

## **Dr Clare Boothroyd presents the session What is PCOS?**

### **Voice 1:**

Hello everyone. You're watching a video about Polycystic Ovary Syndrome, commonly referred to PCOS.

This videostream has been developed in partnership with Women's Health, QUT, and POSAA

The guest presenter with me here today is Dr Clare Boothroyd who is a registered endocrinologist and gynaecologist, and Queensland's leading fertility specialist.

Dr Boothroyd is actively involved in research in many areas related to women's health and fertility, in particular unexplained infertility and PCOS.

Dr Boothroyd's practice, Assisted Conception Australia, is located in the Greenslopes Specialist Centre at Greenslopes.

Welcome Dr. Boothroyd. So to begin our discussion can you please explain what is PCOS, and what are the signs and symptoms associated with the syndrome?

### **Dr Clare Boothroyd:**

PCOS is a syndrome where a woman has 2 of 3 features. And PCOS was redefined in 2004 after the Rotterdam Consensus which like all consensus statements is less than perfect. But, it is the best that we have in 2011. It's important that we use it well.

So the criteria are 2 of the 3 features. And the 1<sup>st</sup> feature is infrequent or absent ovulation and that might be having periods less than eight a year or no periods at all. It can vary between that.

The 2<sup>nd</sup> feature is high male hormones or evidence of high male hormones, which might be a predisposition to developing hair in the male distribution, or it may be a high testosterone level. And we can talk a little bit more of the type of male hormones that we measure.

The 3<sup>rd</sup> feature is a particular appearance on vaginal ultrasound scanning, and that's very strict criteria and they were changed in 2004.

Over the last 5 or 6 years there has been confusion on the part of radiologists but that's really now largely been resolved

So, two out of the three features where all other causes have been excluded. So it means that the woman has to have been investigated for high prolactin, or for reduced number of eggs in the ovary or other causes of high male hormone. So it is a diagnosis of exclusion. And roughly 9% of women will have PCOS - the syndrome. However, polycystic ovaries per say and appearance on ultrasound that I referred to, is very much

more common. And it's present in about 25% of women, which means that if you drag 100 women off the street and do vaginal scans on all of them, 25 women will have ultrasound appearances of polycystic ovaries and these may or may not have menstrual disturbance or high male hormones

Now I argue that if it is so common, why if all women have the ultrasound of PCO, that it's not a disease. That's a normal variance. It's too common to be a problem.

PCOS is clearly a very common hormonal disorder at 9% - the actual syndrome – the association of the ultrasound with the other features.

So it is one of the most common hormonal disorders and it must have provided some kind of evolutionary advantage to remain as common as it has and not to have contributed significantly to infertility in the past.

**Voice 1:**

Is there such a thing as lean PCOS?

**Dr Clare Boothroyd:**

There is. In fact they are probably a different type of PCOS. The thing about this is that it probably is ultimately that we will find that there are lots of subtypes of PCOS, and lean PCOS the women often very early in life have irregular periods straight after their periods start. And they often have a large number of eggs in their ovaries and in fact twice as many as their non PCOS counterparts, and as they age and the number of eggs in their ovaries reduce, they often get a return of their ovulation.

The thing about girls with lean PCOS is if they get fat the disease gets worse. One thing that is a little bit tricky to sort out is that women who have normal weight and normal ovulation and then gain a lot of weight - they can actually meet these criteria for PCOS. Are they the same as the lean PCOS girls? We really don't know. There's an enormous amount to learn about PCOS and that's why it's very important that we actually do get funding to research and understand more.

Thank you Dr Boothroyd.