

HEATHER HUDDLESTON: Hi, everyone. I'm Heather Huddleston. I'm one of the physicians that works in the reproductive endocrinology division at UCSF, and I am going to be talking about PCOS-- polycystic ovary syndrome-- and the multidisciplinary care model that we provide. There'll also be a talk after me by one of our other physicians about fertility, so I'm going to not focus so much on the fertility side with this. I'm going to talk more about PCOS.

So PCOS is incredibly common, as I'm sure many of you know. It impacts anywhere from 5% to 15% of the female population, depending on what diagnostic criteria you use. It is, therefore, the most common endocrinopathy in women. It has associations with reproductive, dermatologic, and psychological systems as well as metabolic health, and it impacts women from adolescence to menopause.

So in terms of talking about our multidisciplinary care model, we're going to start by talking a little bit about the why-- a little bit about PCOS and the interconnections with different systems of the body and how it impacts across the lifespan. Then we'll talk a little bit about our actual care model and how it works. And we'll review some examples of the comprehensive care that we're able to deliver through this model.

So first of all, let's just talk more about the basics and what is PCOS. So PCOS has diagnostic criteria that were established about 10 years ago as a revision of criteria that were established in the early 2000s. So you have three criteria. You have to have two out of three.

So PCOS is essentially established by the presence of irregular cycles, meaning infrequent cycles. So oligo ovulation, oligomenorrhea-- fewer than eight cycles a year is kind of the cutoff. Hyperandrogenism-- so symptoms of that either with your skin, hair, or just even finding it in the blood-- so elevated testosterone in the blood. And then this characteristic appearance of what we call polycystic ovaries, which is really a misnomer. It's not actually cysts in the ovaries. It's just an excessive number of follicles that represents a sort of hormonal imbalance-- so sort of excess of eggs really in the ovary.

So because there's different criteria and you don't need all of them, there's also different phenotypes. So you don't have to have all three of these things. Also, some very important factors are part of the diagnostic criteria, some important factors that have a lot of implications for these patients. In particular, insulin resistance and elevated BMI impacts many women with this disorder and can very much exacerbate the symptomatology.

This is just showing some data from the patients that we've been following in our clinic-- so it's about an n of 379-- and showing the distribution of BMI. And so you can see that there's about 1/3 that are in there just sort of overweight to normal but 2/3 of our patients end up in this range. So weight is certainly something that this population struggles with and certainly wants our help with as well.

We know that insulin resistance is also very common in PCOS, and we think that it's part of that pathophysiologic pathway. This is a classic study which basically just showed that even lean women with PCOS are more insulin resistant to their lean peers, and obese women with PCOS are more insulin resistant than their obese peers without PCOS. And as you know, insulin resistance can lead to a host of other problems.