

CASE REPORT

Loss of Sight Caused by Calcium Hydroxide Paste Accidentally Splashed into the Eye During Endodontic Treatment:

Case Report

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Calcium hydroxide is widely used as an intracanal medication in root canal treatments. The most common and effective type of calcium hydroxide is in an aqueous suspension. It kills a wide spectrum of bacteria and remains active for a long time. The antibacterial effect of calcium hydroxide is due directly to its high pH (12–13) (1-4). However, tissue damage occurs when calcium hydroxide is applied beyond the root canal space. De Bruyne and others, and Bramante and others described cases of overextending a calcium hydroxide intracanal dressing into the periradicular and soft tissue after iatrogenic perforation of maxillary incisors (5,6). The result was severe necrosis of gingival and oral mucosa. Sharma and others described 2 cases in which calcium hydroxide was injected into an artery through the root canal system of maxillary canals (7). In both cases, the



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Abstract

Calcium hydroxide, widely used in endodontic treatment, is a strong base that may cause irreversible injury to vital tissue that comes into contact with this substance.

We present the first case of a dentist who accidentally splashed endodontic calcium hydroxide into her own eye. After washing with copious amounts of water for several minutes, she was treated in the hospital within 30 minutes of the accident. Because of the burning caused by the base solution, the dentist lost vision in the affected eye. She returned to the hospital several times for treatment of a corneal abscess and corneal fungal infection. She had the keloid that formed between the eyeball and eyelid removed 3 times. Calcium hydroxide can cause blindness when it comes into contact with the eye.

Clinicians should take adequate precautions to prevent this serious complication. In case of an accident, it is important to wash the eye efficiently.

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