

## Antibiotics and Sinusitis – How Long is Too Long? - Frankly Speaking EP 67

### Transcript Details

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### Dr. Frank Domino:

It's spring, flowers are blooming, trees are developing leaves, and your triage nurse messages you that a patient's called and is insisting that you call in antibiotics because they believe they have a sinus infection. New guidelines exist and we're going to discuss them today. Joining me is Robert Baldor, Senior Vice Chair and Professor in the Department of Family Medicine and Community Health at the University of Massachusetts Medical School. Thanks for coming today Bob.

### Robert A. Baldor, MD, FAAFP:

Thanks, Frank. Great to be here, and you mentioned it's spring, but we had snow yesterday once again.

### Dr. Frank Domino:

We did in New England. We had snow. So, I understand there's some new diagnostic and treatment criteria for the management of sinusitis. Can you help us learn a little bit about this?

### Robert A. Baldor, MD, FAAFP:

Yeah, so it's actually not so much that it's new. What I wanna report on was a study that came out there, noting that most treatments for sinusitis with antibiotics are too long. So, what are we talking about? We're talking about acute bacterial, a rhinosinusitis as it's called. And this is where somebody has a constellation of symptoms. Primarily, it's a purulent nasal discharge, and it's accompanied by nasal obstruction with facial pain or fullness. And for the most part, these are

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looking at individuals that would be indicated for treatment with antibiotics and that's after having 10 days of symptoms or having had 10 days of symptoms clearing and then a relapse.

That's what the guidelines have been right along, and then the indication is to sort of say, "Well, if you're gonna use the antibiotic, five days." And so, what the study did was really looked at it and they found that they had data on almost 4 million, 3.7 million office visits in which antibiotics were prescribed for sinusitis. The median length of prescriptions was 10 days. However, if you take... Azithromycin was being used within there, and if you take that out, 92% of the prescriptions were 10 days or longer. And that really was in contrast with the guidelines saying, you really should be thinking about not using the antibiotics, and if you use antibiotics, certainly five days.

**Dr. Frank Domino:**

So wait! You're telling me that we shouldn't be using an antibiotic in patients if they haven't had symptoms for at least 10 days. Is that correct?

**Robert A. Baldor, MD, FAAFP:**

Right, and that's basically what the guidelines have come out with the last two or three years. If you look at this, most of these are viral, so antibiotics aren't gonna help you in that regard. You mentioned the onset of spring and allergens that are causing a lot of signs and symptoms that are consistent with that, not with a viral, but with consistent just with allergic ideology. So certainly, antibiotics aren't gonna help you with that. And even if you have a bacterial infection that's part of this, most healthy people are gonna clear that on their own. And so, you really wanna wait 10 days. And also, you wanna be looking at that subset of folks that may be immuno-compromised in some fashion, as opposed to somebody who's otherwise young and healthy.

**Dr. Frank Domino:**

Okay. So, good data, wait 10 days, if they still have symptoms, you mentioned macrolides like azithromycin. We're not to use those, is that correct?

**Robert A. Baldor, MD, FAAFP:**

Right, but let me just back you up for just a minute. Because a little bit of this, sometimes when we say, "Don't use antibiotics," we're not saying don't treat the patient. And that's what happens sometimes is to say to the patient, "No, I'm going to treat you. I'm just not gonna treat you with an antibiotic." So what are you going to treat with? And then the guidelines talk about what can be used there. Certainly, acetaminophen, anti-inflammatory and non-steroidals can be used to be helping with that facial pressure and pain. Saline, nasal irrigation's great. Inhaled corticosteroids have been shown to be of benefits as well. Oral decongestants have some benefit, particularly, but needs to be for short, three to five days, and that's the people that have that plugging sensation or popping they're talking about in their ears.

A word about inter-nasal decongestants though, those really are not indicated. People end up with a rebound problems with those, and there's no evidence to show any benefit for treating sinusitis with these agents. And antihistamines as well, there's really no benefit there. They tend to be drying and they actually prolong the course. And finally, just to talk about guaifenesin, because people like guaifenesin and there's no benefit to show... There's no trials that have shown any benefit from use of those agents. So that's what you're going to be doing during those 10 days. You're treating that person. You're just not treating them with an antibiotic. Now you have somebody who's had a prolonged course, and you may wanna be thinking about an antibiotic at that point. And I'm sorry, what was your question about the antibiotic now?

