A Placebo-Controlled Trial of Antibiotics for Smaller Skin Abscesses

- A randomized, double-blind, placebo-controlled trial published in NEJM in 2017. It looked at whether giving antibiotics after incision and drainage improves outcomes in patients with small uncomplicated skin abscesses.
- The study included 786 outpatient patients, both adults and children, who had a single skin abscess measuring 5 cm or less. All patients first underwent standard incision and drainage, which is considered the primary treatment for an abscess.
- After drainage, patients were randomly assigned to receive either Clindamycin, Trimethoprim-sulfamethoxazole, or placebo for 10 days.
- The main outcome they looked at was clinical cure 7- 10 days after completing treatment. The results showed that both antibiotics performed significantly better than placebo. The cure rate was 83.1% with clindamycin, 81.7% with TMP-SMX, and only 68.9% with placebo. This means that adding antibiotics improved cure rates by about 12–14% compared with drainage alone.
- Another important finding was that there was no significant difference between clindamycin and TMP-SMX in initial cure rates, meaning both are effective options after drainage.
- The study also looked at recurrence at 1 month, which I thought was especially relevant to my patient. Clindamycin had the lowest recurrence rate at 6.8%, compared with 13.5% for TMP-SMX and 12.4% for placebo, suggesting that clindamycin may be more effective at preventing recurrent or new abscess formation.
- In terms of microbiology, Staphylococcus aureus was isolated in 67% of patients, and almost half of all patients had MRSA, which supports why empiric MRSA coverage is important in skin abscess management.
- One of the main trade-offs discussed in the article was side effects.
    - Clindamycin had more adverse effects, particularly GI symptoms such as diarrhea, with side effects occurring in 21.9% of patients, compared with 11.1% with TMP-SMX.
- This article directly relates to my patient because she was presented with a 2 cm draining gluteal abscess, which we further drained in office and sent for wound culture. She was started on Clindamycin which was selected due to its activity against *Staphylococcus aureus*, including possible community-acquired MRSA, which is a common cause of furuncles and skin abscesses. Clindamycin is considered acceptable for use during early pregnancy when clinically indicated.

Citation

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. doi:10.1056/NEJMoa1607033