How many times have we as dentists been faced with a tooth broken at the coronal gingival margin? Then what treatment plan do we advise the patient to follow? As dentistry progresses so does treatment methodology, but are the most modern techniques always the best? We should not always turn our backs on treatment modals that have served us well in the past. These are the following courses open to us today:

1. Extract the tooth and leave the space.
2. Advise extraction and place a partial denture.
3. Advise endodontics, post & core, and crown.
4. Advise extraction, place a temporary acrylic denture, place titanium implant followed by a crown.

The first option is not really acceptable in the front of the mouth but may be the only option to the patient with limited funds. The second option is often the most affordable for many patients, and within a few days will make the patient more presentable aesthetically. The third option is more expensive, but within an hour or so the patient has a temporary post crown and can meet the public again with confidence. The fourth option is the most expensive but appears to be gaining in popularity with dentists as the appropriate treatment plan. Let’s examine each option in greater detail.

Option 1:
Extract the tooth and leave the space

This has the advantage in that once removed the tooth will not give any further problems. A partial denture can always be made later, and a composite resin bridge can be bonded into place using the adjacent teeth for support. The patient must always be informed that the bonding often fails and will have to be repaired.

Option 2:
Extract and place a partial denture

This is very acceptable, but it does take time to make up a cast partial denture, although an acrylic partial can be made relatively quickly. The patient must be informed that the denture will need to be relined once resorption has occurred. A heat cured reline will mean that the patient will have to wait a day or two for the process to be completed, although a cold cure reline can be done while the patient waits. Acrylic dentures often need repairs.

Option 3:
Endodontics, post & core, and crown

The advantages for endodontic treatment are as follows:

- Endodontics can be performed immediately.
- A temporary post crown can be made shortly afterward.
- A sturdy post and core can be made, preferably using a wrought non-oxidised gold ParaPost to which a core is cast. The reason for this is that there is no possibility of incorporating porosity at the coronal radicular junction precipitating a fracture of the post, necessitating its removal and compromising the strength of the remaining root structure.
- Alternatively a stainless steel post or a Fiber Lux post can be cemented. A hard composite core material such as ParaCore or Denmat Corepaste is then bonded to the top of the post for strength prior to making a crown.
- A crown is then made to restore the aesthetics. This can be made in porcelain/gold or Zirconia.

The advantages for temporary denture, implant and crown

- There may be a vertical split in the root from an accident, which will cause the prosthesis to fail, necessitating extraction.
- Without sufficient ferrule and without an excellent post and core, a deep overbite will often cause the post crown to become loose.
- To force erupt the root to gain ferrule takes time. This adds to the cost and delays the aesthetic restoration of the tooth.
- The threaded Parapost XT Titanium post can be used, and although very retentive, like all active posts can contribute to a fracture of the remaining root structure.

The stages shown in the photographs and x-rays accompanying this article (Figs. 1-3) are an example of the cost effectiveness of preserving the crown of a fractured root filled tooth with minimal ferrule. This treatment surely enhances the patient’s opinion of the operator. Informed consent here though is imperative.

The disadvantages for endodontic treatment are:

- There may be a vertical split in the root from an accident, which will cause the prosthesis to fail, necessitating extraction.
- Without sufficient ferrule and without an excellent post and core, a deep overbite will often cause the post crown to become loose.
- To force erupt the root to gain ferrule takes time. This adds to the cost and delays the aesthetic restoration of the tooth.
- The threaded Parapost XT Titanium post can be used, and although very retentive, like all active posts can contribute to a fracture of the remaining root structure.

Advantages:
- The final result can be excellent aesthetically.
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References:
32. Coltene Whaledent Literature on Integrity crowns can be made using the Titanium temporary posts, and impressions are taken using the plastic made-to-measure posts by flattening one end with a hot wax knife for retention.

Posts are a very necessary item for support of a crown, as an endodontically treated tooth is quite brittle. Posts are an elementary yet exacting process in the construction of a post crown. It is essential to have a good foundation for either crowns or bridges. The ParaPost system fulfills all the elements of a good foundation with the least amount of work, and operators should be able to find the right method for each circumstance with the variety at their disposal.

Like anything else post crowns are not infallible and they can fail. However the author recently had to make two three unit bridges where Titanium implants were rejected. Therefore ask yourself, would you have your own anterior tooth removed followed by an implant without at least attempting to save the tooth with a post crown? If you would like to thank Mr. Mark Monome RDT at www.FalconDental.com for his invaluable assistance in preparing this article.