Etomidato

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SRI

- Dose:
  0.2^{1} - 0.6 $(0.3)^{2}$ mg/kg

  - 59% bom

  - 19% inadequado

- 30 segundos

- 10 minutos

[1] Kay B. Some experience of the use of etomidate in children. Acta Anesthesiol Belg. 1976;27 Suppl:86–92

[2] Zuckerbraun NS et al. Use of etomidate as an induction agent for rapid sequence intubation in a pediatric emergency department. Acad Emerg Med. 2006; 13(6):602-9

Quando usar?

- Hipotensão
- Aumento de PIC
- TCE + Hipotensão
- Status Epilepticus

Prós

❖ Efeitos hemodinâmicos[3, 4]

❖ Farmacocinética[5]

❖ Efeitos respiratórios[6]

[3] Gooding JM, Corssen G. Effect of etomidate on the cardio- vascular system. Anesth Analg 1977; 56: 517–9

[4] Sprung J, Ogletree-Hughes ML, Moravec CS. The effects of etomidate on the contractility of failing and nonfailing human heart muscle. Anesth Analg. 2000;91:68–75

[5] Van Hamme MJ, Ghoneim MM, Ambre JJ. Pharmacokinetics of etomidate, a new intravenousanesthetic. Anesthesiology 1978; 49: 274–7

[6] Morgan M, Lumley J, Whitwam JG. Respiratory effects of etomidate. Br J Anaesth 1977; 49: 233–6

Contras

- ❖ Supressão adrenal[7]

- ❖ Mioclonia[8]

[7] Vinclair M, Broux C, Faure P, Brun J, Genty C, Jacquot C, et al. Duration of adrenal inhibition following a single dose of etomidate in critically ill patients. Intensive Care Med. 2008;34:714–9.

[8] Guldner, G., Schultz, J., Sexton, P., Fortner, C. and Richmond, M. (2003), Etomidate for Rapid-sequence Intubation in Young Children: Hemodynamic Effects and Adverse Events. Academic Emergency Medicine, 10: 134–139. doi:10.1197/aemj.10.2.134

Anesthetic Indu... ...er than Propofol, ... 30-Day Mortal... ...dity After Noncardia...

Ryu ...
Yusu...

Conclusion... ...tion between use of a single dose of e... ...tracheal intubation in the tra... ...inconclusive. Etomidate ...with caution in trauma ...ation. Further data are ...ty and risk-benefit of e... ...lation.

Conclusions: The use of bolus dose ...in the 72 h before study ...is associated with an ...incidence of inadequate ...o corticotropin, but is also ...be associated with an ...n mortality. We recommend ...demonstrate extreme cau- ...use of etomidate in...

...30-day mor- ...specially on ...lthough our ...tcomes but ...at improved ...longer-term

MD;

The impact of e... ...y in trauma patients

L'impact de l'éto... ...lité des patients atteints de trauma

Chris Hinkewich, MD · Robert G...

a lower incidenc...

Etomidat... to pneum...

RESEARCH **Open Access**

Comparis... ...variables in patients w... ...d ...date-facilitated

Incre... In anesthesia ...cti... ...ajor cardiac surgery: a ...sp...

...sed on anesthesia ...d Ixchel Castellanos[1] ...ate might remain

Conclusions: This study found no evidence ... induction with or without administration of a ...se ... an acceptable option for single-dose anesthesia inductio...

Single-Dose Etomidate Does Not Increase Mortality in Patients With Sepsis

A Systematic Review and Meta-analysis of Randomized Controlled Trials and Observational Studies

Wan-Jie Gu, MSc; Fei Wang, MD; Lu Tang, MD; and Jing-Chen Liu, MD

BACKGROUND: The effect of single-dose etomidate on mortality in patients with sepsis remains controversial. We systematically reviewed the literature to investigate whether a single dose of etomidate for rapid sequence intubation increased mortality in patients with sepsis.

METHODS: PubMed, Embase, and CENTRAL (Cochrane Central Register of Controlled Trials) were searched for randomized controlled trials (RCTs) and observational studies regarding the effect of single-dose etomidate on mortality in adults with sepsis. The primary outcome was all-cause mortality. The Mantel-Haenszel method with random-effects modeling was used to calculate pooled relative risks (RRs) and 95% CIs.

