Influence of Infection at The Time of Root Filling on The Outcome of Endodontic Treatment of Teeth With Apical Periodontitis

**Aim**
- To investigated the role of infection on the prognosis of endodontic therapy.

**Materials & Methods**
- 53 single-rooted teeth were included in the study.
- Teeth had intact pulp chamber walls, necrotic pulps and PAR.
- Samples were obtained from root canals before and after instrumentation
- Single visit RCT was performed.
- Follow-up was done annually and radiographs were analyzed separately by 2 observers.
- Strindberg’s criteria were used to judge the success rate of treatment.
- Cases were followed up for 5 yrs. if complete healing had not taken place earlier.

**Results**
- All teeth were initially infected.
  **Healing rate**
  - a- Total = 83%
  - b- In teeth with - ve culture after instrumentation = 94%
  - c- In teeth with + ve culture after instrumentation = 68%
- 3 failures revealed the presence of *Actinomyces* species in each case.

**Conclusion**
- It is important to completely eliminate bacteria from the root canal system before obturation.
- This objective cannot be reliably achieved in a one-visit treatment because it is not possible to eradicate all infection from the root canal without the support of an inter-appointment antimicrobial dressing.

**Authors**
Ulf Sjogren, David Figdor, Sten Persson, Goran Sundqvist