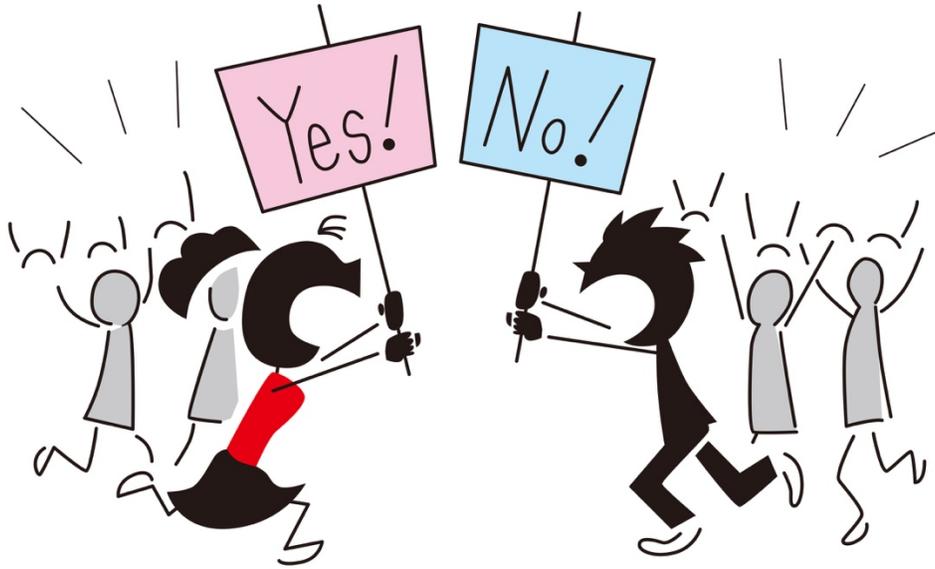


## Controversies in Dentistry, or, A Case for Conservative Treatment



Dentists are funny – we usually think we’re right about, well, everything. I’m not especially proud of this, but as one who often suffers this affliction, the first step towards a cure is admitting the problem exists. Believe it or not, there are many, oh so many controversies in dentistry. Some examples are: do we treat root canals in 1 visit or 2? What causes nighttime tooth grinding? How and why do we treat it? What causes jaw pain (also known as TMD, TMJ, TMJD and so on)? How do we treat jaw pain? Who needs braces? When do you start? Should you remove teeth to treat crowding? Root canal or implant? Who should do root canal? When to gum graft? Is “cosmetic dentistry” ethical? Should all wisdom teeth be removed? When? Who does it – an oral surgeon? A periodontist? A general dentist? Fluoride in the water? Amalgam? Is conventional 2-D x-ray good enough or do we need more 3-D? If more 3-D, when do we do it? And on and on and on it goes. I once sat in a room full of dentists (mostly Endodontists) for a weekend listening to 2 differing factions argue about 1-visit versus 2-visit root canal therapy. It was heated, the room was equally divided and each side passionately advocated for their position and each side was adamant that they were correct and the other side was dumb.

This highlights a few issues: firstly, scientific advancement in healthcare is messy in real-time. When we view progress through the lens of years, decades and centuries, the achievements are easy to see. Unfortunately, we don’t live in decades or centuries, we live now, here, today and seeing progress on a daily basis is virtually impossible. Secondly, we are humans and so we have biases. We make a decision, often emotionally charged, and then doggedly defend that position in spite of any evidence to the contrary. *90% of my colleagues disagree with me? They’re idiots. They’re biased. They’re morally bankrupt. They’ve been bought off.* We’ve all seen this and, if you’re human, you’ve likely accused others of polluted thinking, unable to see the facts clearly as *you* do through your Spockesque viewfinder.

What's one to do? In my line of work, the standard operating procedure is: study the literature; look at all arguments; understand what is and what isn't a scientific study (hint: if you've seen it on Facebook, it likely isn't science); studies should be randomized and double blinded with placebo treatment; read systematic reviews of the literature; **DO NOT RELY ON GOOGLE TO TELL YOU WHAT IS RIGHT OR WRONG**. Reliable and accessible sources are PubMed and Evidence-based Dentistry (American Dental Association & Nature). Do you remember the adage of questioning things that sound too good to be true? Extend that to **EVERYTHING** you research.

When considering what treatment is best-suited to address someone's pain or disease, we must consider so many things, including their expectations, nature of treatment (how invasive is the treatment?), timing of treatment (do I need to start now or can it be delayed?), length of treatment (1 visit? 2 visits? Will it take several months or years to achieve the desired result?), alternatives (what else is there that may achieve the same result? A better result? A worse result?), cost, and prognosis (including best and worst-case scenarios). The good news is that many things we recommend in dentistry are straight-forward. Take the following example: You have an infected tooth. You want to keep your tooth and cost is a factor. Root canal is predictable (90-95%, but there can be complications) and you will likely keep your tooth. Extraction is predictable (100%, but there can be complications), but you will lose your tooth. Doing nothing is predictable, but predictable in that we can be certain that your condition will only worsen. Allow me to summarize:

- **Do nothing**

- Initial cost: antibiotic and analgesic prescription (approx. \$100)
- Long-term cost: extraction, possible hospitalization, time off work, tooth replacement, etc. (approx. \$500 - \$7000+)
- Ultimate tooth loss (remember, your goal was keeping your tooth)
- Timing: uncertain, but the chickens will likely come home to roost sooner than later
- Prognosis: long-term is uncertain because of bone loss due to infection
- Number of visits: again uncertain, but plan for 4+ if you plan on replacing the tooth. If not, then as few as 1 visit
- If you have an infected tooth and elect to do nothing about it, please know you are only delaying treatment – you will be forced into a decision in the future and the experience will not likely be a pleasant one

- **Extraction**

- Initial cost: \$150-\$300
- Long-term cost: \$0 (no tooth replacement) - \$800 - \$7000 (implant + extensive bone grafting). You should discuss replacement options with your dentist *prior* to removing your tooth to obtain a more accurate cost estimate
- Tooth loss
- Timing: sooner is better
- Prognosis: good/favourable (that is, favourable in that it addresses the tooth infection, but this prognosis *does not* address any other treatment)

- Number of visits: 1 (extraction is finite), additional visits to replace the tooth may range from 3-8+, depending on how you elect to replace your tooth
- Again, please discuss all options with your dentist before removing a tooth so you can proceed with confidence
- **Root Canal Therapy**
  - Initial cost: \$800-\$2200 (this depends on number of canals, complexity, number of visits, additional diagnostic procedures involved, etc.)
  - Long-term cost: plan on either a simple filling (\$150-\$300) or a post/core/crown (\$1500-\$2000) in addition to the root canal cost. Additionally, some teeth also require gum surgery to adequately repair
  - You keep your tooth
  - Timing: sooner is better
  - Prognosis: typically, good/favourable (RCT succeeds 90-95%; retreatment succeeds 80-85%; apical surgery succeeds 80-90%)
  - Number of visits: typically, 1-3, but may require more if surgery is required. Also, this does not account for the visits required to have a crown made for the tooth
  - Please discuss all options with your dentist before having with root canal therapy so you can proceed with confidence

I have to emphasize that this is a fairly watered-down version of this scenario and will probably necessitate a longer conversation with your dentist before you can arrive at a decision. Ask questions. Ask lots of questions....

Root canal, while a complex procedure, has a straight-forward decision tree. There is a pretty well-established diagnostic protocol and then generally accepted treatment that flows from these diagnoses. You treat it or you don't. The end. But let's investigate another example that may not be so straight forward: Temporomandibular dysfunction.

To be continued next week