

## Airway Evaluation for Endotrache Mandibular Prognathic Patients

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**Background:** The fundamental responsibility of an anesthesiologist is to maintain adequate gas exchange. Failure to maintain a patent airway can result in brain damage or death. Generally, in patients with mandibular prognathism, who have the protruded mandible, the mask ventilation was thought to be not easy. The purpose of this study was to observe the degree of the difficulty of airway management in mandibular prognathism using some anatomic criteria for defining and grading difficulty of airway and difficulty of endotracheal intubation with direct laryngoscopy.

**Methods:** The observations and measurements are done to the 54 patients with mandibular prognathism, who were scheduled for corrective esthetic surgery. The case study is done to the 30 patients with normal mandible for control group. In all patients, mouth opening distance (MOD), mouse opening angle (MOA), mandibular length (ML), mandibular depth (MD), thyromental distance (TMD), thyromental area (TMA), Mallampati grades, and Cormack and Lehane grades are measured. T-test and Chi-square test are done ( $P < 0.05$ ).

**Results:** In the mandibular prognathism cases, the measurements of MD, TMD and TMA are more greater than those of controls ( $P < 0.05$ ). Mallampati grades with tongue thrust are higher in the female mandibular prognathism cases than those of female controls. Most of the grades of the mandibular prognathism cases with Cormack and Lehane grading system are I or II being easy intubation cases ( $P < 0.05$ )

**Conclusions:** In the patients of mandibular prognathism, the intubation with laryngoscope will be easier than that of normal mandible in general. It is for that their laryngeal aperture can be easily visible when the laryngoscope are used.