

Root Canal Therapy: Debunking Myths and Embracing Facts

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Introduction

Root canal therapy, often shrouded in myths and misconceptions, is a dental procedure that is both misunderstood and feared by many. However, this essential treatment has advanced significantly over the years, becoming a highly effective and virtually painless solution for saving damaged or infected teeth. In this article, we will delve into the world of root canal therapy, debunking common myths and embracing the facts that make it a crucial component of modern dentistry.

Myth: Root canals are painful

One of the most prevalent misconceptions surrounding root canal therapy is that it is a painful procedure. In truth, advancements in dental techniques and anesthesia have made root canals nearly painless. Dentists use local anesthesia to numb the affected tooth and the surrounding area, ensuring that the patient feels little to no discomfort during the procedure. Patients may experience mild soreness after the treatment, which is manageable with over-the-counter pain medications and typically subsides within a few days [1].

Fact: Root canals relieve pain

Contrary to the misconception that root canals cause pain, they are actually performed to alleviate severe toothache and discomfort. When the inner pulp of a tooth becomes infected or damaged due to deep decay, cracks, or trauma, it can lead to excruciating pain and swelling. Root canal therapy removes the infected pulp, cleans and disinfects the tooth's interior, and seals it, effectively relieving the pain and preserving the tooth [2].

Myth: Tooth Extraction Is a Better Alternative

Some people believe that having a tooth extracted is a preferable option to undergoing a root canal. However, preserving natural teeth whenever possible is essential for maintaining proper oral function and preventing issues like shifting of neighboring teeth and jaw problems. Tooth extraction may require additional treatments, such as dental implants or bridges, to restore functionality and aesthetics. Root canal therapy allows the natural tooth to remain in place, providing superior long-term benefits [3].

Fact: Root canals save natural teeth

Root canal therapy is designed to save severely damaged or infected teeth from extraction. By removing the infected pulp and sealing the tooth, dentists can preserve the natural structure and function of the tooth. This not only maintains the integrity of the dental arch but also ensures that the patient can chew, speak, and smile confidently without the need for artificial replacements.

Myth: Root canals cause systemic health problems

There is a myth circulating that root canals can lead to systemic health issues. This misconception originated from outdated and poorly conducted

research that has been widely discredited by the scientific and dental communities. Modern studies have shown no credible evidence linking properly performed root canals to systemic diseases. In fact, root canal therapy effectively eliminates the source of infection within the tooth, promoting overall oral and systemic health [4].

Fact: Root canals are safe and effective

Root canal therapy is a safe, common, and highly effective dental procedure. Dentists, equipped with advanced technology and expertise, can accurately diagnose the extent of the infection and perform the root canal with precision. The procedure has a high success rate, and with proper care, a tooth that has undergone root canal therapy can last a lifetime.

Myth: Root canals are lengthy and time-consuming

Another misconception is that root canals require multiple lengthy appointments, causing inconvenience to patients. While the complexity of the case can influence the duration of the procedure, most root canals can be completed in one or two visits to the dentist. Advances in dental technology, such as rotary instruments and digital imaging, have streamlined the root canal process, making it more efficient and reducing the time spent in the dental chair [5].

Fact: Root canals are timely and precise

Modern root canal procedures are performed with remarkable precision and efficiency. Dentists use specialized instruments and imaging techniques to accurately assess the tooth's condition and perform the necessary treatment. The goal is to remove the infected pulp, clean the canal thoroughly, and seal the tooth effectively. Dentists prioritize patient comfort and strive to complete the procedure in a timely manner, ensuring a positive experience for the patient. Root canal therapy, also known as endodontic therapy, is a dental procedure designed to treat and save a severely damaged or infected tooth. The treatment involves removing the pulp – the soft tissue inside the tooth – when it becomes inflamed or infected. This inflammation or infection can occur due to various reasons, including deep decay, repeated dental procedures on the tooth, or traumatic damage like cracks or chips.

