ANALYSIS OF ANATOMICAL CHARACTERISTICS IN PREDICTING DIFFICULT INTUBATION ACCORDING TO WILSON RISK SUM IN GENERAL ANESTHETIC PATIENTS AT CENTRAL SURGICAL INSTALLATION OF DR SOEDIRMAN KEBUMEN HOSPITAL

Kania Ratna Arimbi[1], Yustiana Olfah[2], Tri Widyastuti Handayani[3]
[1]Nursing Anesthesia Student of Health Polytechnic Ministry of Health Yogyakarta
[2,3]Nursing Department Lecturer of Health Polytechnic Ministry of Health Yogyakarta
Jl. Tatabumi No. 3, Banyuraden, Gamping, Sleman
E-mail : kaniaratna1@gmail.com

ABSTRACT

Background: *It is very important to prevent difficult intubation, because it is the most important technique in managing difficult airway and be the most common technique in rescuing airway obstruction. Difficult intubation in managing airway management can be prevented by doing pre anesthesia assessment using Wilson risk sum. This parameter has 40% sensitivity level and 98% specificity, which this is higher than Mallampati classification (23% and 89.4%) because Wilson risk sum not only focus on one characteristics but also focus in weight, head and neck movement, jaw movement, receding mandibular, and overbite.*

Objective: *The purpose of this study was to determine the characteristics of difficult intubation according to Wilson Risk Sum.This research is a cross sectional study with total sampling.*

Method: *Sample used in this study were 45 patients underwent surgery with endotracheal tube (ETT) intubation at General Hospital dr. Soedirman Kebumen during October – November 2021. Data analysis using Chi Square (X^2) and Logistics Regression.*

Result: *The results of this study were about 14 people (31.1%) had difficulty intubating. The results of the Chi Square test showed that there was a significant correlation between weight (p=0.002), head and neck movement (p=0.002), and jaw movement (p=0.002). While, there was no significant correlation between receding mandibular (p=0.165) and overbite (p=0.657) with difficult intubation. The results of Logistic Regression stated that weight (OR: 33,105) was the most influential factor in difficult intubation, then followed by head and neck movement (OR: 13,776) and jaw movement (OR: 3,110).*

Conclusion: *There was a significant correlation between weight, head and neck movement, and jaw movement with difficult intubation. There was no significant correlation between receding mandible and overbite with difficult intubation. Weight is the most influential risk factor in predicting difficult intubation.*

Keyword: *Difficult Intubation, Wilson Risk Sum, General Anesthesia.*

ANALISIS KARAKTERISTIK ANATOMI PENYULIT INTUBASI MENURUT WILSON RISK SUM PADA PASIEN ANESTESI UMUM DI IBS RSUD DR SOEDIRMAN KEBUMEN

Kania Ratna Arimbi[1], Yustiana Olfah[2], Tri Widyastuti Handayani[3]
[1]Mahasiswa Sarjana Terapan Keperawatan Anestesiologi Poltekkes Kemenkes Yogyakarta
[2,3]Dosen Jurusan Keperawatan Poltekkes Kemenkes Yogyakarta
Jl. Tatabumi No. 3, Banyuraden, Gamping, Sleman
E-mail : kaniaratna1@gmail.com

ABSTRAK

Latar Belakang: Kesulitan intubasi sangat penting untuk diantisipasi, karena merupakan teknik terpenting dalam memanajemen jalan nafas kasus beresiko tinggi dan teknik pertolongan paling umum pada sumbatan jalan nafas. Kesulitan intubasi dalam pengelolaan jalan nafas dapat di cegah dengan adanya pemeriksaan pre-anestesi dengan *Wilson Risk Sum* yang memiliki tingkat sensitivitas 40% dan spesifisitas 98% yang lebih tinggi daripada klasifikasi Mallampati yaitu 23% dan 89,4%. Hal ini karena parameter ini berfokus kepada berat badan, pergerakan kepala dan leher, pergerakan rahang, *receding* mandibula, dan *overbite*.

Tujuan: Tujuan penelitian ini untuk mengetahui karakteristik penyulit intubasi menurut *Wilson Risk Sum*. Penelitian ini merupakan *cross sectional study* dengan *total sampling*.

Metode: Sampel penelitian ini sebanyak 45 pasien yang menjalani pembedahan dengan tindakan intuabasi *endotracheal tube* (ETT) di RSUD dr. Soedirman Kebumen pada bulan Oktober – November 2021.

Hasil: Analisis data menggunakan *Chi Square (X^2)* dan Regresi Logistik. Hasil dari penelitian ini adalah sebanyak 14 orang (31,1%) mengalami kesulitan intubasi. Hasil uji *Chi Square (X^2)* didapatkan adanya hubungan berat badan *(p=0,002),* pergerakan kepala dan leher *(p=0,002)*, dan pergerakan rahang *(p=0,002)* dengan kesulitan intubasi. Sementara itu tidak ada hubungan antara *receding* mandibula *(p=0,165)* dan *overbite (p=0,657)* dengan kesulitan intubasi. Hasil Regresi Logistik menyatakan berat badan (OR: 33,105) adalah faktor paling berpengaruh dalam kesulitan intubasi yang diikuti pergerakan kepala dan leher (OR: 13,776) dan pergerakan rahang (3,110).

Kesimpulan: Terdapat hubungan antara berat badan, pergerakan kepala dan leher, serta pergerakan rahang dengan kesulitan intubasi. Tidak terdapat hubungan antara *receding* mandibular dan *overbite* dengan kesulitan intubasi. Berat badan adalah faktor risiko yang paling dominan.

Kata Kunci: Kesulitan Intubasi, Skor Wilson, Anestesi Umum.