

# — FOCUS ON: Endodontic Emergencies —

*Emergencies can be intrusive in a busy day!*

**Q:** How can the dental team distinguish between a true emergency vs a non-emergency?

**A:** Much of how a dental team reacts to an emergency patient is based on training, judgment, and experience. There are 3 critical questions your dental team should be trained to ask an emergency patient in pain to protect an already fully scheduled day: How bad would you rate your pain? How long have you been in pain? Is there a stimulus that triggers your pain?

Your team should carefully clarify each question so the patient can be scheduled at a time that is least disruptive. You want to triage true emergency patients who need urgent care from non-emergency patients.

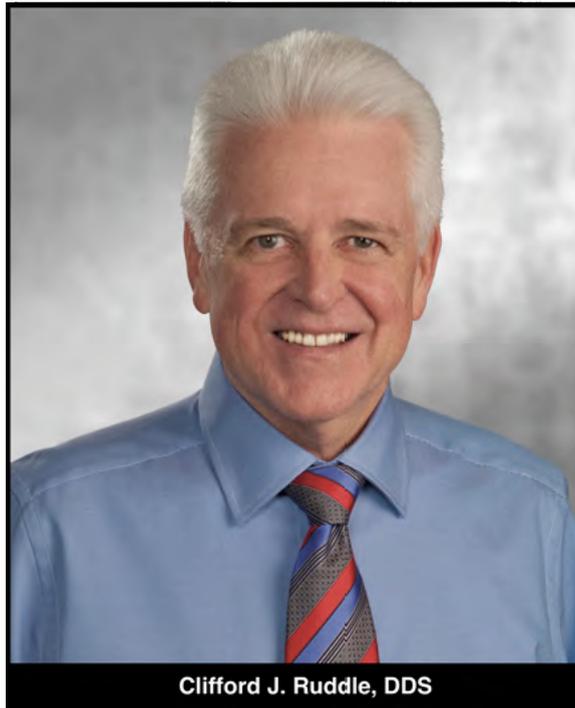
Other variables also influence the management of emergencies. For example, is the patient currently anesthetized or taking any medication that could mask the chief complaint? Or, is the pain associated with a maxillary versus a mandibular or an anterior versus a posterior tooth?

**Q:** Are there different types of emergencies? If so, which type involves the most time to manage?

**A:** Although traumatic facial injuries can be serious and require various interdisciplinary skills, the most commonly encountered endodontic emergencies may be divided into 3 types: vital emergencies, necrotic emergencies, and emergencies associated with endodontically failing teeth. The essential tenet in providing emergency endodontic treatment is to promptly eliminate pain and reschedule when there is adequate time to provide definitive care.

In the case of a vital emergency, the patient may report spontaneous, sharp, or radiating pain. Classically, the chief complaint is an immediate, intense, and prolonged painful response to a cold stimulus. In my experience, vital emergencies typically require the most chair time to manage. Once you have identified the culprit tooth and achieved profound anesthesia, which can be challenging, retest this tooth with a cold stimulus before isolating it with a rubber dam. If your patient still feels cold, supplemental anesthesia will be required. Emergency treatment is directed toward reducing the occlusion when practical, preparing an endodontic access cavity, and performing a pulpotomy. If bleeding is quickly arrested, place a dry cotton pellet and provisionalize the tooth. Alternatively, if time permits, definitive treatment may be provided.

However, many highly inflamed pulps continue to vigorously bleed after completing the pulpotomy. In these instances, the most predictable emergency



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treatment requires the pulp to be extirpated from any given canal that bleeds excessively. Leaving inflamed pulp deep within the canal does not predictably eliminate pain post-treatment and invites anesthesia difficulties on the next working visit. Within reason, I do not place an instrument into any canal unless I can be fairly definitive. Be willing to free up your schedule so you can provide what will be perceived as miraculous emergency care.

**Q:** How does a necrotic emergency differ from a vital emergency, and how is it managed?

**A:** In a necrotic emergency, the patient may report a spontaneous, dull, throbbing ache; pain from biting pressure; or, at times, intra- and/or extraoral swelling. Classically, the chief complaint is severe pain to a hot stimulus that can be alleviated by a cold liquid. Conventional radiographic or CBCT images reveal that these teeth commonly exhibit lesions of endodontic origin. Performing emergency treatment on necrotic teeth is more straightforward compared to vital teeth. Anesthetize, isolate, and perform an emergency pulpotomy only! Adjust the occlusion. If practical, place one large, fluffy cotton pellet in the access cavity. And, if you're looking for the most predictable result, leave the tooth open!

Visualizing productive drainage emanating from the pulp chamber of a necrotic tooth is a reassuring confirmation that the patient will subsequently describe the emergency treatment as a miracle visit. On the other hand, just because you do

not see an exudate does not mean there will not be relief of pain. Putrescent necrotic tissue frequently contains gas-producing microorganisms. Intentionally leaving an acutely painful and necrotic tooth open for 3 to 4 days for drainage is exactly analogous to a surgeon performing an incision and drainage, then placing a drain to prevent wound closure and to encourage subsequent drainage during the acute phase of infection. Prescribe the appropriate antibiotic and anti-inflammatory. Provide the patient with open-tooth instructions and schedule the next visit so there is sufficient time to shape, clean, and pack this tooth from the open position after the patient is comfortable, but still on the antibiotic.

**Q:** How would you manage an emergency related to endodontic failures?

**A:** In this type of endodontic emergency, the patient typically reports severe spontaneous pain, acute pain to biting pressure, and, at times, swelling. Diagnostic radiographic images reveal a history of previous root canal treatment and, frequently, lesions of endodontic origin. These infected, endodontically failing teeth should not be disassembled during the acute phase of the disease process. Palliative emergency treatment is directed toward adjusting the occlusion, if practical, and prescribing the appropriate antibiotic, anti-inflammatory, and, if necessary, a narcotic. After 3 to 4 days, these patients may be scheduled for a working visit.

**Q:** What are the upsides to effectively managing emergency patients?

**A:** One of the oldest maladies of mankind is the toothache, which can provoke fear and anxiety regarding the unknown. The dental team that can deliver painless, effective, and compassionate emergency care typically earns patient respect, confidence, and trust. Emphasis should be directed toward developing the psychological and communication skills so important in managing distressed patients.

Following the emergency visit, a simple phone call not only gives the dental team a report on how the patient is doing, but also gives the patient an opportunity to report how the dental team did during all aspects of the emergency experience. When dental patients verbally detail their experiences to you, it subliminally serves as a powerful rehearsal for them to express their satisfaction to others.

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