

Root Canal Safety Talking Points

Information to share with patients concerned about the safety of root canal treatment

- 25 million endodontic treatments are performed every year, safely and effectively. If it were true that root canals caused diseases like cancer, there would be much more information about it available in peer-reviewed scientific publications, and root canals would not be the preferred treatment option to save teeth.
- There is no valid, scientific evidence linking root canal-treated teeth and disease elsewhere in the body. Data showing that "97 percent of cancer patients had root canal treatment" has not been published anywhere. There is no causality between root canals and cancer; just because a person has experienced both doesn't mean a cause-and-effect relationship exists.
- Claims that root canals are not safe are based on research that's nearly 100 years old and has long been debunked.
- As recently as 2013, a study published in a journal of the American Medical Association (*JAMA Otolaryngology*—*Head & Neck Surgery*) found that a patient's risk of cancer doesn't change after having a root canal treatment; in fact, patients with multiple endodontic treatments had a 45 percent *reduced* risk of cancer.
- Advancements in medicine, techniques and technologies have made endodontic treatment a more predictable, successful treatment than ever before. Today, digital imaging, rubber dams, rotary instruments, powerful disinfectants and medicated filling materials help ensure successful root canal treatment.
- 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.
- The only alternative to endodontic treatment is extraction of the tooth. Extraction is a traumatic procedure and is known to cause a significantly higher incidence of bacteria entering the bloodstream.
- You wouldn't cut off your hand if you broke a finger, so why would you extract your natural tooth if it could be saved? Nothing looks, feels or functions like your natural tooth it should be saved whenever possible. 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.
- Media reports stemming from a study published in the September 10, 2015, issue of *Nature* claim that the proteins that indicate Alzheimer's disease may be transmitted from one person to another during medical procedures including root canal treatment. There is no evidence that root canal treatment is a risk factor for Alzheimer's disease.
- There is nothing definitive in the *Nature* study. It involved a small sample of eight patients who died from Mad Cow Disease. The brain tissues of seven patients showed signs of the protein associated with Alzheimer's but they had no symptoms of Alzheimer's. The study authors speculate that the proteins were transmitted when the patients had injections to treat their Mad Cow Disease.

- While the prion protein has reportedly been transmitted to medical patients through exposure to blood, inadequately sterilized neurosurgical instruments and a variety of cadaver-derived materials, there has never been a confirmed case of CJD transmitted through dental treatment.
- There are procedures in place to minimize infection risk from endodontic instruments such as files and reamers. Many endodontists employ single-use instruments and, if not, instruments are thoroughly sterilized prior to each use.
- The study author said, ""It is possible our findings might be relevant to some other medical or surgical procedures, but evaluating what risk, if any, there might be requires much further research. Our current data has no bearing on dental surgery and certainly does not argue that dentistry poses a risk of Alzheimer's disease."
- The Alzheimer's Society's director of research issued a statement in response to the *Nature* report saying, "While these findings are interesting and warrant further investigation, there are too many unknowns in this small, observational study of 8 brains to draw any conclusions about whether Alzheimer's disease can be transmitted this way. There remains absolutely no evidence that Alzheimer's disease is contagious or can be transmitted from person to person via any current medical or dental procedures."