UNIT NO. 5 HELPING THE SILVER GENERATION SMILE - PART 1

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ABSTRACT

Oral health is an integral component of general health and wellbeing. It is essential even in old age. This article highlights common dental conditions affecting the elderly that the general medical practitioner can identify and motivate their patients to seek follow-up oral health care. These are periodontal disease, dental caries, and tooth loss that may require prostheses. Denture hygiene is important for the health of the oral mucosa. Patients must therefore clean and maintain their dentures well with daily cleaning and maintenance. Denture patients also need their annual dental checkups and cases of uncomfortable dentures and inflammation of the oral mucosa should be referred to a dentist for further investigation and management.

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INTRODUCTION

Ageing brings about physiological changes to the oral tissues. These changes affect the teeth; oral mucosa; alveolar bone; saliva quality and quantity; taste acuity and chewing. However, it is important to recognise that no broad, generalised detrimental changes in oral health occur simply with age. Healthy older people can therefore expect to keep their teeth throughout their lifetime. Unfortunately, many older adults do not place a priority on oral health. This article describes common dental conditions affecting the elderly that the general medical practitioner can easily identify during their routine examination and motivate them to seek follow-up oral health care.

COMMON DENTAL CONDITIONS AFFECTING THE ELDERLY

Periodontal Disease

Poor oral hygiene is a key risk factor for the onset of periodontal disease. Maintaining good oral hygiene can be a challenge for

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HILARY PIK YEN THEAN, Senior Lecturer, Department of Restorative Dentistry, Faculty of Dentistry, National University of Singapore the elderly patient with limited manual dexterity and impaired visual acuity. It may also be complicated by the presence of systemic illnesses like diabetes mellitus and renal impairment. As the destructive nature of periodontal disease is determined by individual host response to the presence of pathogens in dental plaque, it has a high recurrence rate as dental plaque forms continuously in the mouth. Please refer to Unit 3 for a more extensive discussion on this subject.

These patients, in particular, will need to visit a dentist more regularly, like every 6 weeks or 3 months instead of the customary 6 months to a year for periodontal maintenance.

Dental Caries

Dental caries may become more prevalent in the elderly as they retain more teeth in old age. In the elderly, when salivary levels are reduced, their teeth are more susceptible to carious attacks especially the root surfaces of the teeth.

Gingival or gum recession is the main cause of exposed root surfaces. Unlike the crown of the tooth, root surfaces are only covered by cementum and not enamel therefore a less acidic environment is needed to initiate demineralisation on the root (pH of 6.7) compared with enamel (pH of 5.4), hence root surfaces are at increased risk of succumbing to dental caries than the crown of the teeth. Such risk is compounded by a cumulative gingival recession exposing more root surfaces; pre-existing restorations and prostheses in the mouth. Root caries is a serious problem among the elderly that can ultimately lead to tooth loss.

TOOTH LOSS AND REPLACEMENTS

The main reasons for tooth loss are dental caries and periodontal disease. Patients who have lost teeth usually need some form of prosthesis to replace them. A dental prosthesis not only replaces teeth but also provides support for the lips and cheeks as well as corrects the collapsed appearance of the face that results from tooth loss. This will not only make the person look younger and feel better, it will also improve their chewing ability, prevent saliva from dribbling out of the corners of the mouth and improve speech.

Prostheses to Replace Missing Teeth

Dentures are removable prostheses which can be removed for cleaning and maintenance. Well designed dentures look good and do not induce other problems like mouth ulcers, gum disease or tooth decay. Partial dentures replace some missing teeth while complete dentures are used by individuals who have lost all their teeth in either one or both jaws. Complete dentures primarily rely on suction to keep them retained (feeling tight) and functioning. Patients with reduced saliva flow or no saliva will find it very difficult to keep the dentures firm and 'tight' in the mouth. Dentures need to be professionally cleaned and serviced every year and might require replacement every 3 to 8 years. Many patients think that once they have no teeth they do not ever have to see a dentist again but they forget that false teeth also require maintenance. Studies have shown that worn and broken dentures cause more oral lesions than having no teeth nor dentures!

Many patients do not complain about discomfort under their dentures or think that they may need to make new ones. Patients with uncomfortable dentures and inflamed oral mucosa need to be referred to a dental surgeon for treatment. Prolonged chronic irritation can lead to precancerous lesions.

Denture wearers have to keep their dentures clean to prevent oral disease like denture stomatitis, candidal infection and ulcers. With age, the oral mucosa tends to lose elasticity, diminish in blood supply and exhibit atrophy of epithelial cells. These changes can be exacerbated by conditions common in elderly patients such as xerostomia, iron or vitamin deficiency, making the oral mucosa more friable and susceptible to inflammation and ulcers. Denture wearers are therefore advised to remove their dentures at night brush off all food debris and soak them overnight in a denture cleanser. The oral mucosa also needs to be exposed to the protective antibodies and enzymes in saliva to minimise denture stomatitis (inflammation of the denture supporting oral mucosa).

Fixed partial dentures, better known as "crowns and bridges", are cemented to the adjacent supporting teeth and cannot be removed for cleaning or maintenance. The prosthesis needs to be replaced if the supporting teeth become mobile, painful or fractured.

Dental implants are effective for replacing missing individual teeth or anchoring loose complete dentures to their respective jaws. In fact, implant treatment has become much more affordable and more patients are opting for them. Not everyone, however, is suitable for dental implants. Contraindications include smokers, patients with diabetes and those on oral bisphosphonates.

LEARNING POINTS

- Oral health is an integral component of general health and wellbeing. It is essential even in old age.
- Common dental conditions affecting the elderly that the general medical practitioner can identify and motivate their patients to seek follow-up oral health care are periodontal disease, dental caries, and tooth loss that may require prostheses.
- Denture hygiene is important for the health of the oral mucosa. Patients must therefore clean and maintain their dentures well with daily cleaning and maintenance.
- Denture patients also need their annual dental checkups and cases of uncomfortable dentures and inflammation of the oral mucosa should be referred to a dentist for further investigation and management.