



A problem shared

In part two of this new series, **Liviu Steier** presents the solution to last month's case, plus a brand new real-life case problem for you to consider

Last month's case

Questions:

1. Can the GDP immediately begin the restorative procedure?
2. Is RE-RCT needed? How would a RE-RCT alter the initial treatment plan?

Answers:

- Decisive treatment criterias:
- Restoration: yes
- PDL thickened: yes
- Circumscribed lucency: yes
- Restoration Composite: yes – leaking

The coronal restoration is indicated. Cuspal coverage is indicated due to the amount of coronal destruction. RE-RCT is indicated due to the above diagnostic findings.



Figure 1: Direct clinical picture through the microscope demonstrating a previous root canal obturation performed with Thermafill. Three plastic carriers have been used

Figures 2a and b: The carriers were all removed using two Hedstroem files twisted together

Figure 3: Clinical picture showing the three carriers removed:

- ELM to apical constriction was 19.5 mm ISO 35
- Patency was achieved
- Mechanical shaping was performed to taper 06 – ISO 50
- Irrigation protocol applied was according to previous publications by the author
- One session treatment was performed
- Root canal obturation was performed using adhesive technology (RealSeal, SybronEndo, www.sybrondendo.com) – warm vertical/thermomechanically



Figure 2a



Figure 2b



Figure 3



Figure 4: X-ray of the performed root canal obturation. A sealer puff is clearly visible. This was the treatment goal, the reasons being: (1) presence of the thickened PDL; (2) patency; (3) warm vertical root canal obturation technique applied

EXAMINATION	
Caries	Yes
Restoration	Defective
Calcification	No
Resorption	No
Fracture	No
Perforation/deviation	No
Prior RCTxRCF	No
Separated instrument	No
Canal obstruction	No
Post/build-up	No
Open apex	No, but possible communication with the maxillary sinus



Figure 5: Direct picture of the coronal access after 'downfill' prior to orifice sealing

CLINICAL	
Discolouration	No
Caries	Yes
Pulp exposure	Yes
Prior access	No
Attrition/abrasion	No
Fracture	No
Restoration: Amalgam Composite Inlay/onlay Temporary Crown	Yes Yes
Abutment	No

Further treatment plan recommendations

The GDP will select a coronal reinforcement procedure, which has to be performed immediately. The patient has to be scheduled for recall in six months. Subsequent treatment steps will be scheduled according to the healing process.

This month's case

A 34-year-old female patient referred by her GDP for consultation. The X-ray is preoperative of tooth 5:



DIAGNOSTIC TESTS	
Perio	
Mobility	No
Percussion	(+++)
Palpation	(+)
Cold	(+++)
Hot	(+++)
EPT	14
Transillum	Yes
Cavity	No
Bite/chewing	Yes

SOFT TISSUE	
Exta-oral swelling	No
Intra-oral swelling	No
Sinus tract	No
Lymphadenopathy	No
TMJ	No
Perio	No

RADIOGRAPHIC	
PDL normal	Yes
PDL thickened	No
Alveolar bone	Within normal limits
Diffuse lucency	No
Circumscribed lucency	No
Resorption: Apical Lateral	No
Hypercementosis	No
Osteosclerosis	No
Perio	No



Treatment performed

Conventional RCT:

- FFB: B = ISO 15; L = ISO 15
- ELM: B = 22.5mm (ISO 15); L = 22.5mm (ISO 15)
- Patency on both canals ISO 10.
- Mechanical shaping: K3 (SybronEndo VTVT)
- MAF: B = 04/ISO 35; L = 04/ISO 35
- Extensive up to date irrigation protocol

- Obturation: Resilon (RealSeal, SybronEndo) – warm vertical condensation.

Above is the post-operative X-ray. The coronal access was sealed using Total etch and 4th generation plus resin modified GIC. The patient complains after 48 hours and continues to complain of post-operative pain for the next seven days. Analgesics did not bring any relief. Read the next *Private Dentistry* to find out what the author did next. [PD](#)

[Comments to pd@fmc.co.uk](#)

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