Absract

Background: Difficult Intubation is just a significant cause of mortality and morbidity relate to the Anesthesia. We decided to evaluate the value of Mallampati score, Upper Lip Bite Test and Facial Angle in prediction of difficult intubation.

Methods: In a prospective descriptive study, data from 132 patients candidate for elective maxillofacial surgeries under general anesthesia were gathered. Facial Deep Angles were measured by maxillofacial surgon according to the cephalometry. An anesthesiologist evaluated the modifiedmallampati score and Upper Lip Bite Test and another anesthesiologist evaluated Cormack and Lehane score during the Intubation . Grade 3, 4 were defined as difficult Intubation. Sensitivity, specificity, positive predictive value, negative predictive value and Youden index were determined for all tests.

Results: Difficult Intubation was reported in 12% of the patients. Facial Angels≤ 82.5 ° can predict difficult intubation with 87.5% sensitivity and 88.8% specifity. Among three tests, Modified Mallampati Score was of highest specificity (94.5%) and Modified Mallampati Score and facial angle of highest sensitivity (87.5%). The highest NPV, sensitivity and Youden index were observed when using facialangle with modified mallampati score or with Upper Lip Bite Test.

Conclusions: Facialdeep angle has a high sensivity, NPV and Youden index for prediction of difficult intubation, but the best way for prediction of difficult intubation is the combination of Facial Angle with one of the Modified Malampati Scoreor Upper Lip Bit Test.

Keywords: Difficult intubation, Modified Mallampati Score, Upper lip bite test, Facial Angle