

Safety of Endodontic Treatment

Endodontics is the branch of dentistry that is concerned with the morphology, physiology and pathology of the human dental pulp and periradicular tissues. The CAE and its members are dedicated to excellence and quality in the art and science of endodontics and to the highest standard of patient care. The overall well-being of our patients is our primary focus.

According to the most recent statistics published by the American Dental Association more than 25 million endodontic procedures are done per year. As a result of this it is apparent that the safety and efficacy of endodontic treatment is critical. Though there is excellent research based information found on the CAE, AAE, and CDA websites, people are still susceptible to sources of misinformation. The most common issue cited is in regards to the long refuted “focal infection theory” from the early 1900s.

The focal infection theory, promoted by Dr. Weston Price, in relation to endodontics stated that pulpless and endodontically treated teeth may leak bacteria or toxins or both into the body, causing any type of degenerative systemic disease. This unfortunately led to the needless extraction of many teeth. Dr. Price’s research and techniques were questioned at the time and his results were refuted as a result of well designed studies using modern research techniques in the subsequent years. In 1951, The Journal of the American Dental Association published a paper that reviewed the relevant scientific research of the time and reaffirmed that endodontic treatment was the standard of care for non-vital teeth that could be saved. The Journal of the American Medical Association echoed this in an editorial in 1952.

Recent research has further affirmed the earlier studies. In 2007, the American Heart Association updated its guidelines and dramatically decreased the indication for the use of antibiotics for the prevention of infective endocarditis. In 2012, they also found no link between periodontal disease and heart disease. In 2016, the Canadian Orthopedic Association, the Association of Medical Microbiology and Infectious Disease Canada and the Canadian Dental Association in a joint position paper after a careful review of the most recent research stated that: 1. most transient bacteremia of oral origin occurs outside of dental procedures; 2. the significant majority of prosthetic joint infections are not due to organisms found in the mouth; 3. few prosthetic joint infections have an observable and clearly defined relationship with dental procedures; and 4. there is no reliable evidence that antibiotic prophylaxis prior to dental procedures prevents prosthetic joint infections.

In light of these findings and recent research we feel the focal infection theory has been discredited and that patients should feel reassured that endodontic treatment is not only safe but recommended for the preservation of teeth.

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