## View on the regulation of woman life network in diagnosis and theurapy in pcos with integrative medicine

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According to view of Yu Jin on the regulation of woman life network, patients with PCOS have been diagnosed, classified and treated with integrative medicine(IM) for more than 15 years, and the effectiveness is steadily kept around 90% of ovulation rate and 70% of pregnancy rate.

In TCM, element Kidney is the innate foundation of life and responsible for reproduction, and the maturity of it's substances, TianGui (TG) and the Qi flowing in Chong Mai(CM) with the blood, refer to menstruation with ovulation and pregnancy. There is no terminology for PCOS in TCM, but symptoms of obesity, enlarged ovaries and amenorrhea described PCOS like are related to the Kidney deficiency resulted in blockage of the CM, termed phlegm blockage. Besides, that blockage causes the reflux of the blood up with the Qi in the CM, just like man without menstruation but with the Qi and the blood normally flowing up in the CM leading to acne, sex hair on the lip, chestetc due to high androgen level. So in IM, PCOS is recognized as immaturity of ovarian axis with hyperandrogenism, the root for PCOS, cutting into the patient's life network resulted in expressions of PCOS, while hyperinsulinism being the earth for the root planting causing more complications. The hyperinsulinism, secondary obese and high leptin levels are taken worse to blood stasis in TCM, referring to blood viscosity. Signs of pigmentation on the skin fold and darkened tongue are evidences for Blood stasis in TCM, and promotion of human platelets aggregating by leptin via its receptor may one of its mechanisms.

According to 5 decades of observations, clinical, laboratory and animal modal(9d-ASR) studies, we insist the diagnosis of PCOS must include three items: no ovulation, hyperandrogenism, and PCO. Then, patients should be divided into 2 big groups: hyperandrogenism(PCOS I )and hyperandrogenism with hyperinsulinism(PCOS II). In PCOS I or PCOS II, patients will be subdivided into 4 types of androgen originated from the ovary (PCOS I a or PCOS II a) or from both the ovary and adrenal (PCOS I b or PCOS II b). Moreover, element Liver usually refers to emotion in TCM literature, "female is more congenitally Liver characterized than male", and with the relationship in 5 elements theory exaggerate Liver may hurt the Kidney. That means woman is more vulnerable to stress producing levels of higher CRH and higher cortisol than that in man, which has been proved with neurobiological studies. With the stress, HPO axis will be suppressed by CRH and cortisol in various degrees. So in TCM, we divided syndromes of PCOS into 3 types: deficiency of the Kidney with phlegm blockage, deficiency of the Kidney Yin with both phelgm blockage and blood stasis, and deficiency of the Kidney with Liver Qi stagnancy. For treatment, to have deep talk with the patient and resolve her stress as possible is the first and most important continuing work for doctors with idea of regulation on woman life network. TCM recipe is prescribed according to different expressions in the 4 types: recipes Kun Tai 1 or Kun Tai 2, and acupuncture is also applied individually. Dialectical use of hormones may help the TCM administrations to change the microenvironment of the ovarian follicle from androgenic into estrogenic etc. Both the patients and the 9d-ASR modals show decrease levels in BMI, WHR, abdominal fat, testosterone levels in the ovary, adrenal and pituitary, serum free testosterone, androstenedione, insulin, leptin, and ARmRNA in the pancreas and the brain, NPY and POMC levels in the hypothalamic arcuet nucleus and preoptic area, and the increase in

satiety, levels of hypothalamic OB-Rb and GnRH, serum SHBG etc. Three vicious cycles: androgen $\rightarrow$ Insulin $\uparrow \rightarrow$ androgen $\uparrow$ ,AR $\uparrow \rightarrow$ NPY $\uparrow$ ,POMC $\uparrow \rightarrow$ leptin $\uparrow$ ,and  $\rightarrow$ GnRH $\downarrow$  are reversed to normal after administration of the TCM recipe. So the fusion of IM can directly reduce hyperandrogenism and/or hyperinsulinism, induce ovulation, pregnancy and patient's happiness at the first step, and the recipe may protect patients of PCOS from cardiovascular disease, diabetes, obesity, etc in the future, in case patients take it intermittently.

It is also proved that idea of regulation on woman life network has pushed effectiveness of endometriosis, female stress syndrome,DOR(decreased ovarian reserve), infertility, micro-fibrosis of uterine endometrium, PID including hydrosalpinxetc, while fusion of IM is used strategically.

## **Recent Publications (minimum 5)**

- 1. Sun F, Yu J. (2000) The effect of a special herbal tea on obesity and anovulation n androgen-sterilized rats. ProcSocExp Bio Med, 223: 295
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- 3. Yu J.(2007) Proposal on the diagnosis and classification of polycystic ovary syndrome. Reprod Med 16(S1):1-3
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- 8. Nakata M, Yada T, Soejima N.(1999) Leptin promotes aggregation of human platelets via the long form of its receptor. Diabetes. 48: 426-429