# When Unscientific Claims Cause Patient Confusion and Fear

How to Respond to Questions from Patients About Root Canal Treatment

**THE ISSUE:** Misinformation about root canal treatment is circulating in the public domain. False claims about root canal treatment is harmful because it creates undue fear or confusion among patients and their families which can lead to delays in seeking treatment and result in the loss of treatable teeth.

WHAT YOU SHOULD DO: Consider scheduling time with the dental team to ensure that any information provided to patients about root canal treatment is consistent.

- Patients should be informed not to trust any medical advice from sources that are not scientifically credible.
- ✓ Patients should always be reassured that their overall health is your top priority.
- ✓ It's also important to communicate your professional experience in providing root canal treatment to patients, including the related health outcomes you have seen in your practice.

The Canadian Dental Association (CDA) and the Canadian Academy of Endodontics (CAE) have developed answers to common patient questions about rumours surrounding root canal treatment. You can use the suggested language in the answers below when preparing to speak with your patient.

#### Patient: "Is root canal treatment safe?"

#### **Dentist/Endodontist:**

"Root canal treatment is a safe and effective option for teeth whose pulp has become inflamed or infected. It is also used as a safe treatment option to address specific situations to help save and restore a tooth.

You shouldn't trust any medical advice from sources that are not scientifically credible. Claims that root canals are not safe are based on research that's nearly 100 years old and has long been debunked. These false claims only cause fear and confusion, which can be harmful to your comfort, safety, and your long-term health. Not only can it lead to causing delays in getting treatment, but it can also result in the loss of a tooth that would have been treatable.

For accurate information about root canal treatment, visit credible sources such as the Canadian Dental Association (CDA), Canadian Academy of Endodontics (CAE) and the Canadian Cancer Society.

The CDA and CAE have also produced a **joint public statement** about root canal treatment that can be found at the CDA website at **www.cda-adc.ca** and CAE website at **www.caendo.ca**."

#### Patient: "Can I get sick from root canal treatment?"

#### Dentist/Endodontist:

"No, root canal treatment does not cause illness or degenerative systemic disease. This information has been falsely and dangerously claimed by non-scientific sources that you shouldn't trust.

Misinformation about root canal treatment has circulated since the early 1900s. There is no valid, scientific evidence that links root canal-treated teeth and disease anywhere else in the body.

If it were true that root canal treatment caused systemic diseases, more peer-reviewed, scientific information would





be available and root canal treatment would not be the preferred, safe and effective option to save teeth.

These false claims about root canal treatment can only cause you unnecessary anxiety or fear of developing other health problems. Please don't let misinformation about root canal treatment result in treatment delays which could further compromise the integrity of your tooth."

### **Patient:** "I heard that root canal treatment causes cancer. Is it true?"

#### **Dentist/Endodontist:**

"There is no evidence that root canals cause cancer. Just because a person has experienced both cancer and a root canal doesn't mean that there is a cause-and-effect relationship.

Data showing that "97 percent of cancer patients had root canal treatment" has not been published anywhere.

Get health information from trusted sources that are scientifically credible. For example:

- The Journal of the American Medical Association (JAMA Otolaryngology—Head & Neck Surgery) in 2013 found that a patient's risk of cancer doesn't change after having a root canal treatment. It was also found that patients with multiple root canal treatments had a 45 percent reduced risk of cancer.
- Also check out the "Myths and Controversies" section on the Canadian Cancer Society's website – they directly address the myth "Do Root Canals Cause Cancer?"

Remember that false claims only cause fear and confusion which can be harmful to your mental- and overall long-term health. Don't let wrong information cause delays in you getting treatment or put you at risk of losing a tooth that could have been treatable."

## **Patient:** "Is it true that the leading cause of a heart attack is dental treatment or your oral condition?"

#### **Dentist/Endodontist:**

"No, there is no valid scientific evidence linking root canaltreated teeth and disease elsewhere in the body.

In April 2012, the American Heart Association found no scientific evidence linking periodontal (gum) disease and heart disease. They concluded that heart disease and

periodontal disease often occur in the same person due to common risk factors such as age, diabetes and smoking.

The spread of inaccurate information about root canal treatment is harmful to your comfort, safety, and long-term health. You shouldn't trust medical advice from sources that are not scientifically credible. Please don't let misinformation about root canal treatment result in treatment delays which could further compromise the integrity of your tooth."

#### Patient: "What is involved in root canal treatment?"

#### **Dentist/Endodontist:**

"Root canal treatment is the process of removing infected or injured tissue (pulp) from inside the crown and roots of a tooth. Once cleaned, the canal is disinfected and shaped and is then filled with a biologically inert material (i.e. gutta percha).