RESULTS: Eighteen studies (two RCTs and 16 observational studies) in 5,552 patients were included. Pooled analysis suggested that single-dose etomidate was not associated with increased mortality in patients with sepsis in both the RCTs (RR, 1.20; 95% CI, 0.84-1.72; $P = .31$; $I^2 = 0\%$) and the observational studies (RR, 1.05; 95% CI, 0.97-1.13; $P = .23$; $I^2 = 25\%$). When only adjusted RRs were pooled in five observational studies, RR for mortality was 1.05 (95% CI, 0.79-1.39; $P = .748$; $I^2 = 71.3\%$). These findings also were consistent across all subgroup analyses for observational studies. Single-dose etomidate increased the risk of adrenal insufficiency in patients with sepsis (eight studies; RR, 1.42; 95% CI, 1.22-1.64; $P < .00001$).

CONCLUSIONS: Current evidence indicates that single-dose etomidate does not increase mortality in patients with sepsis. However, this finding largely relies on data from observational studies and is potentially subject to selection bias; hence, high-quality and adequately powered RCTs are warranted.
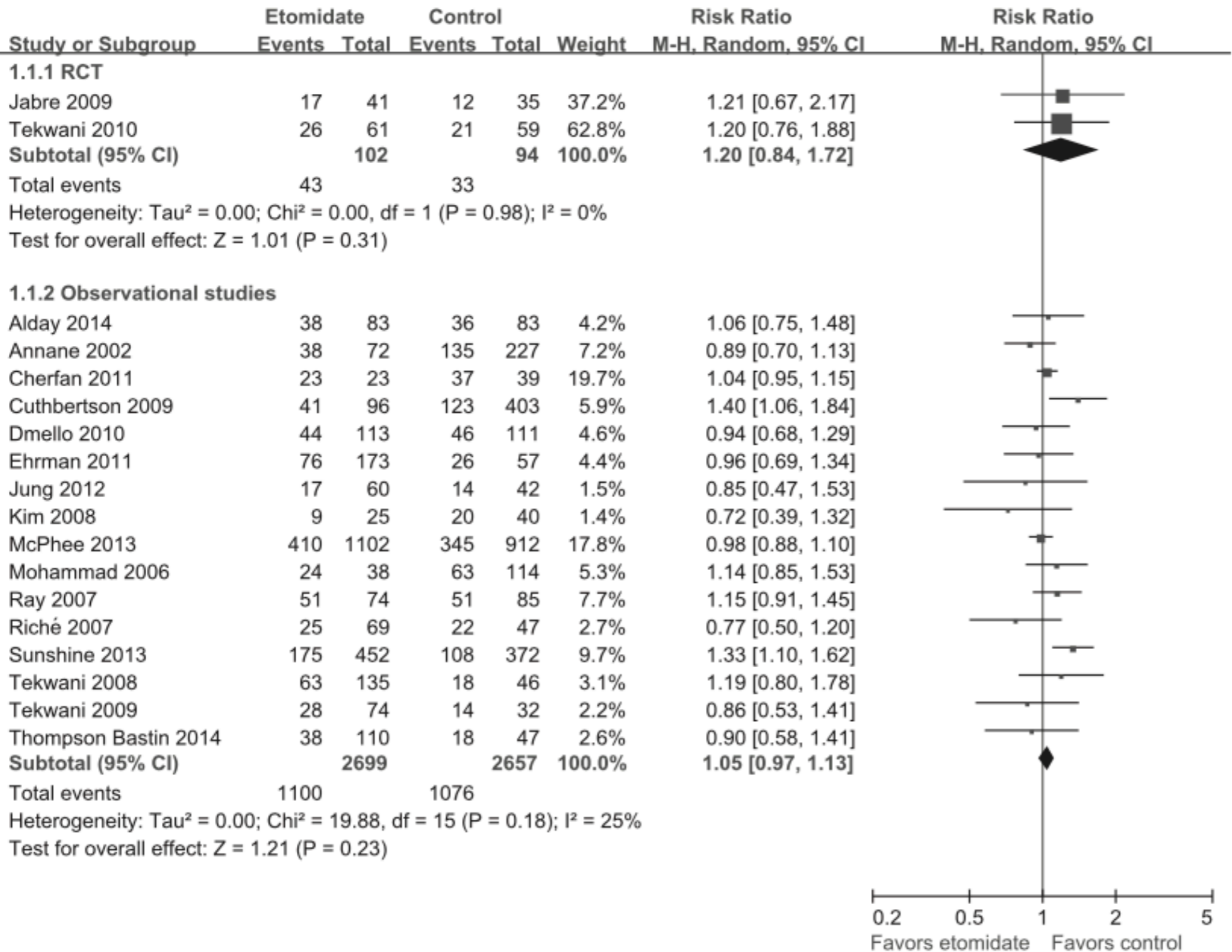
CHEST 2015; 147(2):335-346

Figure 2 – *Effect of single-dose etomidate on mortality in patients with sepsis. df = degrees of freedom; M-H = Mantel-Haenszel.*

