



Seeing is knowing

In three articles of this issue of ENDO, cone beam computed tomography (CBCT) has been used to clarify anatomic features of the root canal structure. This points to the increasing presence of CBCT within the endodontic field. CBCT could be a powerful tool for analysing root canal anatomy before treatment. A clearer view will improve our knowledge and consequently our treatment. The same has been experienced with the microscope. Who will argue the advantages of using a microscope during endodontic treatment? If it will improve endodontic outcome is still a question to be answered, because not all the influencing factors of healing of apical periodontitis have been identified. Unfortunately, we cannot work on improving endodontic treatment when we do not know all the influencing factors of endodontic outcome and their interrelation. Is the biofilm around the apex the determining factor in the healing of the apical periodontitis, or is the biofilm in the unreachable apical delta the determining factor? Or does it depend on the virulence of the biofilm and its relation to the host? Or does apical periodontitis only heal when there is no apical biofilm present before starting the treatment? And we can go on asking these kinds of questions without getting an answer.

Another subject of debate is the relation of apical periodontitis to general health. Is there a rela-

tion? And is there a causal relation between apical periodontitis and cardiovascular disease? If there is a relation, will a reduction of apical periodontitis be enough to reduce this effect? If there is no influence, do we need to improve the endodontic treatment? In the reduction of pain and ensuring the survival of teeth, we are already champions: a survival rate of more than 90% does not leave much space for improvement.

Perhaps also CBCT could help us to answer these questions. Accepting radiographic analysis of apical periodontitis is accepting 40% of undetected lesions, and thus accepting a detection fault of 40%. This results in a bias in the detection of the endodontic outcome and during the formation of control or experimental groups of patients, with or without apical periodontitis. Well-organised multicentre trials using CBCT could give answers to basic questions still not known in endodontics. The answers are necessary to know if we need to improve endodontic treatment and if so, how to improve it. CBCT could open our eyes in many aspects.

A handwritten signature in blue ink that reads 'Luc van der Sluis'.

Luc van der Sluis