

# A Simple Retrieval Technique for Accidentally Displaced Mandibular Third Molars

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The retrieval of an accidentally displaced mandibular third molar with conventional techniques has always been complicated. This report describes a simple technique to retrieve a displaced impacted mandibular third molar.

Accidental displacement of impacted third molars, either a root fragment, the crown, or the entire tooth, is a complication that occasionally occurs during exodontia but is rarely discussed.<sup>1-5</sup> The most common sites of dislodgment of an impacted mandibular third molar are the submandibular and pterygomandibular spaces. Retrieval of such a displaced tooth is typically approached transorally.<sup>4,5</sup> The surgical procedure may be complex due to poor visualization and limited space, and it is usually performed under general anesthesia. We describe an easy technique to remove an accidentally displaced mandibular third molar using a combined transoral and extraoral approach.

## Technique

Three patients were referred for the removal of 2 accidentally displaced root fragments and 1 entire impacted mandibular third molar during the past 8 years. Radiographic examination showed that the molars were dislodged into the submandibular space (Fig 1). The procedure was performed under local anesthesia and intravenous sedation in 2 patients and under general anesthesia in 1 patient due to severe trismus.

The original wound was extended lingually to the distal side of the first molar. The mucoperiosteal flap was then reflected carefully so as not to damage the

lingual nerve. A 4-mm-long skin incision was made in the submandibular region. A hemostat was inserted via the skin incision, pushing upward along the lingual surface of the mandible to stabilize the fragment or tooth while an index finger of the surgeon was placed into the floor of the mouth to feel the fragment (Fig 2). The hemostat was then replaced with a transoral Kelly clamp to hold the fragment gently and deliver it upward into the mouth (Fig 3). All 3 patients had teeth successfully removed without complications.

## Discussion

Impacted mandibular third molars may be pushed through a perforation in the lingual surface of the mandible into the region of the submandibular fossa. The thin lingual plate can be fractured during the attempt to remove the tooth, and retrieval of such a displaced tooth is usually difficult. The conventional retrieval technique uses an assistant to keep constant upward external pressure in the submandibular region to push the fragment toward the oral cavity. The lingual gingiva may be reflected as far forward as the premolar region, and the mylohyoid muscle is de-



**FIGURE 1.** A panoramic radiograph reveals a displaced fragment of the left impacted mandibular third molar.

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**FIGURE 2.** A hemostat is inserted along the lingual surface of the mandible to stabilize the tooth fragment, while an index finger is placed into the floor of the mouth to feel the fragment.

tached to gain adequate access to the submandibular space.<sup>4</sup>

Locating the displaced tooth or tooth fragments is often difficult because of limited space, hemorrhage, and poor visualization, and blind probing may result in further displacement.<sup>5</sup> Upward external pressure in the submandibular region is not likely to be of much help in an obese patient or if the region is swollen because of hemorrhage or infection.



**FIGURE 3.** The tooth is removed.

The technique prescribed here does not require a large lingual flap for visualization. Submandibular access to control the tooth fragment prevents further displacement during the procedure despite poor visualization. After localization of the tooth, it is easily removed by pushing it upward with an instrument, resulting in a more effective and less traumatic surgical procedure.

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