Considerable advancements in diagnosis, radiographic imaging, equipment and techniques in Canada now permit dentists and endodontists to complete root canal treatment, even for teeth with very complex anatomies, to the highest level of precision.

For more detailed information about root canal treatment and what to expect, please visit the Canadian Dental Association's website under "Your Oral Health > Visiting Your Dentist > Dental Procedures > Root Canal Treatment" at http://www.cda-adc.ca/en/oral\_health/talk/procedures/root\_canal/

### **Patient:** "I heard that root canals always end up failing. How successful is root canal treatment?"

#### **Dentist/Endodontist:**

"This claim cannot be any farther from the truth. According to American Dental Association, approximately 25 million endodontic treatments are performed safely and effectively every year.

Root canal treatment has a high success rate and is routinely performed by dentists across Canada. For example, research completed at the University of Toronto states that approximately four to six years after the initial root canal treatment, 86 percent of teeth heal, and 95 percent of teeth remain functional and without symptoms.

Root canal treatment will only be recommended by me, as your dentist/endodontist, for teeth whose pulp has become





inflamed or infected, or to address specific situations to help save and restore a tooth. If left untreated, the infection in a tooth that requires a root canal will persist, which will result in increased pain and the eventual loss of that tooth.

As your dentist/endodontist, it is my primary objective to ensure your best oral health – and this means eliminating both infection and pain while preserving natural teeth."

**Patient:** "Where can I find trustworthy information about root canal treatment?"

#### **Dentist/Endodontist:**

 The Canadian Dental Association website is the recommended place to visit for more information about root canal treatment: http://www.cda-adc.ca/en/oral\_ health/talk/procedures/root\_canal/

- Additional information about the safety of endodontic procedures can be found on the Canadian Academy of Endodontics at: https://www.caendo.ca/patients/ safety-of-endodontic-treatment/
- The Canadian Cancer Society addresses "Do Root Canals Cause Cancer?" on their website under the Myths and Controversies section.
- You can also refer to scientific research about focal infection theory, cancer and root canal treatment, heart attacks and dental treatment, and the success of root canal treatment. (Have the references printed on a separate page and refer patient to studies, as needed.)





#### Focal Infection Theory

Easlick K: An Evaluation of the Effect of Dental Foci of Infection on Health. JADA 42:615-686, 694-697, June 1951

Smith A: Focal Infection 150:490, 1952.

Cohen S, Burns RC: Pathways of the Pulp 8th Edition, Mosby, St. Louis, 514, 2002.

Bender TB, Seltzer S, Yermish M: The Incidence of Bacteremia in Endodontic Manipulation. Oral Surg 13(3):353-60, 1960.

Baumgarther J, Heggers J, Harrison J: The Incidence of Bacteremias Related to Endodontic Procedures. I. Nonsurgical Endodontics. J Endodon 2(5):135-40, May 1976.

Ehrmann E: Focal Infection: The Endodontic Point of View. Oral Surg 44:628-34, Oct. 1977.

Delivanis P, Snowden R, Doyle R: Localization of Blood-borne Bacteria in Instrumented Unfilled Root Canals. Oral Surg 52(4):430-32, Oct. 1981.

Grossman L: Pulpless Teeth and Focal Infection. J Endodon 8:S18-S24, Jan. 1982.

Delivanis P, Fan V: The Localization of Blood-borne Bacteria in Instrumented Unfilled and Overinstrumented Canals. J Endodon 10(1 1):521-24, Nov. 1984.

Wilson W, Taubert K, et al. Prevention of Infective Endocarditis: Guidelines From the American Heart Association, J Amer Heart Assoc 2007;116:1736-54.

Canadian Orthopedic Association (COA), the Canadian Dental Association (CDA), and the Association of Medical Microbiology and Infectious Disease (AMMI) Canada: Consensus Statement: Dental Patients with Total Joint Replacement, 2016.

#### Cancer and Endodontic Treatment

Tezal M, et al. Dental Caries and Head and Neck Cancers. JAMA Otolaryngol Head Neck Surg 139(10):1054-60, Oct. 2013.

#### ► Heart Attacks and Dental Treatment

Lockhard, PB, et al. Periodontal Disease and Atherosclerotic Vascular Disease: Does the Evidence Support an Independent Association? Circulation 2012;125:2520-2544. study refuting heart attach being the cause of a root canal.

#### Success of Endodontic Treatment

De Chevigny, C, et al. Treatment Outcome in Endodontics: The Toronto Study—Phase 4: Initial Treatment. J Endodon 34:258–263, March 2008.

Friedman S et al. The Success of Endodontic Therapy-Healing and Functionality. J Calif Dent Assoc. 32(6): 493-503, June 2004.

Salehrabi R et al. Endodontic Treatment Outcomes In a Large Patient Population in the USA: an Epidemiological Study. J Endodon 30(12): 846-850, December 2004.



