Recent advances in ovulation induction in PCOS

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The definitions of PCOS have changed from the classic NIH definition to more inclusive Rotterdam's criteria (any 2 of the following 3 criteria after excluding etiologies like hyper-prolactinemia, clinical etc., and or biochemical androgen excess, oligo/anovulation and polycystic morphology on USG. Ovulation induction in PCOS; CC acts by increasing serum FSH remains the first line of treatment, Metformin-commonly used as an oral hypoglycemic has been found to improve menstrual cyclicity by reducing insulin levels and altering the effects of insulin on androgen biosynthesis, also potentially inhibits through a direct effect on inhibiting ovarian gluconeogenesis. Further allopregnanolone secretion is altered with no change in progesterone secretion in obese PCOS patients which gets corrected by metformin restoring normal steroid synthesis both from the ovary as well as the adrenal gland (Gennazzani). Aromatase Inhibitors-leterzole/anastrazole-banned in India, special interest was for getting monofolliculogenesis but Kasper et al., showed how under the false impression as many as sixtuplets got born with 3rd cycle of 7.5 mg letrozole and hence careful monitoring needed even when planning an IUI. Glucocorticoids-dexamethasone-used to induce by adding high dose short course to CC resistant PCOS with normal DHEAS-Enthusiasm has dampened by potential adverse effects on insulin sensitivity. Gonadotrophins; second line of action & its main drawback are multiple folliculogenesis, OHSS. D-chloroinositol (DCI) is effective in restoring insulin sensitivity in obese hyper-insulinemics especially with diabetic relatives. Myoinositol, Kamanovetalin n=50 led to ovulation in 61.7%, 38.3% resistant. 11/29 (37.9%) became pregnant. Of 18 R after CC addition 13 (72.2%) ovulated of which 6 (42.6%) became pregnant. In severely obese PCOS topiramate/exenatide considered morbid obesity. Occasional extreme PCOS>100 df/ovary-how successful OI/pregnancy achieved is discussed.

Biography
Kulvinder Kochar Kaur is the Scientific Director of Dr. Kulvinder’s Centre for Human Reproduction. In 1980, she topped in Medicine of all medical colleges and got Dr. Devi Chand Gold Medal from the late PM Indira Gandhi. She has been working in the field of neuroendocrinology to unearth the complexities of obesity and she is trying to work on the neurophysiology of GnRH control, kisspeptins besides her endeavor to unearth the complexities of AIDS/Cancer. During this period she managed to successfully treat the first case of non-gestational chorio-carcinoma of uterine body in a young girl medically, thereby preserving her fertility.

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