To Re-treat or to Implant

I recently received an interesting letter from a colleague after I had referred a patient to him for an extraction.

This patient had originally been treated by a young dentist who had fractured a rotary instrument in a canal, left it in position and neglected to tell the patient about it. A second practitioner saw her and referred her to me. I discussed all the issues with the patient and removed the instrument, at great expense (rands and dentine) and the patient then moved to KwaZulu Natal. She phoned and complained of continued pain and I referred her to the colleague in KZN for an extraction. This colleague then wrote to me suggesting that perhaps I should never have attempted to remove the instrument but should have immediately removed the tooth. Well, as they say, hindsight is a very exact science…

What then are the issues? When do we decide to retreat a root canal and when do we rather extract the tooth and place an implant? What about apicectomies? There is no simple answer.

Guidelines for re-treatment of root canals

1. Success rates for original treatments of root canals (properly done by specialists) are better than 95%. Success rates for **re-treatments** by the best specialists are only 60-70%. In other words 1 out of every 3 re-treatments will fail. A sobering thought. On the other hand these failures may still be salvaged by apical surgery.
2. In the hands of the average general dental practitioner the above success rates are not achieved.
3. Periodontal health is of the utmost importance. It is pointless to retreat the root canal if there is no bony support. Yet, once again there is another side to the coin. In the grey mists of endo-perio disease there are a number of cases where the apparent periodontal breakdown is actually caused by endodontic disease and will heal after the endodontic infection had been cleared up. Even 10 mm pockets (of these selected cases) can heal after root canal treatment.
4. The presence of perforations in the root canal impacts heavily upon the prognosis. However they do not constitute an absolute contra-indication for re-treatment. Perforations can sometimes be successfully sealed with MTA.
5. Fractured instruments are a special problem, as our colleague in KZN pointed out. The fact of the matter is that sometimes we can remove them. This compels us to at least try once. Sometimes we fail and we cannot get them out. The problem is that you never know until you have tried. From a patient's perspective it is not a pleasant thought to know that somewhere deep inside his or her root canal there is lodged a fractured root canal instrument and generally they want them out. It is our duty to oblige them, or at least to try. Unfortunately sometimes removal of fractured instruments requires an inordinate amount of sacrifice of dentine, weakening the root considerably. Personally I do not accept that there is justification for the viewpoint that all teeth with fractured instruments should be extracted.

6. Proponents of implants are sometimes reluctant to fully explain to patients all the costs, risks, complications and time involved with this treatment. Implants have problems. They are very expensive, often require bone augmentation and general anaesthesia, sometimes fail, and there are very real risks of pain, swelling, nerve damage and damage to the adjacent roots, poor aesthetics, loosening or fractures of screws. Tell all this to a patient and let them decide…
7. All implant specialists agree that implants should only be placed in healthy mouths. So one implant can actually necessitate extensive periodontal, occlusal and prosthodontic treatment prior to the placement of the implant. On the other hand, perhaps it is justified to re-treat one root canal whilst postponing the treatment of the rest of the mouth. With implants you cannot do this.
8. The dentist's personal abilities and capabilities should not be the overriding factor. If you cannot do the re-treatment or the implant find somebody who can. It is immoral and unethical to force a patient to accept your treatment, because you don't have the ability to do a re-treatment or an implant. It is the patient's choice.
9. Communication is the name of the game. Ethical rules demand informed consent. The patient should be informed about the nature of the disease, all possible methods of treatments and the costs, advantages, disadvantages and reasonably foreseeable risks and complications of each treatment. After all this has been explained to the patient, it is up to him or her to decide. This is informed consent and I try my best to adhere to this principle. Sometimes our gut feeling (clinical impression or common sense) will tend to favour one treatment over another and then it is acceptable to guide or advise a patient to have this or that treatment, always because it is in the patient's best interest. Take for an example the hypothetical case of a 65 year old patient who is faced with the imminent loss of an upper first molar. A root canal re-treatment will be costly and unpredictable and an implant will require a sinus lift procedure, bone augmentation, possibly from the hip, quite an invasive procedure. What about a simple extraction and no implant? Is it always necessary to replace teeth? Definitely no. Billions of people the world over live quite happy lives with one or more missing teeth. We should not allow our (healthy) obsession with teeth to cloud our judgement. If a patient can adapt and function without a tooth, and the occlusion remains stable, there is simply no justification for any attempt (bridge of implant) at replacement. In such a case no treatment is the best treatment. But how then does one make any decision and how can one make any recommendation to a patient? All the skills, science and knowledge in the world are not enough. What is required is wisdom, that ill defined quality so sadly lacking in most humans and so well defined in the Bible, Ecclesiastes 12:12-14 and Matthew 7:12.

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