

## **Information on Root Canal (Endodontic) Therapy**

### **Myth #2—Root canal treatment causes illness.**

**Truth**—Root canal treatment is a safe and effective procedure.

Research studies performed in the 1930s and 1940s and those conducted in later years showed no relationship between the presence of endodontically treated teeth and the presence of illness. Instead, researchers found that people with root canal fillings were no more likely to be ill than people without them.<sup>1,2</sup>

Over the past several years, however, a very small number of dentists and physicians have been claiming that teeth that have received root canal (endodontic) treatment contribute to the occurrence of illness and disease in the body. This claim is based on the outdated research performed by Dr. Weston Price from 1910-1930. His research stated that bacteria trapped in the teeth during root canal treatment can cause almost any type of disease, including arthritis, heart disease, kidney disease, and others.

The presence of bacteria in teeth and mouth has been an accepted fact for many years. But presence of bacteria does not constitute "infection" and is not necessarily a threat to a person's health.<sup>3</sup> Bacteria are present in the mouth and teeth at all times, even in teeth that have never had a cavity or other trauma.

More recent attempts to copy the research of Dr. Price (and to check its accuracy) have been unsuccessful. Researchers now believe that the earlier findings may have been caused by poor sanitation and imprecise research techniques that were common in the early 1900s.<sup>1</sup>

These more recent studies support the truth we report today—that teeth that receive proper endodontic treatment do not cause illness.

## **Myth References**

1. Easlick K. An evaluation of the effect of dental foci of infection on health. JADA 1951 Jun;42(6):615-97.
2. Grossman L. Pulpless teeth and focal infection. J Endodon 1982;8:S18-S24.
3. Schonfeld SE. Oral microbial ecology. In: Slots J, Taubman M, eds. Contemporary oral microbiology and immunology. St. Louis: Mosby Year Book, 1992:267-274.
4. Grossman L. Root canal therapy. 4th ed. Philadelphia: Lea & Febiger, 1955:15-40.
5. Grossman L. Focal infection: Are oral foci of infection related to systemic disease? Dent Clin N Amer 1960:749-63.
6. Bender IB, Seltzer S, Yermish M. The incidence of bacteremia in endodontic manipulation.

Oral Surg 1960;13(3):353-60.

7. Goldman M, Pearson A. A preliminary investigation of the "hollow-tube theory" in endodontics: Studies with neo-tetrazolium. J Oral Therapeutics and Pharm 1965;1(6):618-26.

8. Torneck C. Reaction of rat connective tissue to polyethylene tube implants. Part I. Oral Surg 1966;21(3):379-87.

9. Torneck C. Reaction of rat connective tissue to polyethylene tube implants. Part II. Oral Surg 1967;24(5):674-83.

10. Phillips J. Rat connective tissue response to hollow polyethylene tube implants. J Canad Dent Assoc 1967;33(2):59-64.

11. Davis M, Joseph S, Bucher J. Periapical and intracanal healing following incomplete root canal fillings in dogs. Oral Surg 1971;31(5):662-675.

12. Baumgartner J, Heggers J, Harrison J. The incidence of bacteremias related to endodontic procedures. I. Nonsurgical endodontics. J Endodon 1976;2(5):135-40.

13. Ehrmann E. Focal infection: The endodontic point of view. Oral Surg 1977;44:628-34.

14. Wenger J, Tsaknis P, delRio C, Ayer W. The effects of partially filled polyethylene tube intraosseous implants in rats. Oral Surg 1978;46:88-100.

15. Delivanis P, Snowden R, Doyle R. Localization of blood-borne bacteria in instrumented unfilled root canals. Oral Surg 1981;52(4):430-32.

16. Torabinejad M, Theofilopoulos A, Kettering J, Bakland L. Quantitation of circulating immune complexes, immunoglobulins G and M, and C3 complement component in patients with large periapical lesions. Oral Surg 1983;55(2):186-90.

17. Delivanis P, Fan V. The localization of blood-borne bacteria in instrumented unfilled and overinstrumented canals. J Endodon 1984;10(11):521- 24.

18. Benatti O, Valdrighi L, Biral R, Pupo J. A histological study of the effect of diameter enlargement of the apical portion of the root canal. J Endodon 1985;11(10):428-34.

19. Wu M, Moorer W, Wesselink P. Capacity of anaerobic bacteria enclosed in a simulated root canal to induce inflammation. Internat Endodon J 22:269-77, Nov./Dec. 1989.