

# What Are the Incidence and Risk Factors of Extubation Failure in Patients With and Without Obesity?

## STUDY DESIGN

Retrospective analysis of prospectively collected data from a multicenter observational study in 26 ICUs to compare the incidence of extubation failure in patients with and without obesity

Secondary objectives were to describe and identify risk factors for extubation failure

## RESULTS

### Incidence of Extubation Failure

<b>With Obesity</b> 8.0%		Without Obesity 11.0%
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Unadjusted OR, 0.71  
95% CI, 0.45-1.13

### Use of Noninvasive Ventilation

 <b>With Obesity</b> 30%	Without Obesity 22%
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### Physiotherapy

 <b>With Obesity</b> 57%	Without Obesity 49%
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### Risk Factors for Extubation Failure

Adjusted OR, 95% CI



#### With Obesity

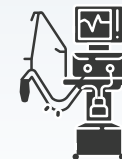
Female  
4.88; 95% CI, 1.61-13.9

Agitation  
6.39; 95% CI, 1.91-19.8

#### Without Obesity

Absence of Strong Cough  
2.38; 95% CI, 1.53-3.84

Duration of Mechanical Ventilation  
1.03/d; 95% CI, 1.01-1.06



The incidence of extubation failure did not vary between patients with and without obesity, but risk factors for extubation failure were different. Anticipation and application of preventative measures for patients with obesity before and after extubation are recommended.