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# "Informed Refusal"

After a 13-hour wait in the emergency room with an elderly family member, we presented a consent form by a first-year orthopedic resident during discussion of treatment for two broken bones. The 78-year-old female patient in question was assaulted on her morning walk and suffered a broken knee and wrist, among other injuries. This patient had the recollection of another orthopedic surgeon cancelling a previous surgery years earlier, warning her not to place plates, pins or screws in her bones if she could avoid it due to her degree of osteoporosis. While we had several questions about the need for the procedure and the risks given the health of the bone in my elderly relative, we were told by the resident discussing this that she was *not* the surgeon performing the surgery, but the head of the surgical team had reviewed the radiographs and they felt this was the best option. On a Saturday night of a long weekend, I imagined the surgeon looking at the X-ray of the knee on his smartphone during cocktail hour somewhere. All of our questions would be answered, but the resident could "consent us" now to get the patient name "on the docket" for future surgery. You can imagine the shock experienced by a dentist at this attempt to be "consented". I demanded (as a family advocate) that the surgeon performing the surgery physically examine this patient and explain how the risks of placing the screws in her osteoporotic bone compare to the

risks of not doing the surgery at all. Can you imagine this in the dental setting?

The nature of examination and diagnosis in dentistry has not changed much, but offering treatment options and achieving informed consent for these treatments has expanded tremendously. Many of us have had the situation where the treatment was so complex, and the patient was so unprepared for the discussion, that once all the questions were answered and the patient was ready to sign the form, they had to be re-appointed as the working appointment time had expired.

Are they different, acquiring informed consent in medicine and informed consent in dentistry? Or is it that we tend to accept the medical field's opinion? "I'm sorry sir, but you're going to die." "Is there anything you can do?" "No." "Ok then, thanks." In dentistry, "I'm sorry sir, you're going to lose your tooth." "What? Lose my tooth? Whose fault is that? Who can I blame? Who's going to pay for the replacement?"

Just as there is informed consent, there is informed refusal, and securing either of these helps protect the patient and the clinician. In searching the website for the Canadian Medical Protective Association (CMPA—an organization similar to our own Canadian Dental Protective Association, CDPA), this explanation came up:



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## "Informed refusal:

Our courts have reaffirmed repeatedly a patient's right to refuse treatment even when it is clear treatment is necessary to preserve the life or health of the patient. Justice Robins of the Ontario Court of Appeal explained:

"The right to determine what shall, or shall not, be done with one's own body, and to be free from non-consensual medical treatment, is a right deeply rooted in our common law. This right underlines the doctrine of informed

consent. With very limited exceptions, every person's body is considered inviolate, and, accordingly, every competent adult has the right to be free from unwanted medical treatment. The fact that serious risks or consequences may result from a refusal of medical treatment does not vitiate the right of medical self-determination. The doctrine of informed consent ensures the freedom of individuals to make choices about their medical care. It is the patient, not the physician, who ultimately must decide if treatment – any treatment – is to be administered.”

However, difficulty may arise if it should later be claimed the refusal had been based on inadequate information about the potential consequences of declining what had been recommended. In the same way as valid consent to treatment must be “informed”, it may be argued a refusal must be similarly “informed”. Physicians thus may be seen to have the same obligations of disclosure as when obtaining consent, that is, disclosure of the risk to be accepted.

When patients decide against recommended treatment – particularly urgent or medically necessary treatment – discussions about their decision must be conducted with some sensitivity. While recognizing an individual's right to refuse, physicians must at the same time explain the consequences of the refusal without creating a perception of coercion in seeking consent. Refusal of the recommended treatment does not necessarily constitute refusal for all treatments. Reasonable alternatives should be explained and

offered to the patient.

As when documenting the consent discussion, notes should be made about a patient's refusal to accept recommended treatment. Such notes will have evidentiary value if there is any controversy later about why treatment was not given.

