

## Videolaryngoscopic Intubation in Patients with Difficult Airway Risk Factors

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**Introduction.** Unanticipated difficult intubation is a significant problem in anaesthesiology. Bedside difficult airway evaluation, methods such as El-Ganzouri risk index can help to predict difficult glottic visualisation when using direct laryngoscopy. However, evidence of using El-Ganzouri risk index in difficult laryngeal visualisation using videolaryngoscopes is limited.

**Aim, Materials and Methods.** The aim of the study was to determine the specificity and sensitivity of El-Ganzouri multivariate risk index to predict difficult glottic visualisation using Storz C-MAC videolaryngoscope equipped with D type blade. We determined El-Ganzouri multivariate risk index in 29 patients before induction of anaesthesia. After induction of anaesthesia, videolaryngoscopy was performed using Storz C-MAC videolaryngoscope equipped with D-blade and glottic visualisation was graded using Cormack-Lehane scale. After laryngeal visualisation grading endotracheal tube insertion was performed, and a number of attempts as well as complications during intubation were recorded. Sensitivity, specificity, positive and negative predictive values were calculated, receiver operating characteristic curve and area under curve was obtained.

**Results.** Sensitivity and specificity for prediction of difficult glottic visualisation were 54.2% and 80.0% at El-Ganzouri risk index cut-off value of two points. Calculated positive predictive value was 26.7% and negative predictive value was 92.9%. Calculated AUC was 78.3%.

**Conclusion.** El-Ganzouri risk index shows moderate sensitivity and specificity when used in patients intubated with Storz C-MAC videolaryngoscope. It is useful in prediction of difficult glottic visualisation during videolaryngoscopic intubation.

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