

Mesial roots of
mandibular molars
(n = 45)

First scan

Evaluation of the
anatomy and initial
root canal volume

Root canal
preparation to size
30.07

Second scan

Quantification of
AHTD after
preparation

Insertion of
artificial,
radiopaque dentin
debris

Third scan

Quantification of
the baseline volume
of artificial debris

Common irrigation steps:

- 5 ml NaOCl for 1 min
- 5 ml ultrapure water for 1min
- 5 ml of EDTA for 1 min
- 5 ml ultrapure water for 1min

Final irrigation step:

5 ml NaOCl for 1.5 min
(30 s activation,
30 s resting phase,
30 s activation)

- CNI (n = 15)
- SAI (n = 15)
- LAI (n = 15)

Fourth scan

Quantification of the
residual debris volume
after activation