

The Use of Propofol for Sedation in Medical Thoracoscopy

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Sedation

Propofol for bronchoscopy

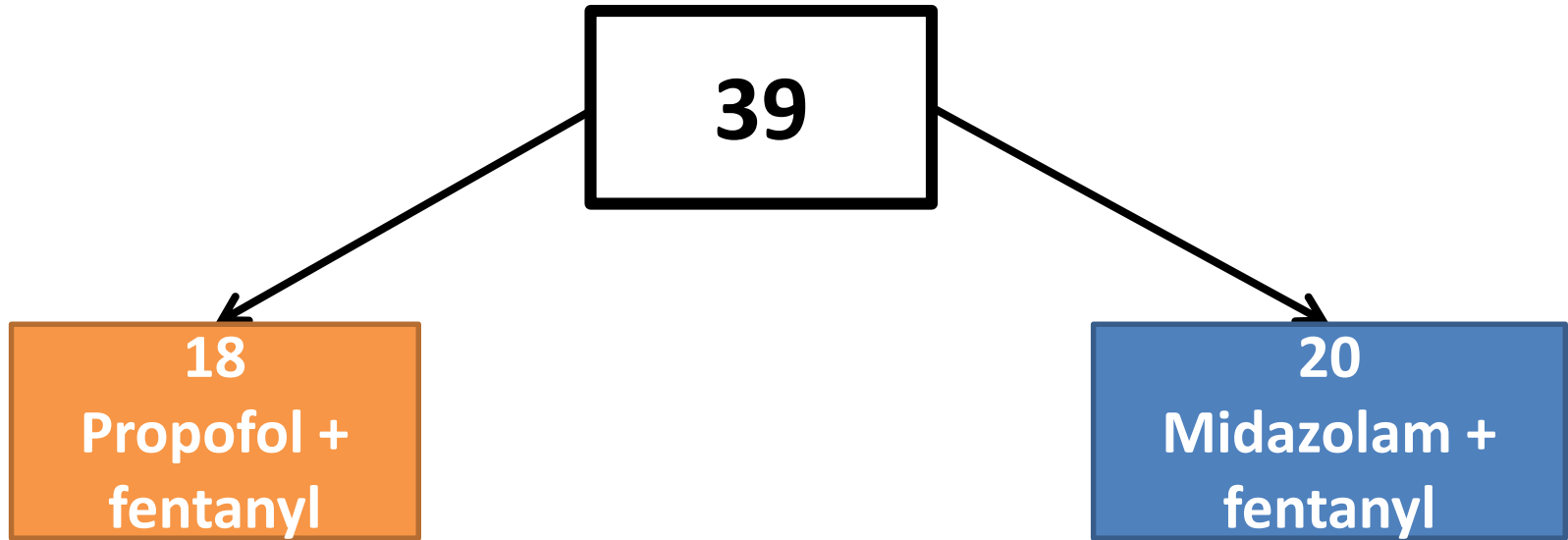
?Use in medical thoracoscopy



Why?

- **No data** comparing propofol sedation with another sedative regimen in medical thoracoscopy
- Prospective, multi-center, randomised trial
- **Compare safety** propofol vs midazolam

Methods



VAS prior/post procedure

Patient and operator

The **primary endpoint** - mean lowest oxygen saturation

Predefined periprocedural complications:

- hypoxaemia
- hypotension
- bleeding
- need for airway insertion
- mechanical ventilation
- intensive care unit transfer
- death

Primary outcome

The mean lowest oxygen saturation did not differ between the groups:

