Dr. Caudle: This is ReachMD, and I am your host, Dr. Jennifer Caudle. Joining me today is Dr. Paul Nyirjesy, Professor of Obstetrics and Gynecology and of Medicine at Drexel University College of Medicine, and Director of the Drexel Vaginitis Center, along with Katharine Smith. She is a Nurse Practitioner at the Drexel Vaginitis Center at Drexel University. Today we aim to review the Care Continuum of Bacterial Vaginosis from clinician and nurse practitioner perspectives. I’d like to welcome you both to the program.

Dr. Nyirjesy: Thanks for having me.

Ms. Smith: Thank you very much for having me.

Dr. Caudle:
I'm going to go ahead and start with Dr. Nyirjesy. Can you help us understand how BV affects a patient's quality of life, so that we're all grounded, really on the importance of a good diagnostic and treatment plan?

Dr. Nyirjesy:
So, bacterial vaginosis is a very common vaginal infection where women develop an imbalance between different bacteria in their vagina, and it's kind of thought of by a lot of people as a nuisance issue. Patients complain of just a discharge and an abnormal odor. But it also may have a lot of ramifications beyond that. So, it's a risk factor for developing all sorts of gynecological infections including pelvic inflammatory disease. It's a risk factor for a greater acquisition of STDs, such as herpes, and HIV, and gonorrhea, and Chlamydia. And then, it may also increase the risk of various morbidities in pregnancy including preterm labor, preterm premature rupture of membranes, and postpartum infection. So, it impacts the quality of life, not only with the symptoms it causes, but also its potential effects on health in general.

Dr. Caudle:
Thank you for that information. It's very helpful. Katharine, from your vantage point in practice, what kinds of impacts do patients with BV report to you?

Ms. Smith:
So, my patients that I'm seeing, especially those that are getting recurrent BV over and over again, it's becoming really disruptive and troublesome in their lives, and they have a discharge and usually a very significant odor. A lot feel very embarrassed about it, oftentimes are avoiding intercourse because of that embarrassment. It seems to affect women's confidence level, and really can be troublesome in their life.

Dr. Caudle:
Okay, and that's helpful too, I think, to get a clinical perspective on how patients feel and some of the concerns that they bring you in the office. Dr. Nyirjesy, let's focus on the diagnostic considerations for BV. What are the tell-tale signs and symptoms that lead you toward diagnosis? Katharine talked a little bit about what patients might complain of, but why don't we expand on that, just a little bit.

Dr. Nyirjesy:
So, in terms of complaints, again, it's actually pretty straightforward: abnormal odor, often described as fishy, and then a change in the discharge where it can be gray, it can be yellow. Sometimes I've heard patients describe it as green or brown. And then, in terms of the findings on examination, you don't usually see much in the way of signs of inflammation, so there's not usually any redness or swelling. Patients aren't particularly uncomfortable when you're examining them. But then, in terms of the
appearance of the discharge, it’ll usually have more of a watery texture, usually gray or yellow. And then, in terms of diagnosis, if you do the standard office-based tests, the pH will be high, greater than 4.5. This is the condition that gives you a positive whiff test, so if you mix the secretions with potassium hydroxide, there’s a fishy odor. And then, if you look at wet mount, there’ll be a lot of clue cells. And also, if you look at the vaginal flora on a wet mount, you’ll see that there’s a very abnormal, heavy, more coccoid flora, as opposed to the normal bacillary flora, in women who don’t have BV.

Dr. Caudle:
Let’s talk a little bit about these initial stages of assessment. So, you’ve gone through, both of you, not only some of the clinical signs and symptoms that a patient may come in with, but also some of the laboratory findings that we may have. Katharine, at this stage, are there any challenges that you or your colleagues run into that impede making a diagnosis of BV?

Ms. Smith:
Many of my colleagues that work in other settings are oftentimes working in practices where they aren’t using microscopes, which makes it difficult to get a good analysis of the flora on the wet mount; so that is oftentimes a barrier. But for me here, what I see a lot as a problem is really an over-diagnosis of BV often, where some providers are treating patients just on their symptoms. Mostly what I see is women that end up self-treating themselves a lot with medication that they have left over at home, where they notice an odor, or they notice a discharge. And oftentimes, you can have a different odor or a different discharge that isn’t BV, or isn’t even necessarily a problem, or women calling and wanting to be treated over the phone. And it really gets in the way of getting a good diagnosis because if they’ve treated at home then they come in and I can’t make a good diagnosis. And then, we also get into a pattern where women may be thinking they get BV more often than they do, and it’s really hard to tease out when they’re having infections and when they’re not.

Dr. Nyirjesy:
If I could add to that, I think the other issue that comes up is, because a lot of providers don’t have microscopes in their office anymore, they’ll send out diagnostic tests that rely on nucleic acid amplification testing, or in the case of the Affirm test, non-amplified DNA test, and with many of those tests, you can get results that are equivocal, or you can get results that do result in over-diagnosis of BV. And depending on the test, that over-diagnosis rate may be as much as 30 or 40%.

Dr. Caudle:
Dr. Nyirjesy, once the diagnosis is made, what factors about the patient’s history or severity of the disease on presentation, may actually then influence your management?

