

Systemic Antibiotics for the Treatment of Skin and Soft Tissue Abscesses: A Systematic Review and Meta-Analysis

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The addition of antibiotics to standard incision and drainage is controversial, with earlier studies demonstrating no significant benefit. However, 2 large, multicenter trials have recently been published that have challenged the previous literature. The goal of this review was to determine whether systemic antibiotics for abscesses after incision and drainage improve cure rates.

Study objective

Table 1. Characteristics of the included studies.

Study	Study Population	Study Location	Median Age (IQR), Years	No. of Male Patients (%)	Antibiotic
Schmitz, 2010 ¹⁰	212	ED	27 (21–38)	140 (66.0)	TMP-SMX 320–1,600 mg PO twice daily for 7 days
Duong, 2010 ¹¹	161	ED	4 (1–12)	62 (41.6)	TMP-SMX 5–6 mg of TMP/kg PO twice daily for 10 days
Talan, 2016 ¹²	1,247	ED	35 (26–48)	726 (58.2)	TMP-SMX 320–1,600 mg PO twice daily for 7 days
Daum, 2017 ¹³	786	Outpatient clinic or ED	25.5*	448 (57.0)	<p>Adult patients</p> <p>Clindamycin 300 mg PO 3 times daily for 10 days</p> <p>TMP-SMX 160–800 mg PO twice daily for 10 days</p> <p>Pediatric patients</p> <p>Clindamycin 8–10 mg/kg PO 3 times daily for 10 days</p> <p>TMP-SMX 4–5 mg of TMP/kg PO twice daily for 10 days</p>

IQR, Interquartile ratio; TMP-SMX, trimethoprim-sulfamethoxazole; PO, per os.

*Mean age.

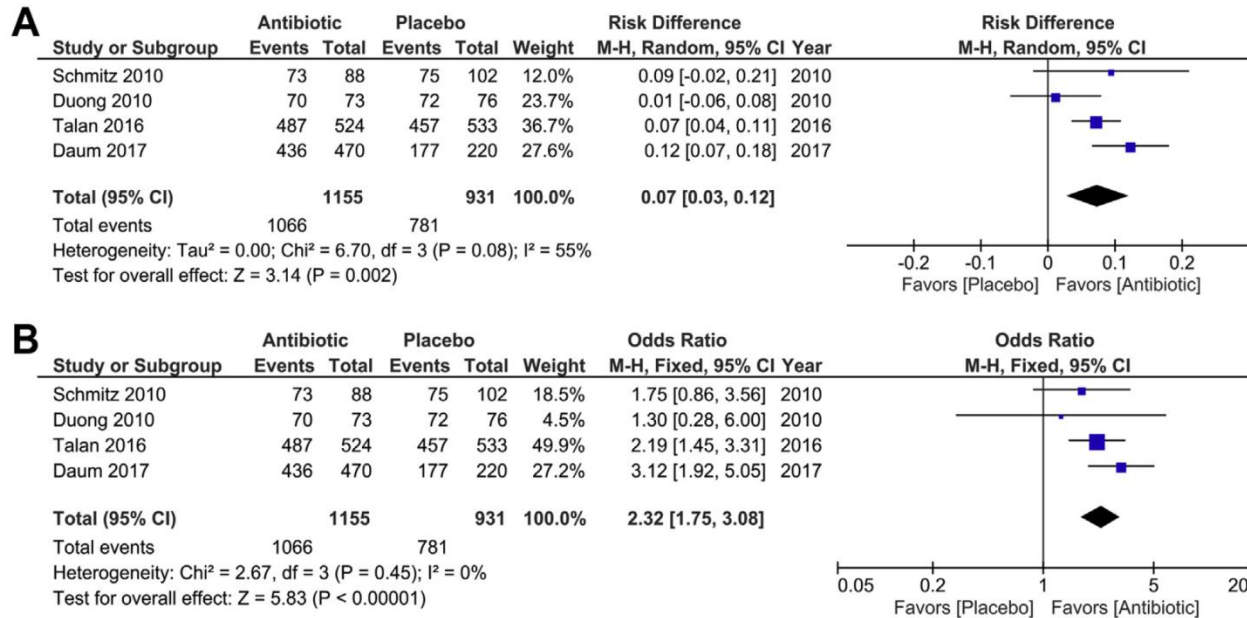


Figure 2. Forest diagram of risk difference (A) and odds ratio (B) demonstrating an increased clinical cure rate in the antibiotic group compared with the placebo group.

The use of systemic antibiotics for skin and soft tissue abscesses after incision and drainage resulted in an increased rate of clinical cure. Providers should consider the use of antibiotics while balancing the risk of adverse events. [Ann Emerg Med. 2018;:-:1-9.]

Please see page XX for the Editor's Capsule Summary of this article.

Conclusion