



## Treating apical periodontitis

The standard aim of a root canal treatment is the prevention and treatment of apical periodontitis. Since the first studies using computed tomography (CT) analysis in place of the radiograph were published, it was clear that more apical lesions could be detected using CT because it was more accurate. From the studies of Brynolf and Barthel, it was already clear that more root-treated teeth were diagnosed with apical periodontitis using histology compared to radiography because, as we all know, the periapical lesion appears on a radiograph only when the cortical bone is affected. Lesions that proceed into the cancellous bone cannot be detected on a radiograph. I can still remember the first and last apical surgery I experienced myself on tooth 16. The surgeon told me the lesion was much bigger than could be expected from the radiograph because it extended through the cancellous bone.

We should probably accept that we are not so good in treating the disease called apical periodontitis, but that we are very good in relieving pain and maintaining the function of a tooth after endodon-

tic treatment. If we determine our success as maintaining the function of a tooth, then our success rate is higher than 90%.

To overcome our problem in treating apical periodontitis we should find better strategies to remove or inactivate the biofilm in the root canal and to prevent the root canals from re-infection. However, this remains difficult because we still do not have a good alternative for our root canal filling, which never completely seals the root canal.

It would be helpful if we could find a general consensus on the goal of an endodontic treatment, a goal more in keeping with reality. Accepting that the complete treatment of apical periodontitis is, for the moment, practically impossible would put the specialty of endodontics back in reality.

A handwritten signature in black ink that reads "Luc van der Sluis".

Luc van der Sluis