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Bacterial Vaginosis: Addressing Your Most Pressing Questions

Announcer:

Welcome to ReachMD. This is a special edition of "What's New in Bacterial Vaginosis," supported by Lupin Pharmaceuticals, Inc.

Dr. Caudle:

This is ReachMD, and I am your host, Dr. Jennifer Caudle. Joining me today is Dr. David Soper, Director of the Division of Benign Obstetrics and Gynecology at the Medical University of South Carolina. Dr. Soper, welcome to the program.

Dr. Soper: Thank you.

### Dr. Caudle:

In today's episode, we aim to address the top questions surrounding bacterial vaginosis. Dr. Soper, to get us started, one of the most frequent and debated questions circling BV is in regards to the origins of this disease. So, what do we know about the root cause, or causes, of BV?

### Dr. Soper:

Well, bacterial vaginosis is a complex alteration of normal vaginal flora and one of the precipitating events is the loss of normal protective lactobacilli which these microorganisms make lactic acid and lower the vaginal pH, and they also make hydrogen peroxide which controls the overgrowth of catalase-negative microorganisms which are anaerobic microorganisms. The real question is: What makes those lactobacilli disappear? And that's a question none of us have been able to answer.

## Dr. Caudle:

Can you talk to us about the microbiology of BV and how the issue of antibiotic resistance affects our approach to treatment?

### Dr. Soper:

Well, bacterial vaginosis was originally felt to be due to a microorganism called Haemophilus vaginalis, which is now called Gardnerella vaginalis, but as I mentioned before, now we understand it is a more multi-microorganism problem that is characterized by a large number of different, particularly anaerobic microorganisms, that overgrow and increase in concentration, even a thousand times normal. The problem is not so much antimicrobial resistance, because for the most part, every patient will respond to one of the recommended treatment regimens, either with metronidazole or with clindamycin. The problem is relapse. And so, it's very usual to see patients with short-term responses to therapy, but with recurrence down the road. And when you see these patients after therapy what you notice is that the criteria used to make the diagnosis of BV resolve. They no longer have clue cells, they no longer have an abnormal odor, or a positive whiff test; but their pHs will never normalize. And the reason that their pHs never normalize is that the lactobacilli do not grow back to normal amount. So that's kind of the missing link with therapy. Not so much failure to respond to antibiotics as it is a failure of reestablishment of normal vaginal flora.

### Dr. Caudle:

Let's move a little bit on to IUDs, because we've heard that there's an association between IUDs and acquiring BV. Are IUDs a known risk factor and, if so, are there ways to minimize the risk?

### Dr. Soper:

I don't actually believe the information that suggests that IUDs are risk factors. I think this relates to the fact that IUDs are in sexually active populations and patients with intrauterine devices do have this foreign body that protrudes from the cervix, but as far as the IUD actually causing a disturbance of flora, I don't believe that this occurs.

# Dr. Caudle:

Let's move on to pregnancy as well, especially with BV infections during pregnancy. How common are BV infections during pregnancy and what are the risks to the pregnancy if a woman acquires BV while she is pregnant?

### Dr. Soper:

Well, bacterial vaginosis is a risk factor for adverse pregnancy outcomes. The most important is preterm labor, but also important is if the bacterial vaginosis persists well into the third trimester, it will increase the risk of intrapartum complications such as chorioamnionitis. It can increase the risk of postpartum complications like postpartum endometritis or post Cesarean infection. And so it might even be worthwhile to embark upon a strategy where bacterial vaginosis is looked for at the time of a late third-trimester screen, much like we do for group B strep at 35 to 37 weeks. Then, if the patient was diagnosed with BV this late in pregnancy, we could offer therapy and hopefully ameliorate the adverse consequences that are associated with postpartum consequences and intrapartum consequences of BV. There has been work already looked at in an attempt to improve outcomes relating BV and preterm labor and, unfortunately, antimicrobial therapy during pregnancy doesn't seem to have a profound effect on that.

### Dr. Caudle:

My next question was a little bit about the current treatment options, because you've been talking about the possibility of treatment during pregnancy, if it's warranted. If you could just dive a little bit more into the safety profile of the current treatment options for expectant mothers and fetuses. Can you expound a little bit upon that?

### Dr. Soper:

Well, the two common therapies for bacterial vaginosis are metronidazole or clindamycin. Both are safe to administer in pregnancy and both are effective in eradicating BV. So, I think either is a choice for a patient.

## Dr. Caudle:

And Dr. Soper, before we close, do you have any additional comments or areas of interest around this topic that we haven't covered today?

## Dr. Soper:

Well, I think with the therapy of recurrence, what we try to do is provide suppressive therapy, and by suppressive therapy I mean that we give the patient the usual consecutive days of antimicrobials, usually metronidazole, to establish remission of disease. And then we weekly, or twice weekly, administer additional doses of metronidazole to prevent an overgrowth of the anaerobic bacteria. Even though this doesn't reestablish the normal flora, it does prevent the symptoms associated with an anaerobic overgrowth. After doing that we just wait for the patient to reestablish her normal flora and that's why metronidazole probably is a better option, because it doesn't inhibit lactobacilli, unlike clindamycin. Once the patient reestablishes normal flora and lowers their pH, then you can stop the suppressive therapy. There are two other interventions that I like to recommend. Both are to prevent the elevation of vaginal pH. One is condom use to prevent semen from elevating the vaginal pH, and the other is to use some sort of birth control method that will result in amenorrhea, whether it be continuous birth control pills or an intrauterine device, because blood will also increase the vaginal pH. And then, this can take, literally, several months for the patient to revert back to normal.

## Dr. Caudle:

That's very helpful and your comments and insights have been very helpful about this important topic of BV. And with that, Dr. Soper, I want to thank you, so much, for joining me to tackle these important questions on the issue of bacterial vaginosis. Dr. Soper, thank you so much for being with us today.

Dr. Soper: Thank you.

### Announcer:

This is ReachMD. The preceding program was supported by Lupin Pharmaceuticals, Inc. If you have missed any part of this discussion, or to find other episodes from "What's New in Bacterial Vaginosis," visit ReachMD.com/NewinBV.