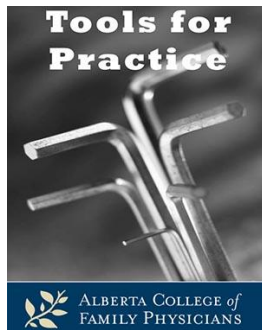


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There's Pus About, So Are Antibiotics In or Out? Adding antibiotics for abscess management

Clinical Question: Does the addition of antibiotics to incision and drainage improve cure rates in single, uncomplicated skin abscesses?

Bottom Line: Adding antibiotics that cover MRSA during incision and drainage for a small abscess increases the cure rate from 85% to 92%, meaning an additional one in 15 patients will be cured compared to placebo at one month. Approximately 25% of patients will experience adverse effects, with gastrointestinal adverse effects occurring for an additional one in 11 on clindamycin and one in 50 on trimethoprim-sulfamethoxazole, compared to placebo.

Evidence:

- Two recent systematic reviews, including four and 14 randomized controlled trials (RCTs), 2,406 and 4,198 patients, respectively.^{1,2} Results statistically significant unless mentioned.
 - Both relied heavily on two new high-quality RCTs (2,051 patients) of clindamycin or trimethoprim-sulfamethoxazole in adults and children with single abscesses <5 cm that had undergone incision and drainage.^{3,4} Prevalence of MRSA ~45%.
 - Treatment failure at one month example:² 8% versus 15% placebo, Number Needed to Treat (NNT)=15.
 - If limited to trials without MRSA coverage, no longer statistically significant.²
 - Recurrence or new lesion within one month example:² 8% versus 15% (placebo), NNT=15.
 - At 1-3 months:² 18% versus 25%, NNT=14.
 - Subgroup analysis demonstrated benefit with antibiotics that cover MRSA, but not those without (example: cephalexin).²
 - Total adverse effects:¹ 25% versus 22% (placebo), Number Needed to Harm (NNH)=38.
 - Gastrointestinal adverse effects:²
 - Clindamycin: ~10% more than placebo, NNH=11.
 - Trimethoprim-sulfamethoxazole: 2% more than placebo, NNH=47.

- Limitations: One systematic review only included studies of antibiotics that have activity against MRSA;¹ only two studies included patients with diabetes (2.4% and 11% of study populations, respectively).²

Context:

- Older systematic reviews^{5,6} and guidelines⁷ found no improvement when antibiotics added to incision and drainage but did not include the newest RCTs above.
- Antibiotics are recommended with systemic illness, extensive tissue damage or at risk of poor healing or complications (examples: immunocompromised or prosthetic device).⁸
- Perirectal, perineal, and paronychia abscesses, or sites requiring specialized management, excluded from above RCTs.^{3,4}
- Risk factors for community-acquired MRSA include recent antibiotic use, contact sports, group housing, lower socioeconomic status, and IV drug use.⁹

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Disclosure:

Authors do not have any conflicts of interest to declare.

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