



Antibiotics for Abscesses

Skin and soft tissue infections are typically categorized as either purulent or non-purulent. The 2014 Infectious Diseases Society of America (IDSA) guidelines recommend incision & drainage (I&D) alone without antibiotics for mild purulent skin and soft tissue infections (e.g. abscesses) without accompanying systemic signs of infections.¹ Is there newer evidence and guidance regarding benefit of adjunctive antibiotics?

What do other guidelines recommend?

More recently updated 2020 guidelines from the Surgical Infection Society (SIS) recommend 7-10 days of clindamycin or trimethoprim-sulfamethoxazole (TMP-SMX) in addition to I&D for simple abscesses.²

What is the evidence?

The SIS recommendation is based on two randomized controlled trials. In the first trial, TMP-SMX 320 mg/1600 mg (e.g. 2 double strength (DS) tablets) PO BID for 7 days was compared with placebo in outpatients who received I&D in an emergency department for an abscess which was at least 2 cm in diameter. More patients who received TMP-SMX (80.5%) achieved clinical cure when compared to placebo (73.6%) at 7-14 days after end of treatment.³ The number needed to treat to achieve 1 additional clinical cure was 14.5.

In another trial, clindamycin 300 mg PO TID for 10 days was compared with TMP-SMX 160 mg/800 mg (e.g. 1 DS tablet) PO BID and placebo for 10 days in outpatients presenting to urgent cares, clinics, and emergency departments with an abscess which was 5 cm or less in diameter.⁴ All patients received I&D. Clinical cure rates were 83.1%, 81.7%, and 68.9% in the clindamycin, TMP-SMX, and placebo groups, respectively. The difference was statistically significant between clindamycin versus placebo and TMP-SMX versus placebo. The clindamycin group had more adverse events than other groups, primarily due to GI adverse events. Although no *C. difficile* infections were reported in this trial, it is known that clindamycin carries a higher [risk of C. difficile infection](#) than TMP-SMX.

Key Takeaways: Patients with small skin and soft tissue abscesses will benefit from adjunctive antibiotics in addition to incision & drainage.

References:

1. Stevens DL, Bisno AL, Chambers HF, et al. Practice guidelines for the diagnosis and management of skin and soft tissue infections: 2014 update by the Infectious Diseases Society of America. *Clin Infect Dis*. 2014 Jul 15;59(2):e10-52.
2. Duane TM, Huston JM, Collom M, et al. Surgical Infection Society 2020 Updated Guidelines on the Management of Complicated Skin and Soft Tissue Infections. *Surg Infect (Larchmt)*. 2021;22(4):383-399
3. Talan DA, Mower WR, Krishnadasan A, et al. Trimethoprim-Sulfamethoxazole versus Placebo for Uncomplicated Skin Abscess. *N Engl J Med*. 2016;374(9):823-832.
4. Daum RS, Miller LG, Immergluck L, et al. A Placebo-Controlled Trial of Antibiotics for Smaller Skin Abscesses. *N Engl J Med*. 2017;376(26):2545-2555.