huntington's disease sufferers need high energy consumption they may also have a very frequent intake of sugar containing foods. Coupled with the decreasing dexterity in plaque control by using toothbrush and dental floss, the decay attacks part of the teeth not normally susceptible – and rampant decay has arrived. Additionally, bacteria in the plaque on the teeth liberate toxins which progressively irritate and destroy the gums and the ligament which attaches the teeth to the bone. As this 'gum disease' progresses; the teeth become loose and sensitive to pressure, and gum boils may occur.

Prevention of dental disease in people with Huntington's disease

This is an extension of the preventative dental care of the general population. Firstly, patients and their carers should understand the importance of the prevention of tooth decay in providing quality of life. Secondly, prevention should be especially emphasised for all people at risk to Huntington's disease.

Thirdly, dental care in the 'at risk' family should be particularly frequent in order to maintain teeth in their optimum condition before the possible onset of the disease. Finally, if the Huntington's disease patient is unable to choose or demand dental care, then someone should take this responsibility.

Prevention of gum disease

Prevention of gum disease is ensured by keeping the teeth free from plaque and irritation by bacteria. This is done with the toothbrush and by using dental floss in a sweeping motion across the surface of the tooth not reached by the toothbrush. Early in the course of Huntington's disease it is possible for the person affected by HD to floss their own teeth but as dexterity deteriorates it may be possible for a member of the family to do it every day. It is advisable to use a good quality electric toothbrush as early as possible and to develop good habits of dental self-care which then remain an automatic behaviour during the course of the disease. The massaging action of the electric toothbrush is an additional benefit.

Prevention of tooth decay

Diet: Almost all foods contain sugar in sufficient concentration to cause decay but some foods appear to contain protective factors. To quote Professor Elsdon Storey; 'Analysis of one common natural food, milk, has led to the finding that not only is it a good buffer against plaque acids but it has the potential to re-mineralize teeth and the capacity to form a protective film on tooth enamel. In choosing the type of food to eat it is wise to favour milk-containing products, wholemeal and unrefined foods. These have other important benefits for the body'.

Oral Hygiene: The correct and frequent use of dental floss and an electric toothbrush will help. Use toothpaste that contains fluoride. Specialist equipment is available, and community dentists may be able to make a home visit.

Bedtime: As saliva flow is much less during sleep, food clearance is slowed. It is therefore most unwise to eat within half an hour of going to bed.

Fluoride treatment: a) It may be worth looking into using toothpaste with more than the normal concentration of fluoride. b) A fluoride mouthwash can be self-applied on a weekly basis or can be staff-supervised in a care centre. It is advisable to have a dentist apply fluoride to the teeth in a stronger solution or as a slowly dissolving varnish at the regular 6 monthly check-up.

Care by dentist: The dentist can, at regular intervals, de-scale the teeth to prevent gum disease, apply fluoride to improve the resistance of the teeth (raising the frequency of intake threshold), and detect early cavities. If he knows the patient is at risk to Huntington's disease, he can choose specific filling materials (such as glass ionomers) that, although being a little more brittle than silver amalgam, do tend to increase the resistance to decay. Normal cavity design can sometimes be modified with a view to prevention to decay. Even the early Huntington's disease patient should be treated as if he had rampant decay. Design of partial dentures should be in sympathy with this and should have extra retention to counteract excessive dislocating forces. As extraction of other teeth is more likely, denture design can allow for easy addition of extra teeth.

Fact sheets available from the HDA

The HDA provide fact sheets about all aspects of Huntington's disease. All fact sheets can be downloaded free of charge from our website www.hda.org.uk or ordered from Head Office.

For a publication price list/order form, membership form, details of our Regional Care Advisers and local Branches and Groups, please call Head Office on 0151 331 5444 or email info@hda.org.uk

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