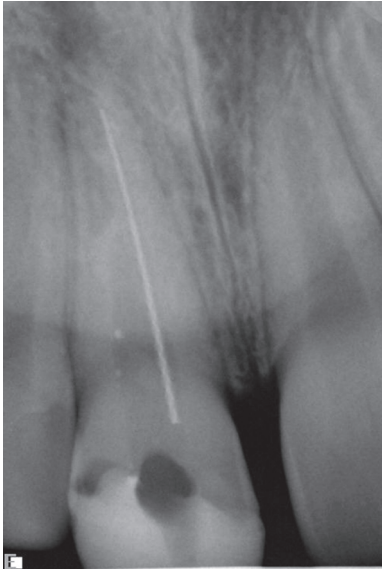
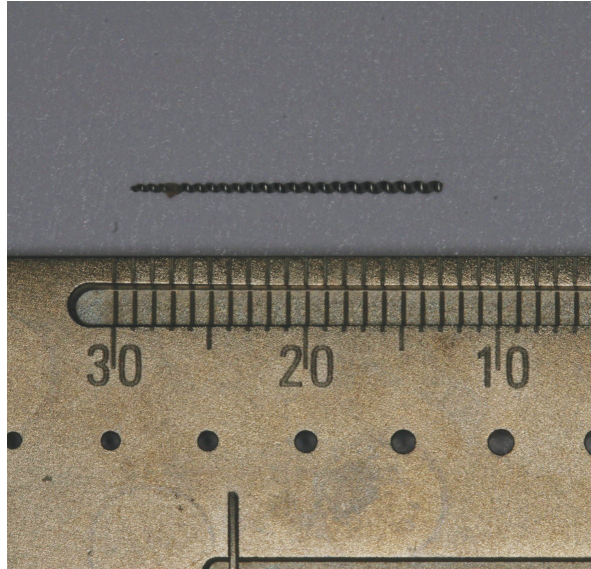


Endo case: fractured instrument

This case study looks at the management of fractured instrument UR1 in a young patient with a history of trauma.



Pre-operative radiograph UR1



Fractured file retrieved intact



Immediate post-obturation radiograph UR1

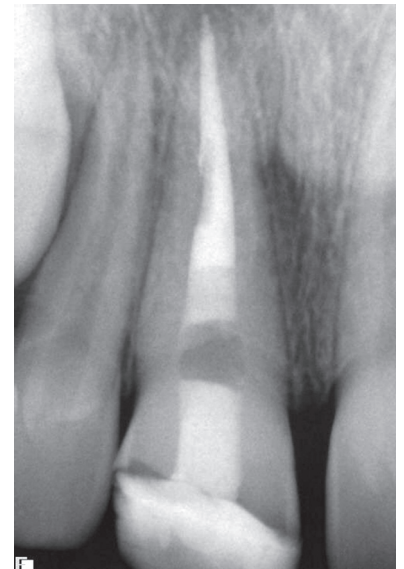
This twelve-year-old boy was referred to us for the management of a fractured endodontic file in the UR1. Six months before his referral, he fractured the tooth on a school trip. A local dentist removed the nerve and made a temporary composite restoration. His own GDP started root canal treatment, but unfortunately the endodontic instrument fractured. This was a size 40 titanium nickel file.

The preoperative radiographs demonstrate the UR1, with good bone support, a single, wide canal with an approximately 17mm separated instrument resting on the medial canal wall. Additionally, evidence of external resorption was seen.

After initial access under rubber dam, the instrument was retrieved. After chemo-mechanical preparation, the apical diameter was deemed to be a size 55 at 0.5mm short of the 'zero' reading on the apex locator. MTA was carefully placed to length as can be seen on the post-obturation radiograph, which also shows an IRM coronal seal in place sub-crestally.

The patient was discharged back to the care of his dentist, and follow-up was uneventful. The tooth was restored with composite.

Instruments can fracture (sometimes referred to as separate) for several reasons. It can happen to most of us at some time, and careful management is needed to ensure a good outcome for the treated tooth.



Follow up radiograph one year after treatment

Shashi Mishra



Shashi served in the Royal Army Dental Corps for over 11 years. During this time he completed his endodontic postgraduate training at the Eastman Dental Institute in London. Shashi is now a Specialist in endodontics.

Whatever endodontic challenge your patient presents you with, Shashi has the expertise to help you.

Wherever you are in the treatment process, if you no longer feel confident dealing with the problem, Shashi is more than happy to assist until the patient is ready to return to you for restorative care.

Contact Shashi on **01252 713797** or email info@elmsleighhouse.com