

**SPEAKER 1:** So diagnosis-- if you'll-- hear the common theme that there's a lot of unknowns when it comes to endometriosis, and diagnosis is one of those areas that we don't have a great diagnostic tool. But-- sorry-- and because of this the delays of the diagnostics-- diagnosis is quite long. So in the US the average-- it takes a little bit more than 10 years to diagnose the patient with endometriosis from the onset of them having pain to getting an accurate diagnosis of endometriosis. And if you look at studies around the world, it's roughly about this amount of time no matter where you are. And this is both by patients who are cared for by a gynecologist, or primary care doctors, or whoever. It still takes on average about 11 years.

I'm not sure why. I think there's not enough awareness. Most women will present with these symptoms of endometriosis. I think the issue is that the most classic teaching is that endometriosis presents with painful periods and so a lot of people will think if a patient has pain outside of their periods, then it's not endometriosis. But it's extremely common for women to have pain both with their periods and not with their periods. Additionally, sometimes people will be on some type of hormonal birth control method and that might be masking their early painful periods and then later on present with symptoms in their 30s or 40s when the hormonal suppression is no longer able to suppress their endometriosis.

But there are also a lot of other symptoms that people don't realize that are associated with endometriosis. So these are things like pain with urination, frequent urination, pain when your bladder is full, pain with your bowel movements, constipation, diarrhea, nausea, bloating. And these are common symptoms that you see for other things like irritable bowel syndrome, or somebody who's just constipated, and so a lot of times patients will go back and forth between different providers with different diagnoses. There are associations with things like chronic fatigue and other more systemic disorders. And it's really hard for patients actually get their real diagnosis. A lot of women will also have pain the sexual intercourse and then we talked about infertility as well.

The other thing that limits our ability to diagnose endometriosis is a classic teaching because of that number-dominant theory of endometriosis etiology is that you can't get endometriosis in adolescence, or you can't get endometriosis when you first start menstruating. But there are studies that show that you can get endometriosis in adolescence, and it's a very high number, it's in the 80s to 90s, of prevalence of endometriosis in adolescents who fail medical management with birth control pills and NSAID anti-inflammatories, as well as there are some studies to even find endometriosis in women before-- in girls before they menstruate. So you can always have endometriosis and cyclic pelvic pain in particular. Cyclic pain with urination-- meaning once a month, the same time every month, usually around menses or around ovulation-- or blood in the urine or blood in the stool only with your periods-- those things are often missed windows to diagnose endometriosis. Let' see. Go back, yeah.

The problem is that the standard diagnosis for endometriosis is laparoscopy. Now, I don't take all of my patients for a laparoscopic or a surgery to diagnose endometriosis. I just start treating. So if a woman comes in, she has painful periods, all those signs that I described before, the first thing I'm going to do is try to suppress the periods. And if gets better, that's great. And we really needs to know 100% for sure it's endometriosis. If she has a good story, we tried to do the least invasive thing possible. But for some women they had tried a couple of different ways to stop their periods with hormones, they tried some other type of the medications that modulate your hormones-- and we'll talk about this in a couple of slides-- and they're still having tons of pain or women who have infertility and we're worried about scarring around the tubes there sometimes-- then you get a dilated fallopian tube that makes it harder for them to get pregnant with IVF. We'll take these patients to surgery and that gives you diagnostic laparoscopy as, technically, the one way that we diagnose-- or the gold standard for diagnosis of endometriosis.

So what does it look like. If you are a-- [INAUDIBLE]. If you look on the left, that little circle, that's a normal peritoneum, or the lining of the inside of the pelvis, and it looks pink. There's not that much on there. The issue of endometriosis is that the lesions can be quite subtle. So those darker blue lesions, or we call them the classic blue-black lesions, or blueberry lesions, or the-- they're usually the older endometriosis that are more standard for endometriosis. But you can also have-- if we can see projecting-- little tiny spots of red, or increased vasculature, or just what looks like scar tissue, or even just clear little vessels, and those are all endometriosis. So even if I've operated on patients who have had a surgery by a gynecologist for endometriosis and was told that their-- they did not find in any endometriosis.