

THE CASE OF PCOS: THE DIFFERENCE BETWEEN OVARIAN AND ADRENAL HORMONES – FAQs

IF A PATIENT HAS POLYCYSTIC OVARIAN MORPHOLOGY BUT NOT THE OTHER TWO. WHAT THEN?

Honestly, I have not seen someone with PCOM and no other symptoms. A cyst or two on an ovary, and PCOM are different. The PCOM are several small cysts that often greatly affect ovulation, at least. Having a cyst or two on an ovary does not qualify as PCOM per the 2003 Rotterdam criteria. However, I have seen a somewhat PCOM-looking ovary on a woman undergoing IVF but that was due to medications.

CAN CHASTE TREE CAUSE SOMEONE TO GET A SECOND PERIOD?

Yes! Chaste tree can cause someone to have some odd cycles - either too early or too late or get a 2nd one. There can be some adjusting with chaste tree as the HPO axis is better communicating. Of course, if these symptoms continue, have them stop the chaste tree.

WHAT ARE THE ADVERSE EFFECTS OF SPIRONOLACTONE? DOES IT DECREASE LIBIDO IN WOMEN? HOW LONG DO YOU RECOMMEND USING IT?

There are some scary-sounding side-effects when you read the insert for spironolactone such as abdominal pain, loss of libido, dry mouth, irregular menses...etc. There is a black-box warning for tumor growth in rats. Having said that, lots of practitioners use it. Sometimes the length of use varies because they can't tolerate it for several months.

IF SOMEONE IS DOSING TESTOSTERONE CREAM AND THEY SEEM TO PUSH IT DOWN THE "A" PATHWAY, WOULD THESE HERBAL AND SUPPLEMENTAL REMEDIES BE RECOMMEND FOR TESTOSTERONE SUPPLEMENTATION AS WELL?

Yes. If someone is on testosterone and/or DHEA and they push those androgens down the 5 α -reductase pathway. First, address the cause (i.e. insulin, stress), and then you can consider using the herbs and medications mentioned.

CAN YOU GO OVER THE SLIDE WITH TRYPTOPHAN CONVERTING TO NAD VS MELATONIN OR 5HIAA? WHAT IS HAPPENING WITH THE PATIENT IN THE CASE DISCUSSED? CAN YOU GO OVER THE LINK BETWEEN ELEVATED CORTISOL AND ANOVULATION/IRREGULAR CYCLES?

1. The patient had lower 5HIAA on the OAT part of the test. Tryptophan can choose to go down the serotonin pathway or go down the kynurenine pathway. 95% of tryptophan goes down the kynurenine pathway while 5% goes down the serotonin pathway. Factors such as elevated estrogen and high cortisol can divert tryptophan away from serotonin and push it down the kynurenine pathway for NAD production. This causes less serotonin, less 5HIAA and less melatonin. The slide was a reminder however in her case, her melatonin was normal so I didn't totally suspect this diversion was happening in her case. 2. Cortisol can suppress from the pituitary (i.e. suppress LH).

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3547681/>

WHEN IS THE BEST TIME TO USE PROGESTERONE IF YOU DO NOT HAVE A CYCLE?

It depends why you don't have a cycle. If you are menopausal, then timing or 'cycling' does not matter. If you are not cycling because of something like hypothyroidism or PCOS, then I tend to do 2 weeks on, 2 weeks off while working on all the other factors to get them cycling again.

DOES THE DUTCH TEST MEASURE LEVELS OF TOTAL TESTOSTERONE OR FREE TESTOSTERONE? HOW DO THE RANGES COMPARE TO SERUM LEVELS? DO YOU SEE WOMEN WITH PCOS WITH LOW T BECAUSE IT IS ALL GOING TO DHT? IS THERE AN IDEAL RATIO OF T:DHT THAT WE WANT TO AIM FOR? IF SO, WOULD YOU MEASURE FREE OR TOTAL T IN THIS RATIO?

The DUTCH test does not test total testosterone. It tests available testosterone. DHT is tested on the DUTCH test, it is on page 2 of a DUTCH Complete so you can look and see. We also test the 5a and 5b-androstenediol markers which are testosterone metabolites. We do not have an ideal T:DHT ratio because we at look more than one alpha metabolite: androsterone, DHT and 5a-androstenediol so it's more involved and a bigger picture.

HOW WILL THE DUTCH TEST WORK WITH A WOMAN WITH NO PERIODS AND OR IRREGULAR PERIODS?

It depends why she does not have a period. If she is menopausal, then she can test at any time. If she has irregular cycles, I would refer to the slide about 'when to collect.' If she does not cycle because of something like hypothyroidism or PCOS, then this depends on what you're looking for as a practitioner. You may choose to do the DUTCH test to get the androgens, OATs and HPA information but you know the progesterone and estrogen will likely be low because she's not cycling. Or you may choose to just run the adrenal profile. Or you may choose to work to get her menstrual cycle back and then test at that time.