

The new technique for reduction of bilateral mandibular dislocation

Temporomandibular joint (TMJ) dislocation is an unusual presentation to the emergency department (ED) and may occur in up to 5% of the population during their lifetime. Anterior dislocation is the most common type seen in clinical practice. In the traditional method described for reduction of bilateral TMJ dislocation, the operator stands in front of the patient and inducts intraoral bilateral inferior-posterior downward force on the patient's molar occlusal surfaces. In the case that is presented here, this ordinary maneuver failed, but the technique of intraoral bilateral inferior-anterior downward force on the back of the last molar teeth wherein the patient was placed on bedstead in semi-sitting position and the operator stands behind the patient was successful in the reduction of the mandibular dislocation.

A 33-year-old healthy woman presented to the ED with bilateral mandibular pain and was feeble to close her mouth while speaking. She described that she has been unable to close her mouth after the incident. She had experienced TMJ dislocation before this episode once. In physical examination, patient mouth was open entirely, and the patient was not able to move her mouth from its locked position. X-ray studies show a bilateral mandibular dislocation. The patient was

placed on bedstead in semi-sitting position, and cardiac monitoring and pulse oximetry were established. In addition, oxygen of 10 L/min was administered for the patient. Then, fentanyl 100 µg with sodium thiopental 150 mg for procedural sedation and analgesia was given intravenously. The ordinary technique was attempted without success. An additional dose of 100 mg sodium thiopental was given to the patient, and then another attempt with the traditional technique was unsuccessful again. After attempting reduction twice, this new technique (semi-sitting approach) was successful in reducing bilateral TMJ dislocation, and the joint examination after the procedure as well as x-ray studies confirmed the reduction.

I examine the new technique for reduction of bilateral mandibular dislocation resistant to the ordinary method. In this new technique (semi-sitting approach), the patient perches on bedstead in semi-sitting position and the physician stands behind the patient. Then, the physician places 2 thumbs bilaterally posterior to the patient's last molar teeth, on the retro-molar gum along the ramus of mandible. Then, bilateral inferior-anterior downward force in this position was given. The benefits of this technique are that the bilateral inferior-anterior downward force provides a levering action on the mandible, which reduction with lower force than conventional methods accomplished, and that it increases the chance of successful reduction of bilateral mandibular dislocations. In addition, it looks that working with this technique is easier than conventional methods for operators.

Eventually, semi-sitting technique was applied successfully for 1 bilateral TMJ dislocation. According to use of the lower force for reduction, it looks that the possibility of complications during reduction is lower than ordinary methods.

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