A root canal, also called an endodontic procedure, is used to save a tooth in danger of being lost due to injury, infection, or destruction of the soft tissue inside the tooth, known as the pulp. If the pulp is injured as a result of decay or trauma, it may not be able to heal. Bacteria may enter the tooth and cause infection of the pulp, which can lead to pressure, intense pain, and even damage to the bone surrounding the tooth.

Although many people think a root canal procedure is painful, it more likely relieves the pain of the injured tooth. A root canal procedure involves drilling a hole into the crown of the tooth, cleaning out the diseased or dying pulp tissue in the tooth down to its roots, filling the area with a sealant, and placing a temporary filling in the tooth.

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continued
PATIENT TEACHING AID

Saving the Diseased Tooth Is the Ultimate Goal

A root canal, or the endodontic procedure used to restore a diseased tooth, is often necessary when the pulp of the tooth dies as a result of injury or infection. The most common causes of diseased pulp are decay (a cavity) or a crack in the tooth. These situations allow bacteria to enter the tooth and cause infection, eventually resulting in the destruction of the pulp and death of the tooth.

A tooth requiring a root canal usually causes severe pain when pressure is applied, such as during chewing, and the tooth may be sensitive to hot or cold foods even after the extreme temperature is taken away. Sometimes it is difficult to determine which tooth hurts, since the nearby teeth may also be painful. If an infection in a tooth is left untreated, an accumulation of pus results, forming an abscess that can cause swelling of the gum around the tooth or in the jaw or face and might even damage the jawbone. Sometimes the affected tooth becomes darkened. Less often, the diseased tooth causes no symptoms at all.

The Root Canal Procedure: A root canal procedure begins with the dentist or endodontist taking an x-ray of the tooth to diagnose the problem and determine exactly which tooth is affected. Once this has been determined, the tooth will need a root canal. An injection of local anesthesia is used to numb the area, and a hole is drilled through the crown of the tooth into the pulp chamber. The root canal(s) are cleaned of dead tissue and infection using small files. The root canals may be treated with medication to eliminate any remaining bacteria, and a small rod is sometimes placed into one or more of the root canals to strengthen them. A sealant is then placed in the root canals and pulp chamber, and a temporary filling protects the tooth until it can be permanently restored by the dentist, usually with a filling or crown. The entire procedure takes two or three appointments.

Treating Root Canal Pain: Once the root canal is temporarily sealed, it may cause some sensitivity, especially if there was pain or swelling prior to the root canal treatment. Most dentists or endodontists recommend nonprescription painkillers such as ibuprofen or naproxen, or acetaminophen for patients unable to take nonsteroidal anti-inflammatory medications. If the tooth was badly infected before the treatment, an oral antibiotic may be prescribed. The treated tooth may feel different than the other teeth for some time after the root canal, but the dentist or endodontist should be contacted if the tooth causes continued pain or pressure for more than a day or two.

It is always best to save the natural tooth whenever possible. If this is not feasible, an artificial bridge may be created or an artificial tooth implanted. However, these procedures are expensive, time-consuming, and less desirable than restoring a natural tooth through an endodontic procedure.

High Success Rate: Most root canal procedures effectively restore diseased teeth. If reinfec-
tion occurs, it may be a result of a root canal in the tooth that was not completely cleaned and sealed, or a crack that was not seen or occurred after the root canal procedure was completed. Anytime bacteria can reenter the treated tooth, the inside of the tooth can become reinfected. Retreatment of a tooth may be an option, or dental surgery to remove the infected tissue in the bony area around the end of the tooth may be necessary. The majority of root canal procedures are successful. Your pharmacist can help you choose an OTC pain medication for dental pain after a root canal procedure.