

# NEWS FEATURE

## The future is bright

How often do you hear senior members of the profession bemoan those aspects of dentistry that have been modernised? I admit I may have been guilty of this myself. But I never will be again. The experience of running the Young Dentist Endodontic Award has been transformative. Prior to receiving any entries, I wasn't entirely sure what to expect, but I certainly didn't anticipate the high standard of cases submitted. Nor did I expect to find it quite so difficult to choose the winners.

### 'Putting back'

Dr Mike Cooper, principal of the Student practice at Brookes university in Oxford, along with co-trainer Daniel Molyneux, have obviously been excellent mentors to Rahul Bose, our first prize winner. As a trainee, Rahul was very nervous of endodontics. But he obviously received the support and encouragement he needed because not only did Rahul impress us with his competent entry, he is now interested in pursuing endodontic training. The award was far from being one night only. For me, its benefits continue. Rahul has taken up the opportunity to watch us working and I'm looking forward to welcoming him to the practice soon. The reason for setting up the award in the first place was to mark the 10th anniversary of Harley Street Centre for Endodontics and to 'put back' into the profession. And, although I did do my little bit of 'putting back', I have got a huge amount out of the experience.

### Winner Rahul Bose: The case

A 30-year-old female attended complaining of low grade dull ache localised to the UR6. After a thorough history and examination, a diagnosis of apical periodontitis of the UR6 was made. The prognosis was assessed to be around 80-85% due to the radiographic evidence of a periradicular lesion. Treatment was performed in one visit under rubber dam, using a mixture of hand and rotary files. An electronic apex locator was used to determine working length. Obturation involved cold lateral condensation followed by thermal compaction. The final outcome was excellent and, over a period of six months, the periradicular lesion had healed and the patient was symptom free.



Rahul won a Dentsply Maillefer X Smart Plus WaveOne kit and was presented with a certificate.

### The overview

During my undergraduate studies, I had minimum exposure to endodontics and feared providing root canal treatments to patients. At the start of my DF1 career, I made a few mistakes – ranging from perforations and file separation – that further knocked my confidence. I was extremely fortunate to have had two excellent trainers, Michael Cooper and Daniel Molyneux, who ensured a solid start to my professional career. This case (although of minimal-moderate difficulty) for me symbolises how I improved, refined, learnt new techniques, used a range of instruments and overcame my fear of providing endodontic care. The aim of treatment provided to the patient was based on integrating the best evidence with clinical knowledge and patient preferences. I have now developed a passion for endodontics and it has motivated me to consider embarking on further postgraduate studies.

### Julian says:

'The judges were most impressed with the quality of this presentation and the excellent final outcome. By his own admission, the winner admitted to being initially fearful of endodontics with minimal exposure to the field at dental school. He was willing to use new techniques, demonstrating his ability to efficiently and effectively provide appropriate and adequate care.'



Judges Julian Webber, Trevor Lamb and Andrew Eder

### Winner 2

#### Luis Fernandez Escarabajal: The case

A 73-year-old woman presented with a problematic UR4. An MOD amalgam extended palatally on the disto-gingival margin of the tooth. This was done over 10 years ago. The buccal cusp broke a few months earlier and had been restored. Hence, the only remaining wall was the palatal one. The case was challenging due to the highly calcified root canal system that the tooth presented. In this case, the use of the surgical microscope was essential when locating the canal orifices. Despite the extreme narrowness of the canals and the obvious difficulties when negotiating them in the early stages of the treatment, they were widened sufficiently to ensure an effective and predictable irrigation and obturation.

### The overview

This case was chosen because calcific metamorphosis of the root canal system is one of the toughest challenges that the endodontist can face in practice. The advent of rotary systems in the last decades has facilitated the preparation of the canals by the clinician greatly, even in cases that used to be considered complex prior to the emergence of rotary instruments. However, the management of a highly calcified tooth remains as one of the procedures where the endodontist needs to show manual and visual dexterity to achieve a successful result. My initial prognosis was guarded but all objectives were achieved and the endodontic prognosis is now excellent.