Propofol 91.8% +/- 6.16

VS

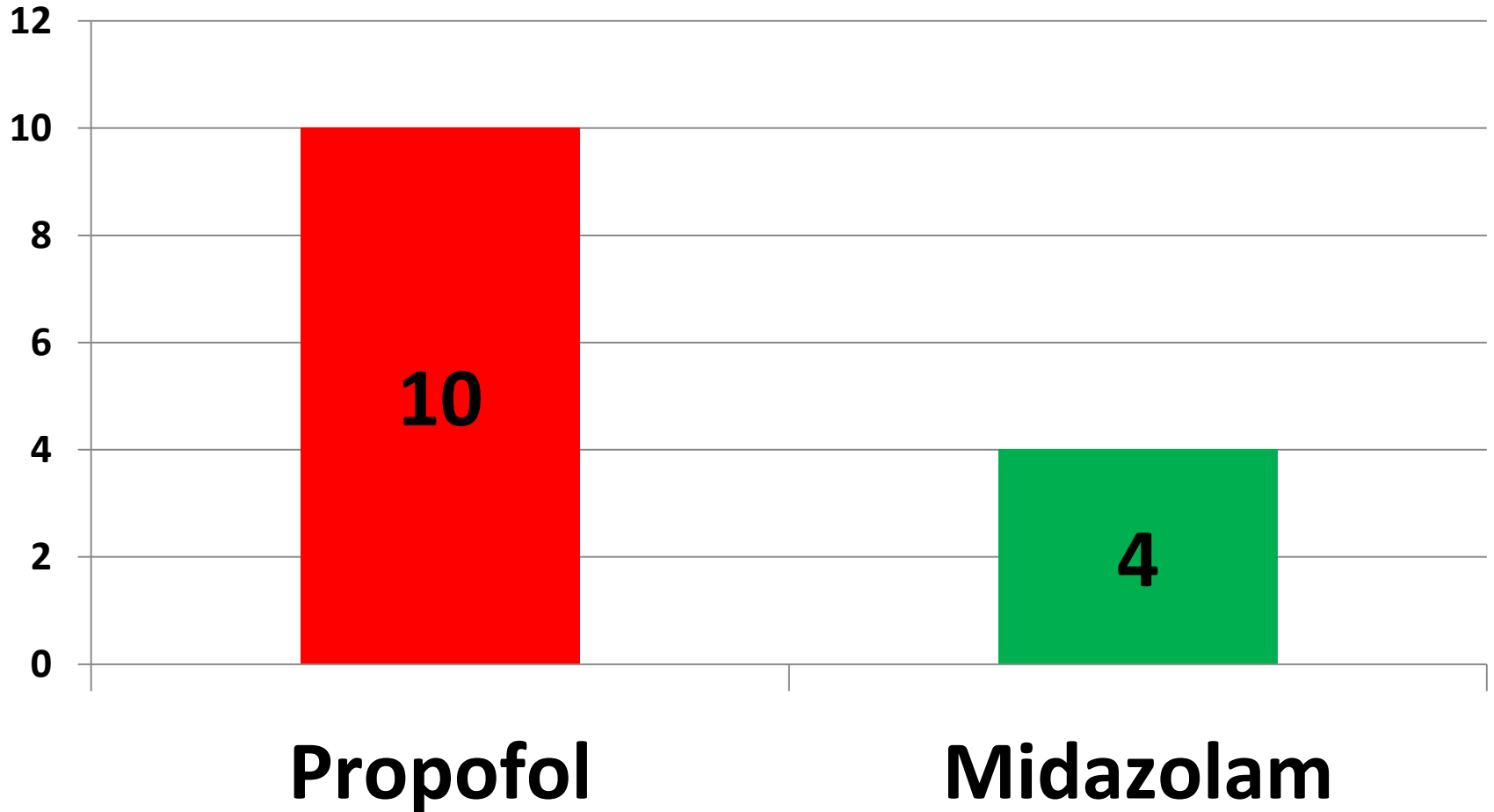
Midazolam 92.7% +/- 6.05

(p = 0.68)

Results

- **procedure time** (37.6 vs. 36.2 min, $p = 0.57$)
- **recovery time** (20.1 vs. 20.8 min, $p = 0.86$)
- **adequacy of sedation** - as perceived by the endoscopist (4.23 vs. 4.15, $p = 0.73$),
- patient discomfort

Adverse events (p=0.04)



Adverse Events

Propofol group:

- **desaturation responsive** to supplementary oxygen (n = 6)
- desaturation requiring temporary **bag valve** ventilation (n = 1)
- **hypotension** requiring intravenous fluid resuscitation (n = 2)
- **abort** the procedure (n = 1)

Midazolam group:

- **desaturation responsive** to supplementary oxygen (n = 3)
- Hypotension not requiring any intervention (n = 1)

Conclusion

Propofol (given as boluses by a non-anaesthetist):

should not be considered the drug of choice for sedation during medical thoracoscopy

Grendelmeier et al. similar study

“Thus, in contrast to flexible bronchoscopy and as assessed by the surrogate marker hypoxemia, propofol should **not** be considered the **first choice** for sedation in medical thoracoscopy.”

Respiration

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bag valve ventilation (n = 1), hypotension requiring intravenous fluid resuscitation (n = 2) and the need to abort the procedure (n = 1). Complications seen in the midazolam group included desaturation responsive to supplementary oxygen (n = 3) and hypotension not requiring any intervention (n = 1). The mean lowest oxygen saturation did not differ between the groups (91.8 vs. 92.7%, p = 0.68).

Our interim findings therefore support the safety concerns raised by Grendelmeier et al. [1], and we concur that propofol (given either in boluses or as an infusion) should not be considered the drug of choice for sedation during medical thoracoscopy. We have since terminated our study.

Propofol has been shown to be a safe alternative for sedation during flexible bronchoscopy [4, 5]. In fact, the use of propofol has been shown to be associated with a significantly higher readiness-

Propofol versus Midazolam in Medical Thoracoscopy: A Randomized, Noninferiority Trial

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