With the continuing education efforts by the RCDSO and ODA on consent, dentists can be well prepared for informed consent and/or informed refusal by the patient. Let's go one step further and discuss informed refusal by the clinician. What if the procedure is just that difficult or the patient's medical history is just that complicated? What if the risk of keeping the acutely abscessed, decayed-beyond-restorability tooth is greater for causing bone infection in a patient on bisphosphonates compared to removing the abscessed tooth and risking bisphosphonate-related osteonecrosis of the jaw? Does the location of a pulpitic third molar in a limited-opening patient with tortuous canals, and only in partial occlusion with the opposing 2nd molar, warrant the risk of rotary instrument separation, and the ensuing problems that may bring with it?

I regularly act as an expert, Dental Advisor, and consultant for dentists when treatment goes “wrong”. In one of my cases, a dentist secured informed consent for endodontic treatment on a difficult tooth, and a rotary instrument separated. The dentist could “not believe the audacity of this patient filing a complaint against me. He signed a consent form, and it said on the consent form that an instrument may separate. So, what's

the big deal?” The consent form is not a “get out of jail free card”, it only gives the clinician permission to be in the mouth performing the procedure discussed. One still has to handle the procedural mishaps that occur.

By informing the patient of the difficulties of a procedure unique to that patient, and refusing to try the procedure because of inherent risks, you will be limiting risk for yourself and the patient. Informing the patient of the diagnosis, the options for treatment, and who is best suited to perform the particular option, is also part of consent. The patient-dentist relationship is like any other relationship. The honeymoon is great at the beginning, but under prolonged stress and breakdown of communication, we've all heard the stories of how both parties are ready to stab each other in the face over a subway token.

That 78-year-old female, incidentally, exercised her informed refusal at the outset. This triggered a chain of events where she was seen by two staff surgeons over the next 12 hours, transferred at the hospital cost to a rehab hospital within 24 hours (because “if you're not having surgery, we need the bed”), and was home and walking (with a brace) without surgery on her leg in three weeks. She also, later on, gave her informed consent for corrective surgery (with pins) on her wrist because a thoughtful surgeon took the time to draw her some pictures of how her wrist could heal with limited mobility otherwise. As we all have been advised, consent is a process, ongoing and changing, as the patient needs change. OH



# Rips, Strips and Broken Tips: Part III: Treating the Untreatable — A Case Report

Steven J. Cohen DDS, Cert. Endo.

The objective of dentistry is to retain the natural dentition as part of maintaining optimum oral health. With recent studies linking oral health to general systemic health, promoting oral health translates to improved quality of life. The discipline of Endodontics encompasses retaining the dentition in the face of diseased pulp and periapical tissues.

As endodontics is being carried out routinely in dental practice, patients are retaining their natural teeth longer. Proportionately, with an increase in successful procedures, there is also an increase in

procedural complications. In Part I (May 2005) a5) and Part II (May 2006) of this article series, procedural mishaps of separated instruments and perforations were discussed in terms of management and successful treatment outcomes.

But what about years after treatment, when the only complication is that the dentistry has “worn out” so to speak? Fractured cusps, leaking margins under a 20 year old crown, and periodontal disease are possible pathways of bacterial ingress. Years after treatment where bacterial contamination has recurred, different treatment mo-

dalities have been developed to address the once treated canal system – retreatment, apical surgery and re-surgery, and extraction/implant. Part III of this series is a case report involving recurring infection years after orthograde (conventional) and retrograde (apical surgery) canal treatment of two central incisors.

## CASE REPORT

A 51-year-old male presented to private endodontic practice for a second opinion regarding teeth 1.1 and 2.1. His medical history was significant for asthma and sinus problems, but no current activity.

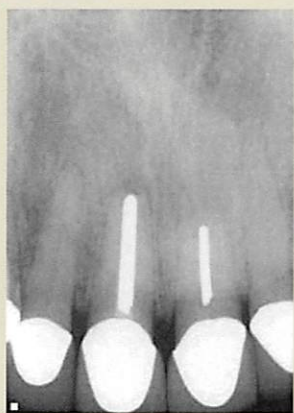


FIGURE 1—pre-op radiograph 1.1 and 2.1.



