

Assessment of diagnostic competence of plasmatic androgens on polycystic ovary syndrome based on receiver operator characteristic curves

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Objective. This study was designed to assess the diagnostic potency of different androgens in hyperandrogenaemia criterion on polycystic ovary syndrome (PCOS) based on receiver operator characteristic (ROC) curves analysis. **Methods.** We evaluated 55 PCOS patients and 27 healthy fertile women (control). Androgen evaluation included bio-available testosterone (BAT) by ammonium sulphate precipitation, Free Testosterone Index (FTI), androstenedione (A), total testosterone and dehydroepiandrosterone sulphate (DHEA-S). **Results.** The androgen tests with the best diagnostic capacities were FTI and BAT. Although T and A had similar diagnostic potencies, A detected 5 of PCOS patients that could not be recognised by FTI, BAT (), or T. The association of FTI, BAT () and A identified 96.36 of the hyperandrogenaemic patients. DHEA-S showed a wide dispersion of values and therefore poor discriminatory competence. **Discussion.** This study suggests that routine androgen evaluation in PCOS should include FTI, B