



### About Dr. Cowie

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Jonathan Cowie is a Specialist Endodontist working in private practice in Bath, UK.

He has worked in endodontic referral practice for the last decade and completed both a Diploma in Endodontics at The Royal London Hospital and subsequently Specialist Endodontics Training at Kings College, London.

Alongside his clinical work, Jon is a very active educator. He runs many hands-on courses through his joint education venture, Contemporary Endodontics and teaches as a clinical demonstrator on the MSc in Endodontics at Kings College, London. The hands-on courses always focus on restoratively driven endodontics and the key philosophy of dentine preservation.

Jon and his colleague Luca Moranzoni were one of the first clinicians to put together training for dentists showcasing the end-to-end endodontic-restorative workflow in these intensive short courses.

## A complex case with long roots and a calcified system

### About the patient

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Male, aged 48  
Tooth: Lower molar (LL6)

#### Chief complaint

Discomfort on biting from the lower left first molar (after having an acute flare-up with swelling).

#### Notable dental history

None

#### Diagnostic findings

Tenderness on palpation and on percussion but no mobility.

### Diagnosis

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Periapical radiolucency associated primarily with the distal root and loss of lamina dura on the mesial root.



Preoperative radiograph

***“TruNatomy® respects the anatomy without compromising the ability to irrigate.”***

## Treatment plan

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Access cavity approach with a leveraged access utilising the distal restoration to gain access preserving mesial pericervical dentin.

Instrumentation with TruNatomy® files in a conventional approach.

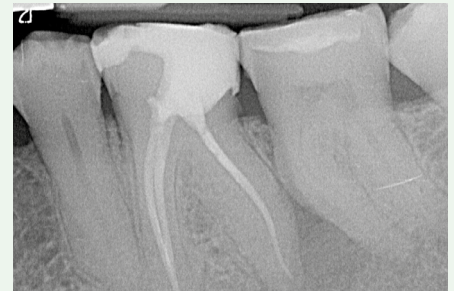
Irrigation with 5.25% Sodium Hypochlorite throughout the procedure with the TruNatomy® Irrigation Needle

Obturation with TruNatomy® Prime GP and AH Plus®. Warm vertical compaction technique.

Direct restoration using Palodent® Plus Matrices, SDR® and Ceram.x Spectra™ ST.

TruNatomy® was chosen in this case to allow a caries leveraged approach and a focus on pericervical dentin preservation especially on the mesial aspect where the tooth had a more minimal restoration.

The 14 months review confirmed the success of treatment. Final restoration with a ceramic onlay with margin elevation to again minimize the impact of dentin preparation that would reduce the thickness of dentin at the base of the cusp.






Postoperative radiograph



14 month follow up showing resolution of the periapical radiolucency

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