Dr. Nyirjesy:
With severity of disease, it probably doesn’t matter all that much because there’s no evidence that patients who are more symptomatic, for example, have a different response to treatment than patients who are less symptomatic. And there’s certainly concerns about patients who have had multiple episodes, four or more episodes in the previous year. They may be less likely to respond to treatment than patients who only have intermittent episodes. So, initially, for somebody who’s got BV who does not have recurrent bacterial vaginosis, I think the main thing that I focus on with history, if she’s had treatments in the past, what types of treatments she’s had, and whether she’s had any difficulty with them. So, for example, with metronidazole, which is the most popular form of treatment, GI side effects can be fairly common, so some patients just don’t want to take metronidazole. When some patients take metronidazole gel, some of it can breakdown to this very thick, chunky, white discharge which can sometimes persist for weeks on end. And so, they might not like taking metronidazole gel because of that. So, it’s really more a history of how they’ve handled treatments in the past and whether they’ve had preferences based on that experience.

Dr. Caudle:
You did mention, and I think this is helpful for our listeners, that maybe it’s not so much the severity of the illness, but maybe a little bit more about the frequency of infections. I want to continue along this line a little bit. So, does the management approach change significantly for patients diagnosed with first-time BV infections versus recurrent ones?

Dr. Nyirjesy:
It does. It’s pretty clear that people with recurrent disease are less likely to respond to treatment than women with an isolated or an intermittent episode. And there’s not much literature on what to do about those women. If it’s an occasional episode, a recurrence may be a couple of months after the first treatment, you can probably retreat with the same thing. For women you have 4, 5, 6, 7, 8, 9 episodes in a year, the approach that we tend to take initially is we’ll switch drugs. So, if they’ve had mainly metronidazole products, we’ll go with the clindamycin product, or we’ll do the opposite. And then, we tend to treat for a lot longer. And so, the only great placebo control data that there are, looked at metronidazole gel where it showed that if patients were initially treated with 10 days of metronidazole gel, and then given twice-a-week treatment for 4 months after that, that there was a big difference between those taking metronidazole gel versus those getting placebo. The catch is is that a fairly significant percent, I think it was about 30%, were still getting BV while they were on treatment, and once they stopped treatment, about 70% recurred within a few months of stopping treatment. So, it can help to control things, but it’s still not a great long-term answer. And people keep trying to tweak that maintenance approach, sometimes adding things like boric acid. A lot of the information that we have is more observational data as opposed to placebo control data.
Dr. Caudle:
That’s very helpful. Katharine, let’s turn to counseling strategies a little bit. Are there any methods or considerations that you keep in mind for helping patients deal with the diagnosis and care plans for BV?

Ms. Smith:
So, the one question that I get all the time, that I wish I had a good answer for was, women want to know what they can do to prevent BV in the first place? And so, people are interested in: is there a different diet I can use? Is there a product I can use to prevent it? And unfortunately, there’s no data saying that there’s any sort of lifestyle changes, like that, that someone could make to really prevent BV. Even though there’s a lot out there on the internet about doing things to change the vaginal pH, that doesn’t seem to work. The one thing that I’ve found in my practice, and that the verdict is still out in the research about whether BV is sexually transmitted or not. I find, in my practice, that the women that use condoms for an extended period of time, after treatment, do much better in not getting recurrent infections. So, even when I’m treating somebody just for a one-time infection, I encourage them to use condoms 100% of the time for at least 3 months. And sometimes I also tell women not to receive oral sex at the same time, as it seems to, some women report that that seems to bring on an infection as well. It’s hard. A lot of women and their partners don’t want to use condoms, but I certainly see that the women that do do that, seem to do better.

Dr. Nyirjesy:
There’s a lot of misinformation on the internet and the focus by a lot of patients is on changing their pH. And the thing that I would stress to them is that pH is a very important diagnostic test; it helps to figure out whether somebody has BV, but there’s no evidence that changing the pH of the vagina actually helps to prevent BV, or helps to treat BV, and so using buffering agents to change vaginal pH is, from my point of view, of no value. Similarly, probiotics make a lot of sense, but there’s no great information to show that there’s any specific probiotic preparation that’s helpful for this. And then, maybe the final thing is partner treatment and the verdict, so far, has been that partner treatment doesn’t help. And there’ve been 7 different studies, all of them which had significant limitations, but none of them showed any benefit to treating the partner.

Dr. Caudle:
So, we’re reaching our close, and before I close, I’d like to ask you both if you have any final takeaway messages. Dr. Nyirjesy, why don’t we start with you, any other takeaway messages that you want to mention for the audience?

Dr. Nyirjesy:
Sure. I think my takeaway message goes back to what I said at the beginning which is that the perception has always been that BV is this minor nuisance infection that you can really trivialize and ignore because it’s not a big deal, but from the point of view of a patient’s overall health, this is a disease that may have very important ramifications, which is why I don’t think it should be ignored.

Dr. Caudle:
Wonderful. And Katharine, is there anything that you would like to add?

Ms. Smith:
Yes, actually, it piggybacks wonderfully on what Dr. Nyirjesy just said, is that certainly a lot of women feel dismissed from the impact of having BV. And I’d say, in all of the complicated things that I treat, recurrent BV is certainly, maybe the most frustrating. It really impacts women’s lives. They are very uncomfortable and self-conscious a lot, and constantly needing to be in the provider’s office to get treatment. And there’s really not a whole lot right now that we can do to really get rid of a recurrent infection, as Dr. Nyirjesy mentioned, other than oftentimes being on long-term treatment. And so, I am really looking forward, hopefully, to more research being done to find out what we can do to approach this in a different way.

Dr. Caudle:
Wonderful. Well, thank you both very much for joining us and for sharing these insights on the Care Continuum of Bacterial Vaginosis.

Ms. Smith:
Thank you.

Dr. Nyirjesy:
My pleasure.

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.