



Past and future of endodontics

This summer, Quintessence has organised an endodontic symposium in Berlin to highlight the 20th birthday of *Endodontie*, the German brother of ENDO, and the 6th birthday of ENDO. During this meeting, different speakers have looked back on the progression or evaluation of endodontics during the past 20 years. I wrote this editorial before the meeting, so unfortunately I can only give you my opinion.

In that aspect, I like the article written by Paula Ng et al¹ in which she summarised the results of all clinical studies published between 1922 and 2002, and found that the average success rate in the 1960s was the same as 40 years later. Probably, the same result applies for the past 20 years. We seem to be good in achieving a certain technical improvement of our treatment procedures, but a real step forward or change in our endodontic profession has not occurred. Apart from the NIT (non instrumentation technique) of Dr Lussi², a visionary idea for cleaning and filling the root canal system with the help of an alternating pressure pump, we still seem to be caught in our tapered root canal.

What in my opinion really changed, or will change the endodontic profession, is the realisation that we have to deal with a biofilm and its extracellular matrix, instead of planktonic micro-organisms in the root canal. Unfortunately, most of the evidence for our treatment is based on the effect of our treatment procedures on planktonic micro-organisms. However, micro-organisms in the biofilm are much more resistant and difficult to remove or

kill. Will calcium hydroxide or sodium hypochlorite be effective against the biofilm? The former seems not to be the question, the latter seems to be, but is the 1% concentration effective³?

Furthermore, cone beam computed tomography (CBCT) will guide us to a more realistic endodontic outcome, which already seems to be different from the data we have from the clinical studies based on a radiographic analysis⁴. So the next 20 years will probably be more exciting than the past 20 years. New research data evaluating our treatment strategies against the biofilm, and our clinical success with help of the CBCT will probably force us to develop a new vision for the future of our profession.

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■ References

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