

PERBANDINGAN SENSITIVITAS DAN SPESIFISITAS *UPPER LIP BITE TEST* DAN *MODIFIED MALLAMPATI TEST* SEBAGAI PREDIKTOR KESULITAN INTUBASI PADA PASIEN GENERAL ANESTESI DI RSUD DR. MOHAMAD SOEWANDHIE SURABAYA

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ABSTRAK

Latar Belakang: Hingga saat ini telah dikembangkan banyak metode untuk memprediksi kejadian kesulitan intubasi, di antaranya adalah *upper lip bite test* (ULBT) dan *modified Mallampati test* (MMT). Penelitian-penelitian yang telah dilakukan sebelumnya menemukan bahwa kedua prediktor tersebut memiliki sensitivitas dan spesifisitas yang cukup baik dalam memprediksi kejadian kesulitan intubasi.

Tujuan: Mengetahui perbandingan sensitivitas dan spesifisitas dari ULBT dan MMT sebagai prediktor kesulitan intubasi pada pasien general anestesi.

Metode: Metode yang digunakan adalah penelitian kuantitatif observasional analitik dengan desain *cross-sectional*. Populasi dalam penelitian ini adalah semua pasien dengan general anestesi intubasi ETT di RSUD dr. Mohamad Soewandhie Surabaya. Penelitian dilakukan pada Februari-Maret 2025. Sampel 59 responden yang diambil dengan teknik *purposive sampling*. Pada fase preoperasi, semua responden dikaji dengan kedua prediktor, yaitu ULBT dan MMT. Responden dengan ULBT kelas III dan/atau MMT kelas III atau IV diprediksi akan mengalami kesulitan intubasi. Penilaian saat laringoskopi dilakukan dengan *Cormack-Lehane classification* dengan kelas III dan IV dianggap mengalami kesulitan intubasi. Analisis data dilakukan dengan uji diagnostik dan uji *Receiver Operating Curve* (ROC).

Hasil: Dalam penelitian ini, kesulitan intubasi ditemukan 30,51% (18 dari 59 responden). Hasil analisis data antara ULBT dan MMT ditemukan sensitivitas (0% vs 88,9%), spesifisitas (97,6% vs 48,8%), nilai prediksi positif (0% vs 43,2%), nilai prediksi negatif (68,9% vs 90,9%), dan kualitas diskriminasi (sangat lemah vs sedang).

Kesimpulan: *Modified Mallampati test* (MMT) memiliki nilai sensitivitas dan kualitas diskriminasi yang lebih baik dibandingkan *upper lip bite test* (ULBT) dalam memprediksi kesulitan intubasi pada pasien general anestesi intubasi *endotracheal tube*.

Kata Kunci: General anestesi, Kesulitan intubasi, *Upper lip bite test*, *Modified Mallampati test*, *Cormack-Lehane classification*

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**COMPARISON OF SENSITIVITY AND SPECIFICITY OF THE UPPER LIP
BITE TEST AND MODIFIED MALLAMPATI TEST AS PREDICTORS OF
DIFFICULT INTUBATION IN GENERAL ANESTHESIA PATIENTS AT
RSUD DR. MOHAMAD SOEWANDHIE SURABAYA**

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ABSTRACT

Background: Many methods have been developed to predict difficult intubation, including the Upper Lip Bite Test (ULBT) and the Modified Mallampati Test (MMT). Previous studies have shown that both predictors possess fairly good sensitivity and specificity in anticipating difficult intubation.

Objective: This study aimed to compare the sensitivity and specificity of ULBT and MMT as predictors of difficult intubation in patients undergoing general anesthesia.

Methods: This was a quantitative analytic observational study with a cross-sectional design. The population consisted of all patients who underwent endotracheal intubation under general anesthesia at RSUD dr. Mohamad Soewandhie Surabaya. The study was conducted from February to March 2025, with 59 respondents selected through purposive sampling. In the preoperative phase, all respondents were assessed using both ULBT and MMT. Respondents with ULBT class III and/or MMT class III or IV were predicted to experience difficult intubation. Laryngoscopy assessment was performed using the Cormack-Lehane classification, with class III and IV considered indicative of difficult intubation. Data were analyzed using diagnostic tests and Receiver Operating Curve (ROC) analysis.

Results: In this study, difficult intubation was found in 30.51% of cases (18 out of 59 respondents). The diagnostic comparison between ULBT and MMT showed sensitivity (0% vs. 88.9%), specificity (97.6% vs. 48.8%), PPV (0% vs. 43.2%), NPV (68.9% vs. 90.9%), and discriminatory ability (very poor vs. moderate).

Conclusion: The Modified Mallampati test (MMT) demonstrated better sensitivity and discriminatory power than the upper lip bite test (ULBT) in predicting difficult intubation in patients undergoing general anesthesia with endotracheal intubation.

Keywords: General anesthesia, Difficult intubation, Upper lip bite test, Modified Mallampati test, Cormack-Lehane classification

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