**Dr. Frank Domino:**

My question was, we're not to use macrolides like azithromycin, what should we be using once we decide we're going to use an antibiotic?

**Robert A. Baldor, MD, FAAFP:**

Okay, well, I think the... Basically there's still limited evidence on some of this around best choices, but mostly we're thinking about what is causing a bacterial sinusitis. And so, the things that are out there, you certainly are thinking about Staph, but you're thinking about Moraxella

and Haemophilus influenzae. The agents of choice is amoxicillin and clavulanic, and so that's that combination. And so, for individuals who are really not at risk, relatively healthy, not at risk for resistance because you've not had a lot of courses of antibiotics in the past. It's sort of a low dose. It's the 875/125 combination twice a day, and that's very reasonable and again that's five days Frank.

I don't know why in the back of my head, I had it for three weeks for sinusitis and that really what that's about is for people with really resistant chronic problems. And that's really a minor subgroup of people. So really five days. This brings me back to thinking about the UTIs where everybody used to get 10 days for UTI, now I do in three days. So five days. If somebody is more at higher risk for resistance or you're worried about immunocompromised, you may wanna go with a high dose amoxicillin and clavulanic and that would be the 2 gram 125 combination, again, twice a day.

Now, somebody's pen allergic you're not gonna give them amoxicillin, right? The choice really is doxycycline, that should be a reasonable one to go. Now, the macrolides, they are not recommended. And the reason why they're not recommended, because there's very high rates of resistance to Staph, Pneumoniae, Haemophilus Influenzae as well. We really wanna avoid that trimethoprim-sulfamethoxazole, that's been another choice that's out there, but there's increasing resistance to those bugs... Increasing resistance of those antibiotics for the common bacteria that are gonna be causing problems with sinusitis. So they're just not indicated at this point.

**Dr. Frank Domino:**

I think that's really welcome news, and it's not terribly surprising. Macrolides in particular are not terribly good. They get resistance quickly, and we need those drugs for other things. In fact, azithromycin's most common indication is for chlamydia, and if we develop resistance there, we're gonna have some significant problems. So, the drug of choice for people who are not pen allergic is amoxicillin-clavulanic, if not doxycycline I'm assuming that's 100 milligram twice a day for doxycycline?

**Robert A. Baldor, MD, FAAFP:**

Yes. That would be the choice, and again, five days.

**Dr. Frank Domino:**

Yeah, five days. Awesome. So I guess my last question Bob is, how are you handling patients in the office that are pressuring you for antibiotics?

**Robert A. Baldor, MD, FAAFP:**

Not very well. [laughter] I think this continues to be a problem because patients come in and they want antibiotics. They see antibiotics as miracle cures for just about everything. And so, doing more with patient education. And again it's like, it's not that I'm not treating you, the evidence has shown these treatments work, antibiotics don't do anything. And I also tell people, you're hearing more and more in the news about these super bugs, where they've become so resistant that we don't have any antibiotics to treat them. And why is that? It's because we're utilizing antibiotics when they're not really necessary. So, I don't want you to end up with a super bug infection by being on an antibiotic that's not really gonna help for you.

And by the way, antibiotics come with side effects and a lot of these studies will actually show that people have problems whether it's rashes, or diarrhea, or stomach upset. So, the Antibiotics can cause other problems as well. If I really thought an antibiotic was gonna be helpful for you, I'd give it to you, but I'm pretty sure it's not gonna be. In the long run, it's probably gonna cause you more problems. So, as your doctor I think the best thing for your health is to use these other treatments and avoid the antibiotics. "Not a lot better here. Call me next week and we reconsider," but upfront, and that's really helped quite a bit.

**Dr. Frank Domino:**

And there's really great data that shows that call me back in a week or so, if things are not improving and we'll reconsider this discussion delays or eliminates unnecessary antibiotics by up to 80%. So it's really a wonderful approach. Well, thank you Bob. This is great news and as spring

sets on, we'll be seeing more acute sinusitis like symptoms.

**Robert A. Baldor, MD, FAAFP:**

Absolutely. Thank you Frank.

**Dr. Frank Domino:**

Practice pointer, new recommendations state to use antibiotics only after patients have had symptoms of acute sinusitis for 10 days. And when you do, use amoxicillin-clavulanic or a doxycycline and for a treatment duration of five days. Join us next time, when we talk about the management of chronic pain and the role for non-opioid and non-pharmacologic treatments and when to consider opioids.