FIGURE 4—clinical photo of post inside crown access.



FIGURE 2—TUFFI set of 6 tips.



FIGURE 5—ET25L Ultrasonic Tip.



FIGURE 3—TUFFI tip # 1.



FIGURE 6—ET2L tip inside access.



FIGURE 7—corroded metal fragments.



His dental history includes: childhood trauma (8 years of age) of maxillary anterior teeth, resulting in original endodontic treatment of teeth 1.1 and 2.1 (43 years ago). Conventional canal retreatment was carried out on these same teeth approximately five years ago, and most recently, apical surgery was carried out 18 months ago. His full crowns were replaced six months ago, after moving to Canada. The patient's chief complaint was discomfort and a fistula buccal to 1.1.

# CLINICAL FINDINGS

Examination revealed full crown 1.3 to 2.3 inclusive, large metal posts or silver points in 1.1 and 2.1, root lengths shortened by apical surgery, and radiolucent lesions at both 1.1 and 2.1 apices.

Soft tissue displayed apical gingival scar from incision for apical surgery buccal to the central incisors, blue "tattoo" from metal corrosion, staining the gingiva apical to these two teeth, and a fistula mid-buccal at tooth 1.1.

# TREATMENT OPTIONS AND CONSENT

After a 43-year history and three endodontic procedures, extraction and replacement via implant was recommended as the easiest and most definitive treatment option to resolve this problem. However, the patient wanted to explore all possibilities.

Communication with the referring dentist revealed that after the last apical surgery, healing was presumed from lack of symptoms or fistula, and the new crowns

were placed for improved cosmetics and fit. Since these crowns are new, replacement was to be avoided if possible. Apical surgery had reduced the root length, and resulted in metal objects now in contact with periapical tissue and fluid, with no sign of a retroseal. A 2nd apical surgery would result in resection of the root across the metal canal filling (post or silver point), and an impossible retroseal situation. Further, the suspicion of canal contamination from the original crowns needed to be addressed.

The option of access through these crowns was discussed, with the goal to retrieve the metal pieces, medicate the canals with calcium hydroxide, and allow time for decontamination (resolution of the fistula). Once that is achieved,

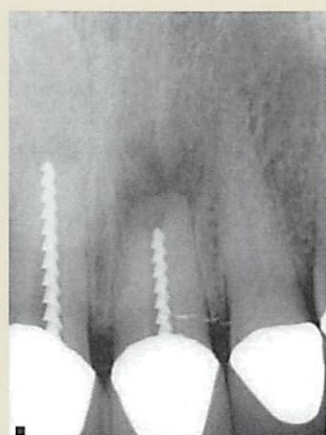


FIGURE 8—working length radiograph.



FIGURE 9—mineral trioxide aggregate (MT Angelus).



FIGURE 11—apical plug radiograph.

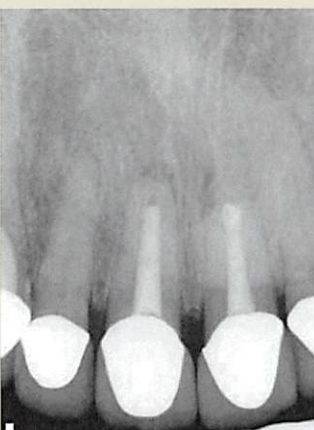


FIGURE 12—immediate post-op radiograph.

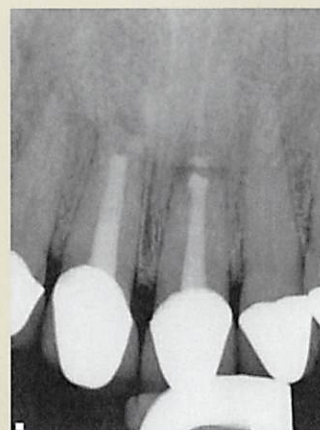


FIGURE 13—3-month recall radiograph.