Description

The process

Diagnosis: The first step in root canal therapy is a thorough examination by a dentist or an endodontist, a specialist in treating the inner portion of teeth. X-rays are usually taken to assess the extent of the infection and to visualize the root canals and surrounding bone.

Local anesthesia: Before the procedure begins, the affected tooth and the surrounding area are numbed using local anesthesia. This ensures that the patient is comfortable and pain-free during the treatment.

Isolation: A rubber dam is placed around the tooth to keep it dry and free of saliva during the procedure. This isolation ensures a clean and controlled environment for the dentist to work in.

Access opening: The dentist drills a small opening in the crown (top) of the tooth to access the pulp chamber and root canals. This access allows the removal of the infected or damaged pulp tissue.

Cleaning and shaping: The dentist cleans the pulp chamber and the root canals using specialized instruments. The canals are shaped to remove any

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remaining pulp tissue, bacteria, and debris. The canals are then disinfected to eliminate any lingering infection.

Filling: After cleaning and shaping, the empty root canals are filled with a biocompatible material called gutta-percha to seal the space. This prevents future infection and strengthens the tooth's structure.

Restoration: After the root canal therapy, the tooth is fragile and more susceptible to fractures. Therefore, a restoration like a dental crown is often placed on the treated tooth to protect it and restore its strength and functionality. Impressions are taken, and a custom-made crown is placed over the tooth, ensuring its natural appearance and functionality.

Benefits of root canal therapy

Pain relief: Root canal therapy alleviates severe toothache caused by inflammation or infection of the pulp. Once the infected pulp is removed, the pain subsides, and the patient feels relief.

Preservation of natural tooth: By removing the infected pulp and sealing the tooth, root canal therapy allows the natural tooth to be preserved. Preserving natural teeth is crucial for maintaining oral function and preventing issues like shifting of neighboring teeth.

Efficient chewing and biting: After the root canal and placement of a dental crown, the treated tooth functions like a natural tooth, allowing efficient chewing and biting. This ensures that the patient can enjoy a normal diet without discomfort.

Improves overall oral health: By preserving the natural tooth and eliminating infection, root canal therapy contributes to overall oral health. It maintains the integrity of the dental arch and promotes a healthy oral environment.

Conclusion

In conclusion, root canal therapy is a vital dental procedure that has been clouded by myths and misconceptions. It is essential for individuals to be well-informed about the facts surrounding root canals to make informed decisions about their oral health. Debunking these myths and embracing the facts can empower patients to seek timely and necessary dental care, ultimately preserving their natural teeth and ensuring a lifetime of healthy smiles. Dentistry continues to advance, making root canal therapy

more efficient, comfortable, and accessible than ever before, reinforcing its importance in the realm of modern dental care.

Acknowledgement

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Conflict of Interest

None.

References

1. Shivakumar, K. M., Sumanth Prasad and G. N. Chandu. "International caries detection and assessment system: A new paradigm in detection of dental caries." *J Conserv Dent* 12 (2009): 10.
2. Little, W. A., D. C. Korts, L. A. Thomson and W. H. Bowen. "Comparative recovery of *S. mutans* on ten isolation media." *J Clin Microbiol* 5 (1977): 578-583.
3. Zeng, Yan, Moustafa Youssef, Lin Wang and Naemah Alkhars, et al. "Identification of non-streptococcus mutans bacteria from predente infant saliva grown on mitis-salivarius-bacitracin agar." *J Clin Pediatr Dent* 44 (2020): 28-34.
4. Su, Shih-Yung. "Evaluation of nationwide oral mucosal screening program for oral cancer mortality among men in Taiwan." *Int J Environ Res Publ Health* 19 (2022): 14329.
5. Ko, Ying-Chin, Yung-Li Huang, Chien-Hung Lee and Mei-Ju Chen, et al. "Betel quid chewing, cigarette smoking and alcohol consumption related to oral cancer in Taiwan." *J Oral Pathol Med* 24 (1995): 450-453.

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