Intentional replantation saves a tooth and preserves natural function

Patient Profile

*Patient: A 71-year-old male with diabetes and high blood pressure*

**Symptoms:** The patient presented with pain, swelling and mobility in tooth #18. He had previous root canal treatment about 10 years earlier, and this tooth was the distal abutment for a lower partial denture. A radiograph revealed infection surrounding this tooth and a large post in the distal canal.

**Initial assessment:** Options included either accessing or removing the crown and retreatting the tooth, apical root surgery, extraction or intentional replantation. Retreating the tooth could have compromised the crown, and the probings and mobility compromised the success of root canal treatment alone. Apical surgery was contraindicated due to access and location of the mandibular canal. Extraction alone would require the patient to get a new partial denture.

**Treatment Protocol**

The tooth was removed gently under local anesthetic and inspected under the surgical microscope for any root fracture. The root ends were beveled and retrograde fillings with MTA cement were placed. The tooth was replanted, and the current partial was used to stabilize the tooth.
Treatment Outcome
The patient continued to have some mobility for eight weeks, but the pain subsided immediately. One year later, the tooth remains in place without pain, swelling or mobility and the radiograph shows complete bone fill around the roots.

Conclusion
An infrequently utilized treatment protocol allowed us to preserve the patient’s tooth and address his pain and infection, without requiring him to get a new set of partial dentures.

Discussion
Sometimes it’s in the patient’s best interest to extend the life of his or her natural teeth for as long as possible, and other times it’s not. We try to save every tooth, but we also must gauge patients’ emotional and financial commitments. These decisions are made in context for each patient, and in consultation with the referring dentist.

The important thing is that we have the expertise and resources to provide these state-of-the-art procedures so the best options are available.

For questions or further discussion of the findings in this case study – or to refer a patient to Endodontic Specialists, call (610) 995-0109 in Wayne or (610) 917-9984 in Phoenixville.