

Poor maintenance of oral hygiene is clearly one such risk factor, as is smoking. Other risk factors are:

- (i) Hormonal changes in females;
- (ii) Diabetes;
- (iii) Other diseases and their treatments;
- (iv) Medications;
- (v) Genetic susceptibility.

The most obvious sign of the onset of periodontal diseases is the development of red and swollen gums, which bleed readily. Other signs and symptoms can include halitosis, pain during chewing, and receding gums (Fermin and Carranza, 1996).

9.2 TREATMENT FOR PERIODONTAL DISEASE

The conventional treatments for periodontal disease have, for many years, been combined scaling and root planning or open flap debridement (Shue et al., 2012). Scaling and root planning is an effective method of deep cleaning below the gumline which is carried out to remove plaque and tartar from the pockets around the teeth. The treatment has two parts. Scaling is the first step, and in this step, hand instruments are employed to remove plaque and tartar from the sub-gingival region by scraping. This step is followed by planning, a step in which the roots of the teeth are smoothed and contoured in order to encourage the soft tissue of the gingiva to reattach. Such treatment should be followed up with an improved regime of oral hygiene, with twice-daily toothbrushing and the regular use of dental floss. Medication such as treatment with doxycycline may also be used to ensure that the newly cleaned pockets do not become re-infected.

Open flap debridement is a more invasive technique which aims to achieve much the same thing in terms of pocket cleanliness and gingival reattachment, but which allows the operator to have visual access to the region being treated. In contemporary clinical practice, it is typically carried out prior to placing implants or other materials with the potential to regenerate the alveolar bone.

Both processes have a long history of clinical effectiveness (Shue et al., 2012). Above all, they lead to removal of the infection and reductions in the size of the periodontal pockets. They also make subsequent cleaning easier.

However, they are not the only treatments that can be applied. Modern periodontology makes use of a number of additional procedures, all of which involve surgery. The simplest is to implant a finely divided bioactive ceramic to promote regrowth of the alveolar bone. Of greater complexity is the provision of implants to replace teeth lost as a result of periodontal disease. In this case, a number of factors need to be considered. Since periodontal diseases arise from poor oral health, it is essential that this be addressed and improved if the placing of implants is to be successful. In addition, where there has been any significant loss of alveolar bone, this must be addressed prior to the provision of implants.