### Julian comments:

'This was a particularly difficult case to manage with little radiographic evidence of any canals present, so quite a challenge. The case demonstrated exceptional clinical skills with both manual and visual dexterity. Luis had access to a dental operating microscope that he used to great effect. Overall, an excellent no-nonsense approach to save a tooth in a mouth where numerous implants were already present.'

### Winner 3 (joint) Thomas Hickley: The case

The patient was a 14-year-old boy who presented with an avulsed central incisor that had been reimplanted and splinted by an emergency dentist. It was slightly extruded, buccally displaced with a small incisal edge fracture. It was Grade II mobile and the gingivae were traumatised. I accessed and dressed the root canal at the first appointment and then completed the endodontic procedure at a second appointment. The outcome was excellent.

### Young Dentist Endodontic Award 2013

Applicants are invited to submit a case report of their best endodontic treatment so far. This national award is open to any young dentist who graduated in the last three years, whether they are in their Foundation Year or just starting out on their career. An application form can be downloaded at [www.roottreatmentuk.com](http://www.roottreatmentuk.com).

**Julian Webber** devised and orchestrated the inaugural Young Dentist Endodontic Award 2012. Here, he shares the experience

### The overview

I chose this case for a number of reasons. Firstly, I think the root canal treatment of an avulsed central incisor is a fairly unusual case to be presented with in your first year of qualification. It forced me to go back to my books (even after one year!) to be absolutely certain of the correct treatment and prognosis. Another reason was that rotary treatment was not suitable for this case and I needed to go back to old-fashioned hand filing. Due to the width of the canal, very large k-files were required to achieve an apical stop and a satisfactory taper. The width of the canal made obturation tricky, so a great deal of accessory points were required. Finally, I chose this case because the post-op radiographs show a good quality, well condensed root canal to the apex. Yet despite this, there is nothing more I could have done to avoid the replacement resorption evident in the six-month review radiograph. Ultimately, this tooth has a very poor prognosis but I believe I gave it my best shot.

### Julian says

'A very different case providing an opportunity for the entrant to treat a case of dental trauma. Thomas was meticulous in his approach, his record-keeping and subsequent documentation were most impressive. A wonderful opportunity for a first-year graduate to treat an unusual case and appreciate the complexity of dental trauma.'


### Winner 3 (joint) Michael Taylor: The case

The patient, a 22-year-old woman, was concerned about her LR 6 that had a broken filling. The LR6 was associated with occasional pain to cold and sweet things that would last for a few seconds. The diagnosis: LR6 reversible pulpitis. The mesial root angle was recorded as 47 degrees using Schneiders' technique and 78 degrees Weines' technique. These calculated root angles are categorised as high complexity in the RIOTN index of root canal complexity.

### The overview

I submitted this case as it demonstrated successful root canal treatment of a lower molar with a severe root curvature in the apical third of both mesial root canals. The root canal is 'good' and the final coronal restoration is appropriate, providing an effective coronal seal and cuspal coverage. Each stage of treatment has been recorded effectively using photography and shows a good aesthetic result. The patient reported a pain-free procedure and process, using the Wand single tooth anaesthesia system. The case also demonstrates the ability to use modern technology such as the wand and CAD/CAM technology.

### Julian says

'A very professional approach, demonstrating maturity beyond his years and considerable skills in the use of a contemporary nickel titanium rotary file system. Michael successfully negotiated, shaped, cleaned and obturated severely curved canals in his lower molar case and from an endodontic standpoint the result was rather exceptional.' 

### The awards criteria

The Young Dentist Endodontic Award 2012 attracted more than 25 entries. Applicants – all within three years of graduation – were asked to submit a case that showcased their skills. The two judges apart from myself were Trevor Lamb, of the Harley Street Centre for Endodontics, and Professor Andrew Eder, of UCL Eastman Dental. The judging criteria was based on four separate areas:

- Quality of the pre-operative radiographs
- Quality of the post-operative radiographs
- Quality of the treatment
- Quality of the application.

The prizes were specialist endodontic equipment supplied by Dentsply UK, QED and SybronEndo and amounted to £3,500.