

Objective: The clinical symptoms of nonclassic adrenal hyperplasia (NCAH) are the same as those in patients with polycystic ovary syndrome (PCOS). The aim of our study was to determine the prevalence of NCAH in hyperandrogenic women, its endocrine parameters and to compare conventional corticoid treatment of NCAH with the effect of combined oral contraception (COC) administration (used in treatment of PCOS) on clinical and laboratory parameters of NCAH. **Material and Methods:** Since 1999 from 298 hyperandrogenic women having 21-hydroxylase deficient NCAH have been identified. In interventional, prospective, cross-over designed study patients were divided equally into two groups according to the order of application treatment modality (hydrocortison vs. COC). Effect of treatment of both modalities on clinical symptoms (hirsutism – FG score, acne, menstrual cycle) and laboratory parameters (testosterone, androstenedione, DHEA, DHEAS, SHBG) were evaluated. **Results:** Eight patients aged 18-28 years were identified as having NCAH. Their mean BMI was 22.67 (20.64-27.27). Leading clinical sign was oligo/amenorrhea. Hirsutism and acne was a minor clinical problem. Seven had both elevated basal and stimulated 17OH-progesterone, while one had elevated only stimulated 17OH-progesterone. All of the NCAH patients had elevated testosterone. We observed the decrease of plasma androgens in both groups, which did not significantly differ. Significant increase of SHBG (i. e. decrease of free androgens) was however documented in each period with COC administration. Not surprisingly, improvement of the most frequent clinical symptom of NCAH in our study group, oligomenorrhea, was also more apparent in COC. Hirsutism was only a minor problem in our group, that did not allow to evaluate treatment effect of both modalities. **Conclusion:** The prevalence of NCAH in hyperandrogenic women was 2.68 %. Their main clinical problem was oligomenorrhea. None of the NCAH patients had an elevated DHEAS, the androgen dominantly produced by the adrenal glands. Our results indicate that ovarian suppression by COC administration can effectively suppress androgen production and improve the most frequent clinical symptom (irregular cycle) in patients with NCAH, so can be successfully used for the treatment at least under basal conditions. Whether corticosteroid substitution can be limited to patients with inadequate response to COC on plasma androgen levels or with signs of adrenal insufficiency requires further data.