Antibiotics for Uncomplicated Skin Abscesses After Incision and Drainage: BMJ Rapid Recommendation

Skin abscesses, which are a collection of pus in the dermis and deeper tissues and often appear as erythematous and indurated nodules, typically result from a bacterial infection (e.g., methicillin-resistant *Staphylococcus aureus*). Current clinical guidelines recommend against the use of antibiotics for uncomplicated lesions after incision and drainage. Recently, however, a collaboration between the BMJ and the MAGIC group led an international panel made up of a variety of health care professionals (e.g., family physicians, internists, dermatologists) and adults with experience treating and living with skin abscesses to create recommendations regarding antibiotic use based on identified benefits, harms, cost, treatment burden, evidence quality, and patient preferences.

The recommendations apply to all adults and children with uncomplicated skin abscesses who present to the emergency department or family physician offices, including those with abscesses of all sizes, first occurrence or recurrence of abscesses, and abscesses with unknown pathogens. They do not apply to patients with systemic illnesses, deep tissue infection, superficial infection (e.g., pustules), hidradenitis suppurativa, or immunocompromising conditions, or to patients who do not require abscess incision and drainage.

**Recommendations**

Based on high-quality evidence, trimethoprim/sulfamethoxazole (TMP-SMX) or clindamycin combined with incision and drainage has been shown to decrease the risk of treatment failure by approximately 5% at one month and the risk of recurrence by approximately 8% at three months compared with no antibiotic treatment. TMP-SMX and clindamycin also are associated with decreases in pain, hospitalizations, and infections in household contacts based on moderate-quality evidence. There is no crucial difference in treatment failure between TMP-SMX and clindamycin, and both have similar risk of recurrence. TMP-SMX is typically taken twice per day, and clindamycin is taken three or four times per day; both are often combined with over-the-counter pain medication. TMP-SMX is usually inexpensive, whereas clindamycin can be expensive in some areas. However, both are available by prescription or over the counter in many countries. Using the GRADE framework, the panel gave a weak recommendation in favor of TMP-SMX over clindamycin. Either agent is recommended over incision and drainage alone.

Adverse effects depend on which antibiotic is prescribed. For example, clindamycin is mainly...
associated with a greater risk of diarrhea and other gastrointestinal effects compared with no antibiotic treatment, and TMP-SMX is associated with an increased risk of nausea and diarrhea, although to a slightly lesser degree than clindamycin. Because of this lower risk of diarrhea, TMP-SMX is recommended over clindamycin. This decision should be made in conjunction with the patient to ensure that the option chosen is in line with what the patient determines is most important with regard to desirable outcomes and undesirable consequences. Patients who prefer to avoid recurrence may opt to take clindamycin, whereas those who prefer avoiding diarrhea may select TMP-SMX.

Although cephalosporins or other antibiotics are often prescribed for skin abscesses, in most circumstances, including settings with high rates of methicillin-resistant S. aureus, cephalosporins are not likely to have reduced rates of treatment failure compared with incision and drainage alone. For this reason, believing that most patients would want to take an antibiotic that has been demonstrated to be effective, including TMP-SMX or clindamycin, the panel strongly recommends against the use of cephalosporins.

Guideline source: The BMJ
Evidence rating system used? Yes
Systematic literature search described? Yes
Guideline developed by participants without relevant financial ties to industry? Yes
Recommendations based on patient-oriented outcomes? Yes
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