

Treating an Abscess: When are Antibiotics Needed? - Frankly Speaking EP 33

Transcript Details

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Dr. Frank Domino:

I recently saw a patient in the office who had a skin abscess. It was about 5 centimeters in diameter, mildly erythematous around the borders, but not at all complicated. Numbed it up, drained it, and I inserted a wick. And as has been my practice, I did not start the patient on antibiotics. Recently, there's been some change in the commonly held belief that incision and drainage were the only things needed for uncomplicated skin abscesses. Joining me today is Dr Alan Ehrlich, Clinical Associate Professor in the Department of Family Medicine and Community Health, Executive Editor of "DynaMed" and "Evidence-Based Database." Welcome to the show, Alan.

Dr. Alan Ehrlich:

Thanks, Frank.

Dr. Domino:

So Alan, tell me a bit about this potentially practice changing paper on using antibiotics for skin abscesses.

Dr. Ehrlich:

Well, this was a paper published in "The New England Journal" recently, end of June, and it looked at three treatment options for people who were having a small abscess, which they defined as less than 5 centimeters, it was uncomplicated. We'll talk about what that means in a

second. And they randomize patients to either clindamycin, trimethoprim/sulfamethoxazole, or placebo. And then they wanted to see, if giving an antibiotic... And obviously, they chose ones that had coverage for MRSA... Whether giving that type of antibiotic would lead to better outcomes. So their outcome was essentially treatment failure or recurrence of other types of infections down the road. And they did, in fact, find that there was a reduction in treatment failure with using the antibiotics. The number of patients who had successful treatment with placebo was about 69%, and if you used one of the two antibiotics, it was either 81% or 83%, that range. So we're talking about a 12 or 13 percentage point difference in what we'll call a cure rate.

Dr. Domino:

It's true. This data does show that there was some benefit, yet with incision, and drainage, and placebo use, almost well over two-thirds of the patients received the clinical cure.

Dr. Ehrlich:

Yeah, and that's, I think, the big dilemma that we have to address, as we're thinking about, "How do we interpret this data?" Because most patients, in fact, will get better with just incision and drainage, and not everyone gets better, if you put them on antibiotics. There's still some patients who will fail, regardless, and what we have to think about, is the risks to the individual, of going on antibiotics they might not need, and the risks from an antimicrobial stewardship perspective from a society point of view, "Are we exasperating issues of antibiotic resistance by giving lots of people antibiotics that they actually don't need?"

Dr. Domino:

So let's talk a little bit. What were the harms with the antibiotic use?

Dr. Ehrlich:

Some of the harms are typical drug reactions, things like diarrhea or rash. In this particular study, they considered a treatment failure, if someone just stopped taking the antibiotic altogether, so I wouldn't focus so much on this particular study, as to, "What are the harms?" But thinking about, "What do we know about the harms, in general, with the use of antibiotics?" And it varies with

the antibiotic. In the case of someone having an abscess, the most common antibiotics that are recommended are the trimethoprim/sulfamethoxazole, clindamycin, or doxycycline, and they each have different side effect profiles.

Dr. Domino:

Were any of the adverse effects in this study or in other studies worrisome enough to make you have pause?

Dr. Ehrlich:

I don't think that they are any more common than for treating anything else. It's not a problem unless it happens to your patient, or if you're the patient, and it happens to you. So if it's a 1% chance of having some type of neutropenia, or having whatever your chances of developing a C Diff, you either get it, or you don't. And if you get it, it can be obviously very troublesome and bothersome. As some of you have to think about it more on a population basis, than think about any individual whose absolute risk from one course of treatment is going to be relatively low.

Dr. Domino:

What I hear you saying is, that adding an antibiotic to incision and drainage of uncomplicated abscesses is probably beneficial, and carries a small risk of adverse effect. Before we make the decision about which clinical approach to take, can you tell us a little bit about the difference between a complicated and an uncomplicated abscess?

Dr. Ehrlich:

I routinely culture all the abscesses that I drain. Partly, it's because we believe there's a lot of MRSA out there, and if someone doesn't get better, you wanna know. The rates of MRSA range from between 50% and 80% for most of these types of abscesses that are being drained, but there are other organisms, and if someone's not getting better after a couple days, it's nice to have some sensitivities to help guide therapy. I think this is especially true when you're not doing empiric therapy, and then it makes sense that you're only giving someone the type of antibiotics that are most likely to be helpful. There have been a lot of studies of antibiotics in treating

patients after incision and drainage, and they've had some conflicting results over the years. Some of it has to do with using antibiotics that have not been effective against MRSA, and so then you don't see a benefit. They've looked at using Keflex or things like that.

Dr. Domino:

It sounds like, although there is some emerging data, this is still a clinical decision. Any final thoughts on how you approach a patient who comes in with an uncomplicated abscess?

Dr. Ehrlich:

I think that there's going to be different styles by physicians. My thinking about this is that, it's not only a question of, "Do you get better if you use the antibiotic? Are you're more likely to be successful, in terms of the treatment?" But the question, also, is, "Do you benefit from treating early compared to treating late?" Suppose you just wait and see who's not getting better, and treat them at that point in time. You'll treat far fewer patients and it's not clear that you're gonna get any worse result. Maybe patients will be sick for a day or two longer, but it's not clear from the data that we have, just what 'sick' means. Does it mean that the abscess needs to be re-opened a little bit more or does it mean that they're missing work? We don't have that level of information.

I wanna go back a minute to the question of the adverse effects. Some of that is drug-dependent. In this particular study, interestingly enough, the best efficacy was with clindamycin. It was a little bit better than the trimethoprim/sulfamethoxazole. Typically, we would think the clindamycin might be a little worse, because there's the potential for inducing resistance, but it was a little more effective, and at the same time, it also did have a higher rate of adverse events. Again, most of these are, I think, well tolerated in the sense of, you stopped the medicine before someone gets better. Most of these are not leading to significant long-term problems.

Dr. Domino:

Well, thank you, Alan. This does advance our understanding about how to approach skin abscesses and we'll probably start changing all of our practices. I really appreciate your thoughts

about the lack of clarity about immediate starting, versus waiting 48 hours and see how thing's going. I think that, as you use the term 'stewardship,' it does help for us to decrease the amount of antibiotics used. And if things are uncomplicated, and 70% of the time are gonna get better on their own, judicious use makes good sense.

Dr. Ehrlich:

I agree. And you just have to present the data to the patients, and I think this is a good example of where shared decision making can be very effective.

Dr. Domino:

Well, thanks again. Practice pointer: Considering use of an oral antibiotic, be it clindamycin or trimethoprim/sulfamethoxazole, in addition to incision and drainage of uncomplicated skin abscesses, may be beneficial in improving clinical outcomes, recognizing that there may be an increased risk of adverse medication-related events. Use antibiotics judiciously. Join us next time, where we discuss the use of e-cigarettes, as a form of nicotine replacement for those patients who wish to stop smoking.