

GERODONTOLOGY MOOC – VIDEO NOTES

AGEING AND ORAL DISEASE

Here we will look at some of the most common dental diseases related to ageing. We will see that, although commonplace amongst older people, none of these conditions are an inevitable part of ageing.

Dental Caries

Many older people experience dental caries. As they lose their independence and begin to reside in care-homes, the prevalence of the disease can increase further. The higher incidence of caries in the elderly is linked to poor nutrition and oral hygiene, driven by functional limitations, declining general health and the socio-demographic factors described previously.



Figure 1: Root caries

Root caries is common condition associated with increasing age and is becoming increasingly common as older patients retain their original teeth. Root caries occurs when the root surface is exposed to the oral cavity. Root surfaces can become exposed as a result of gingival recession, which can increase in older people. Root caries is soft and leathery in appearance when active, and hard and shiny when inactive. Older people are more at risk of root caries due to the presence of dentures, reduced dexterity, poor nutrition and inadequate oral hygiene. These contributing factors can be exacerbated by xerostomia and other medical factors.

“Across the United Kingdom, 29% of adults examined had active caries, rising to 40% among those aged between seventy-five and eighty-four years of age and 33% for those over eighty-five years of age” [1]

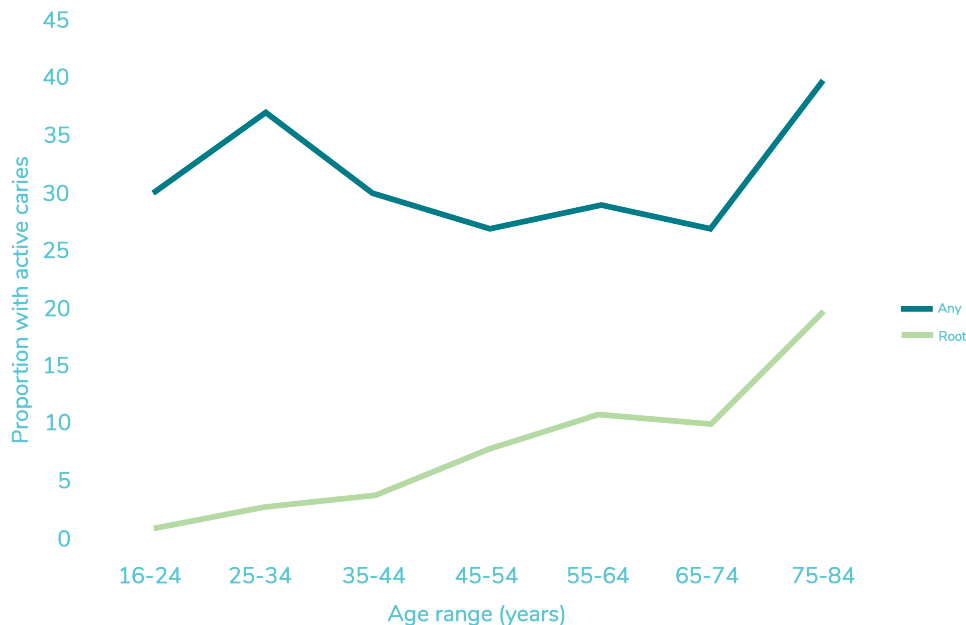


Figure 2: Proportion of adults with active caries (root and any) with respect to age.

Periodontal Disease

Periodontal disease is strongly associated with ageing. Gingival recession, loss of periodontal attachment and loss of bony support can increase with age. The link between ageing and periodontal disease comes from an increased susceptibility of the periodontium due to age related factors. These factors include gingival recession, poor oral hygiene, poor diet and reductions in salivary flow.

“45% of the adult population had some signs of periodontal disease (pocketing above 4mm), but this rose to 60% for those aged between seventy-five and eighty-four years of age. In Wales, 40% of dentate residents in care-homes (with a mean age of over eight-five years) had pocketing of 4mm or more.” [1]



Figure 3: Periodontal disease

Broken Teeth

Many older people also suffer from tooth fracture, where cusps or restorations have been lost. Equally, many teeth start to show advanced signs of wear.



Figure 4: Tooth fracture

Tooth wear describes the loss of hard tissues from the surface of teeth. In similarity to root caries, this is seen more frequently in older people as they retain more of their original teeth. Wear is typically caused by a combination of three factors: abrasion, attrition and erosion. Abrasion is where the tooth surface is worn down by foreign objects, attrition is caused by one tooth rubbing against another, and erosion is the loss of hard tissues from acidic attack.



Figure 5: Abrasion



Figure 6: Attrition



Figure 7: Erosion



Pain and Sepsis

In Wales, approaching a third of all care-home residents have sepsis, whilst in England, one in ten dentate residents reported to be in pain. Another study undertaken in care-homes in London with dentate residents found 31% were complaining of pain.

REFERENCES

[1] White, D., Tsakos, G., Pitts, N. *et al.* Adult Dental Health Survey 2009: common oral health conditions and their impact on the population. *Br Dent J* **213**, 567–572 (2012).
<https://doi.org/10.1038/sj.bdj.2012.1088>