Study or Subgroup	Etomidate Events	Etomidate Total	Control Events	Control Total	Weight	Risk Ratio M-H, Random, 95% CI
Annane 2002	68	72	161	227	21.7%	1.33 [1.20, 1.47]
Cuthbertson 2009	59	96	180	403	17.2%	1.38 [1.14, 1.67]
Dmello 2010	16	50	13	45	4.8%	1.11 [0.60, 2.04]
Jabre 2009	21	41	9	35	4.5%	1.99 [1.05, 3.77]
Kim 2008	21	25	19	40	9.8%	1.77 [1.22, 2.56]
Mohammad 2006	29	38	58	114	14.2%	1.50 [1.16, 1.93]
Riché 2007	41	69	30	47	12.6%	0.93 [0.70, 1.24]
Sunshine 2013	140	312	74	298	15.2%	1.81 [1.43, 2.28]
Total (95% CI)		703		1209	100.0%	1.42 [1.22, 1.64]
Total events	395		544			

Heterogeneity: Tau² = 0.02; Chi² = 18.45, df = 7 (P = 0.01); I² = 62%
Test for overall effect: Z = 4.55 (P < 0.00001)

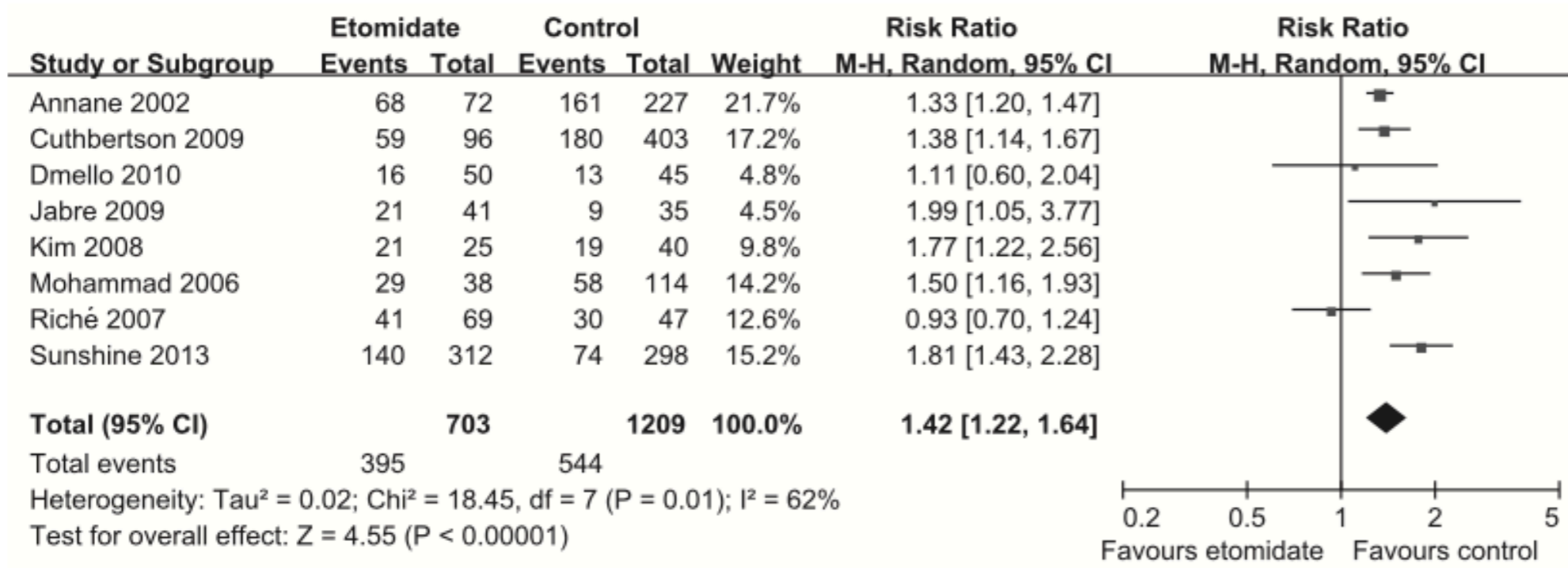Risk Ratio M-H, Random, 95% CI — Favours etomidate / Favours control

Figure 3 – *Effect of single-dose etomidate on adrenal insufficiency in patients with sepsis. See Figure 2 legend for expansion of abbreviations.*

In conclusion, the present systematic review and meta-analysis suggests that single-dose etomidate is not associated increased mortality in patients with sepsis. Etomidate may remain an acceptable option for rapid sequence intubation in patients with sepsis; however, the finding largely relies on data from observational studies, is potentially subject to selection bias, and should be interpreted cautiously. Hence, high-quality and adequately powered RCTs are warranted.

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