

Root Canal to the Rescue

But pain may linger afterwards for some patients

Every year millions of people get root canals, which are necessary to save an infected, often very painful, tooth. Most—almost all—root canals successfully treat the disease undermining the tooth. **But how well do root canals solve the pressing problem of pain?**

Researchers have tried to answer that question, but their studies have had some limitations, such as having few patients. Dentists in the National Dental Practice-Based Research Network decided to do a large study of how root canals affect pain and what increases a patient's likelihood of having pain after the surgery.

The researchers interviewed hundreds of adult patients before they had a root canal, immediately following and one week after, when the pain caused by surgery should have gone away. They asked the patients to rate the worst pain they had, how long they were in pain, and how much it interfered with their daily activities.



Your dentist is part of the National Dental Practice-Based Research Network, a group of dental practices that treat patients and also do dental research. For more information go to www.nationaldentalpbrn.org.



Most patients are painfree one week after a root canal—but not all

The study found that most—but not all—who had been in pain before the root canal felt better following the procedure. The week before the root canal, 50 percent of patients had "severe" pain. The week after the procedure:

- Pain intensity remained the same for 19 percent of patients
- The average number of days patients were in pain decreased
- The number of days in which pain interfered with daily activities decreased.



Whose pain decreased?

Patients who had moderate or severe pain (a 4 or greater on a scale of 0 to 10) before the root canal got the most relief after surgery. More than half of the patients whose pain had been mild (a 3 or less) before the surgery also reported having less pain afterwards. Patients with no pain before the root canal had mild pain, on average, during the week following the surgery.



What predicted pain levels after the root canal:

- Intensity of pain before the procedure
- Number of days in the past week that pain interfered with usual activities
- Having pain that stress makes worse
- Having pain that goes beyond the gums around the treated tooth.



What to do before and after your root canal

- In need of a root canal? Ask your dentist how the procedure might affect your pain.
- Taking an anti-inflammatory, such as ibuprofen or naproxen, may help with pain after the surgery but the research isn't definitive.

Stay tuned: Network dentists are studying how to make sure more root canal patients recover well and painlessly.

Crunching the numbers

The week after a root canal is painful for some patients

BEFORE treatment:



On average, patients' worst pain was a 5 on a scale of 0 to 10



Half of the patients had severe pain (greater than a 7)

ONE WEEK after treatment:



On average, patients' worst pain was a 3



About one-fifth of patients had severe pain at some point during the week

Learn more about root canals at MedlinePlus: <https://medlineplus.gov/ency/article/007275.htm>