FIGURE 10—Dovgan carrier.



the canals could be obturated again. If symptoms or the fistula failed to resolve, treatment would be aborted, and extraction would be recommended. After some lengthy discussion, the patient wanted to try and salvage these two teeth, and consented to another endodontic approach.

### Appointment 1

Access was made lingual through the crowns on 1.1 and 2.1, with a Tri-Hawk Talon 12 bur. The composite cores were immediately encountered under the crown surface. The composite was carefully removed incrementally using TUFU Ultrasonic Tips, Tip # 1 (San Diego Swiss) at medium frequency on the ultrasonic control base. The fine grit diamond coating on this tip allowed for smooth "sanding" of the composite around the post, and pinpoint cutting efficiency to break up the composite and flush

out of the chamber.

As the reduction of composite core continued the metal post/silver point became easily visible in each access.

Once the chamber composite was cleared, and the post/silver point was found to "standing up" out of the canal, the ET25L Ultrasonic Tip (Clinical Research Dental) was then applied. This extremely long, pliable tip can be custom curved and shaped to fit into narrow space between the metal and the canal wall.

At low power, with water spray for coolant, and small radius circular motion, the metal fragments were retrieved.

The canals were then flushed, measured and instrumented to some degree of an apical stop, at file diameter size #100 for the 1.1,

and diameter size #90 for the 2.1. The rough outline of the apex of 2.1, and the persistent bleed noted beyond this length suggested apical root resorption has also been occurring at this root apex.

After irrigation and drying, the canals were filled with calcium hydroxide (Ultra Cal, Clinical Research Dental), and access openings were closed with flowable composite to ensure a seal. A check appointment was tentatively scheduled in 4 weeks' time.

### Appointment 2

The patient returned four weeks later, reporting no symptoms. Clinical examination revealed the fistula over the 1.1 had resolved. Re-entry was made into each of 1.1 and 2.1. The canals were flushed, checked for length and shape, and then prepared for obturation. With the large diameter apices, the deci-



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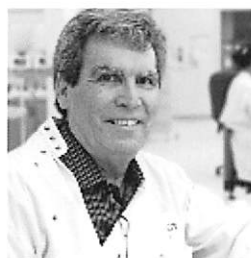


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sion was made to create an apical plug of Mineral Trioxide Aggregate. The objectives were to optimize healing potential in a surgical site, and in the event that a 2nd surgery was to be contemplated, the presence of MTA already at the apex would minimize root handling and a retroseal would not be necessary after beveling.

A barrier of synthetic collagen membrane (NeoCote) was placed in the canal of each tooth, and pushed to the working length with obturation pluggers. Once this soft "stop" was created, Mineral Trioxide Aggregate (MT Angelis, Clinical Research Dental) was mixed, loaded into a Dovgan carrier (Clinical Research Dental) and inserted into the canal. The MTA was inserted and condensed until a 5mm apical plug was created.

After the apical plugs were

checked, the canals were back-filled with sealer and thermoplastic gutta percha in the usual fashion. Access was closed, and the patient was referred back to his family dentist for new core restorations.

#### RECALL APPOINTMENT

Three months after obturation, the patient returned. He reported no symptoms. The soft tissue buccal to the operative teeth remained "blue" from the metal corrosion, but displayed no fistula or discomfort on palpation or probing. A one-year recall is planned.

#### DISCUSSION

The key points leading to success (short term so far) in this case are that 1) the patient was the driving force in deciding to try and save his teeth in a very compromised situation, 2) the canals were able to be decontaminated by removing the obstacles, and 3) advances

in dental technology and materials (optics and illumination of the microscope, ultrasonic tip designs, mineral trioxide aggregate) allowed access to and placement of materials in otherwise unreachable spaces.

The patient realizes that there may come a time when these teeth have to be replaced, but if that time frame can be pushed back another 5, 10 or even more years, then we have maintained his natural dentition that much longer – which is the primary goal of endodontics, simple or complex. **OH**

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