

Latar belakang: Kondisi bibir dan/ atau palatum sumbing sering menyulitkan intubasi pasien pediatrik. Evaluasi perioperatif dan identifikasi determinan keberhasilan intubasi seperti skala Copur, usia, jenis kelamin, status fisik ASA, status gizi, serta tingkat keterampilan intubator penting untuk meningkatkan luaran klinis.

Tujuan: Mengidentifikasi determinan yang memengaruhi keberhasilan intubasi pada percobaan pertama pasien pediatrik dengan bibir dan/ atau palatum sumbing yang menjalani operasi rekonstruksi elektif.

Metode: Penelitian ini merupakan penelitian kohort prospektif yang dilakukan di RSUP Dr. Sardjito Yogyakarta selama Maret 2022 hingga Desember 2024 terhadap 108 pasien anak dengan bibir dan/ atau palatum sumbing. Analisis data menggunakan STATA 15.0 dengan regresi logistik multivariat untuk menentukan pola hubungan, kekuatan asosiasi, serta determinan potensial. Besaran risiko dalam bentuk *Adjusted Odds Ratio* (AOR). Seluruh variabel dengan nilai $p < 0,25$ dimasukkan dalam model multivariat dengan tingkat signifikansi statistik $\alpha = 0,05$.

Hasil: Total sampel sebanyak 108 subjek, dengan proporsi laki-laki lebih tinggi, yaitu sebesar 50.93%. Berdasarkan kurva Indeks Massa Tubuh terhadap usia, mayoritas berada dalam kategori status gizi baik (68.5%), diikuti oleh *underweight* (23.15%), *overweight* - obesitas (8.35%). Sebagian besar subjek memiliki status fisik ASA kelas I (49.1%). Keberhasilan intubasi percobaan pertama pada pasien bibir dan/ atau palatum sumbing yang dilakukan operasi rekonstruksi didapatkan prevalensi sebanyak 62% dengan 62.04% di antaranya dilakukan oleh residen senior. Keberhasilan intubasi percobaan pertama pada anak dengan bibir dan/ atau palatum sumbing adalah sebesar 62%. Analisis multivariat menunjukkan bahwa status fisik ASA 2 (AOR 1.14; 95% CI 1.11–1.17; $p = 0.041$), tingkat kompetensi intubator residen senior (AOR 1.56; 95% CI 1.07–2.03; $p = 0.002$), dan skala Copur <8 (AOR 1.63; 95% CI 1.441–2,532; $p = 0.018$) merupakan determinan keberhasilan intubasi pada percobaan pertama. Variabel lain seperti derajat Cormack-Lehane dan status gizi tidak signifikan secara statistik dalam analisis multivariat, namun tetap relevan untuk dipertimbangkan dalam konteks klinis dan penilaian perioperatif.

Kesimpulan: Status fisik ASA 2, tingkat kompetensi intubator residen senior, dan skala COPUR <8 merupakan determinan utama yang secara signifikan berhubungan dengan keberhasilan intubasi percobaan pertama pada pasien anak dengan bibir dan/ atau palatum sumbing

Kata Kunci: Bibir sumbing, Palatum sumbing, Percobaan pertama intubasi, Anestesi umum.

ABSTRACT

Background: Cleft lip and/or palate conditions often complicate intubation in paediatric patients. Perioperative evaluation and identification of determinants of intubation success, such as the Copur scale, age, gender, ASA physical status, nutritional status, and intubator skill level, are important for improving clinical outcomes.

Objective: To identify determinants influencing the success of intubation on the first attempt in paediatric patients with cleft lip and/or palate undergoing elective reconstructive surgery.

Methods: This prospective cohort study was conducted at Dr. Sardjito General Hospital in Yogyakarta from March 2022 to December 2024, involving 108 paediatric patients with cleft lip and/or palate. Data analysis was performed using STATA 15.0 with multivariate logistic regression to determine the pattern of relationships, strength of associations, and potential determinants. Risk measures were expressed as Adjusted Odds Ratios (AOR). All variables with p -values < 0.25 were included in the multivariate model with a statistical significance level of $\alpha = 0.05$.

Results: The total sample consisted of 108 subjects, with a higher proportion of males (50.93%). Based on the Body Mass Index (BMI) curve against age, the majority were in the good nutritional status category (68.5%), followed by underweight (23.15%) and overweight/obese (8.35%). Most subjects had ASA physical status class I (49.1%). The success rate of the first intubation attempts in patients with cleft lip and/or palate who underwent reconstructive surgery was 62%, with 62.04% of these procedures performed by senior residents. The success rate of the first intubation attempt in children with cleft lip and/or palate was 62%. Multivariate analysis showed that ASA physical status 2 (AOR 1.14; 95% CI 1.11–1.17; $p = 0.041$), intubator competence level senior resident (AOR 1.56; 95% CI 1.07–2.03; $p = 0.002$), and Copur scale < 8 (AOR 1.63; 95% CI 1.441–2.532; $p = 0.018$) were determinants of first-attempt intubation success. Other variables, such as Cormack-Lehane grade and nutritional status, were not statistically significant in the multivariate analysis, but remain relevant to consider in the clinical context and perioperative assessment.

Conclusion: ASA physical status 2, intubator competence level senior resident, and COPUR scale < 8 are the primary determinants significantly associated with the success of the first intubation attempt in paediatric patients with cleft lip and/or palate.

Keywords: Cleft lip, Cleft palate, First intubation attempt, General anaesthesia.