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# Internet Movie Talking Points

#### When is a root canal treatment recommended?

Root canal treatment is necessary when the pulp, the soft tissue inside the root canal, becomes inflamed or infected, most commonly due to decay. Root canal treatments are the recommended course of action when a tooth becomes infected because the procedure alleviates patients' pain and saves a patient's natural teeth from extraction. There are many clinical reasons for recommending root canal treatment, and there are also many practical reasons why saving the natural tooth is a wise choice, as opposed to extraction.

#### What happens during a root canal?

When a severe infection in a tooth requires endodontic treatment, that treatment is designed to eliminate bacteria from the infected root canal, prevent reinfection of the tooth and save the natural tooth. When one undergoes a root canal, the inflamed or infected pulp is removed and the inside of the tooth is carefully cleaned and disinfected, then filled and sealed.

The following is a more detailed, step-by-step explanation of the root canal procedure:

1. The endodontist examines and takes x-rays of the tooth, then administers local anesthetic. After the tooth is numb, the endodontist places a small protective sheet called a "dental dam" over the area to isolate the tooth and keep it clean and free of saliva during the procedure.
2. The endodontist makes an opening in the crown of the tooth. Very small, specialized instruments are used to clean the pulp from the pulp chamber and root canals and to shape the space for filling. The space is disinfected as part of the process of cleaning and shaping the canals.
3. After the space is cleaned and shaped, and disinfected, the endodontist fills the root canals with a biocompatible material, usually a medicinal-grade rubber-like material called gutta-percha. The gutta-percha is placed with an adhesive cement to ensure complete sealing of the root canals. In most cases, a temporary filling is placed to close the opening. The temporary filling will be removed by your dentist before the tooth is restored.
4. After the final visit with your endodontist, you will return to your dentist to have a crown or other restoration placed on the tooth to protect and restore it to full function.

### What exactly is the focal infection theory?

It is a nearly 100-year-old theory that questions the safety of root canal treatment — a claim that has been disproven by decades' worth of peer-reviewed, scientific evidence. Dental restorations and endodontically treated teeth were blamed as focus points for infections in the past, but there is no scientific evidence linking root canal treatments with disease anywhere in the body.

The focal infection theory was introduced before medicine understood the causes of degenerative systemic disease. The key propagator of this theory, Dr. Weston A. Price, advocated tooth extraction—the most traumatic dental procedure—over endodontic treatment. This theory resulted in a frightening era of tooth extraction both for treatment of systemic disease and as a prophylactic measure against future illness. Dr. Price's research techniques were criticized at the time they were published, and by the early 1930s, a number of well-designed studies using more modern research techniques discredited his findings.

Decades of research have contradicted Dr. Price's findings since then.

### You constantly see scientific claims swinging back and forth in other areas (i.e., coffee is good for you or not). Could that be the case here too, and people really should pause on whether to have this treatment?

About 25 million new endodontic treatments, including root canals, are performed each year, safely and effectively. The success of root canal treatment is strongly based on good science, with overwhelming success rates of all the procedures performed over the years. A multitude of studies and peer-reviewed research over the last 100 years support its safety and efficacy.

Examples of research supporting the safety of root canals:

- a. In 1951, the *Journal of the American Dental Association* endorsed endodontic treatment as a procedure to save the natural tooth.
  - i. Literature on the focal infection theory was reviewed, and *JADA* noted that others had lacked many fundamental practices of modern scientific research, including proper control groups.
- b. A 2013 *JAMA Otolaryngology – Head & Neck Surgery* study found that patients with multiple endodontic treatments had a 45 percent reduced risk of cancer.

### If patients want to be overly cautious and avoid root canal treatment, what are the alternatives?

Root canals are the preferred treatment option for inflamed or infected teeth, as the procedure saves a patient's natural teeth. Patients who want to avoid root canal treatment would need to have their infected tooth extracted in order to alleviate the pain and remove the infection.

Root canal treatments save teeth, and saving a patient's natural tooth is the wise choice for a number of reasons. Tooth extraction is often more painful than the infection itself and replacing an extracted tooth with an artificial one requires additional dental visits that can quickly add up, both in terms of time and expense. Missing teeth can cause other teeth to shift, affect your ability to properly chew and ruin your smile. Why remove a valuable part of your body when it is not necessary?

Root canal treatment, along with appropriate restoration, is usually faster and less expensive than extraction and implant surgery. In most cases, endodontic treatment allows patients to keep their natural teeth for a lifetime.

### What do other medical groups say about root canal treatment?

Mainstream medical and dental communities overwhelmingly agree that root canal treatment is safe, effective and eliminates pain. The success of root canal treatment is based in science with a multitude of studies and peer-reviewed materials supporting its safety and efficacy.

Organizations such as WebMD, Mayo Clinic, the American Dental Association and the American Association of Endodontists agree that root canals are a safe and important procedure.

For example, here is what WebMD has to say about root canal treatment:

- a. Root canal treatment is used to repair and save a tooth that is decayed or becomes infected.
- b. The root canal procedure has more than a 95 percent success rate, and many teeth fixed with a root canal can last a lifetime.
- c. Saving your natural teeth is the very best option if possible, and the root canal procedure is the treatment of choice to do that.

Research supporting root canal treatments and their safety:

- In 1951, the *Journal of the American Dental Association* endorsed endodontic treatment as a procedure to save the natural tooth.

**Aren't some of the people opposing root canal treatment in this movie reputable doctors and experts?**

The doctors and experts in the movie are extremists and outliers within the broader medical community. Many have questionable reputations and/or license revocations. The theory questioning the safety of root canal treatment is nearly 100 years old and has long and continuously been debunked.

The broader medical and scientific community support root canal treatments as a safe and effective way to eliminate pain and save a patient's natural teeth.

**Don't endodontists just want patients to get root canals because that's what they do?**

No. Root canals are an important part of the standard, proven treatment for infected and inflamed teeth, and allow patients to retain their natural teeth in most cases. The procedure has decades of research and tens of millions of case studies to substantiate its effectiveness. Nothing looks, feels or functions like your natural teeth, and endodontists are experts in diagnosing and treating tooth pain so that patients can continue smiling, eating, chewing and talking as they always have.

**As stated in the movie, the fact that "98% of women who have breast cancer had a root canal tooth on the same side as their breast cancer" is pretty compelling. How do you respond?**

This claim is completely misleading, and irresponsible. There is absolutely no credible scientific evidence pointing to root canal treatment being the source of any chronic disease.

Interestingly, a 2013 *JAMA Otolaryngology – Head & Neck Surgery* study found that patients with multiple endodontic treatments had a 45 percent reduced risk of cancer.

The success of root canal treatments is based in science, and a multitude of studies and peer-reviewed materials support the safety of root canal treatments.

**What basis is there for the claim that "almost all patients who come in with a chronic illness have a dental cause."?**

There is no basis for this claim. There is absolutely no credible scientific evidence pointing to root canal treatment being the source of any chronic disease.

The success of root canal treatments is based in science, and a multitude of studies and peer-reviewed materials support the safety of root canal treatments.

**How do you respond to this claim from the movie, "There is no branch in medicine that exists where a dead organ is left in, except for in dentistry where a root canal is left in"?**

This claim is misguided. When you undergo a root canal or other endodontic treatment, the inflamed or infected pulp is removed and the inside of the tooth is carefully cleaned and disinfected, then filled and sealed. A fully developed tooth can survive without the pulp because the tooth continues to be nourished by the tissues surrounding it with a viable blood supply. Saving your natural teeth, when possible, versus extraction is always the best option and endodontic treatments make that possible.

**Is there any validity to the claim from the movie, "The vast majority of chronic degenerative diseases begin with problems in the mouth"?**

There is no valid, scientific evidence linking root canal treatment to disease elsewhere in the body.

**How do you respond to the comment in the movie that asserts: "If you think you can get away with an infected toxic tooth and not have a systemic consequence, you are deluding yourself."?**

There is no valid, scientific evidence linking root canal treatment to disease elsewhere in the body. When you undergo a root canal or other endodontic treatment, the inflamed or infected pulp is removed and the inside of the tooth is carefully cleaned and disinfected, then filled and sealed. Root canal treatments eliminate bacteria and infection while allowing patients to keep their natural teeth.