

# NONCLASSIC CONGENITAL ADRENAL HYPERPLASIA AND FUNCTIONAL OVARIAN HYPERANDROGENISM DIAGNOSED DURING THE TRANSITION PERIOD: DIFFERENCES IN CLINICAL, HORMONAL AND METABOLIC ASPECTS



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All authors have nothing to disclose.

## INTRODUCTION

Hyperandrogenism is a common presenting complaint during the transition period; however, clinical, hormonal and metabolic parameters in these patients have not been yet adequately characterized.

## OBJECTIVE

To evaluate the disease-related history, clinical presentation and biochemical parameters in patients diagnosed during this period with nonclassic congenital adrenal hyperplasia (NCCAH) due to 21 $\alpha$  hydroxylase deficiency and patients with functional ovarian hyperandrogenism (FOH).

## PATIENTS AND METHODS

### PATIENTS DIAGNOSED BETWEEN AGES 15 – 25

NCCAH n=28

FOH n=28

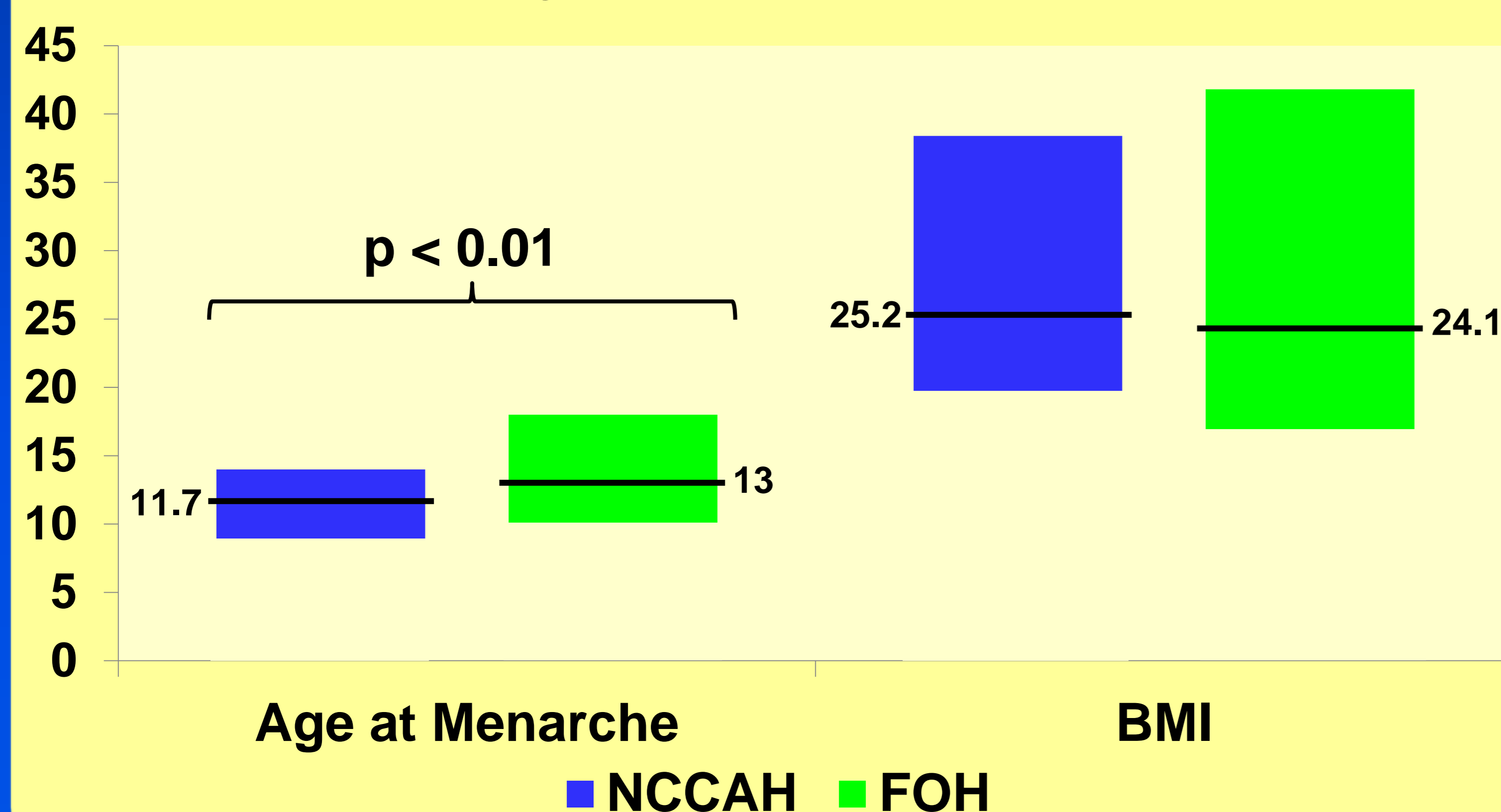
**Clinical Parameters:** Age at menarche; Body Mass Index (BMI); Menstrual Disorders; Hirsutism; Acne; Increased sweating; Precocious pubarche; Androgenic alopecia.

**Hormonal Parameters:** Total Testosterone (To); Androstenedione ( $\Delta$ 4); Dehydroepiandrosterone sulfate (DHEAS); 17OH Progesterone (17OHP); LH; FSH.

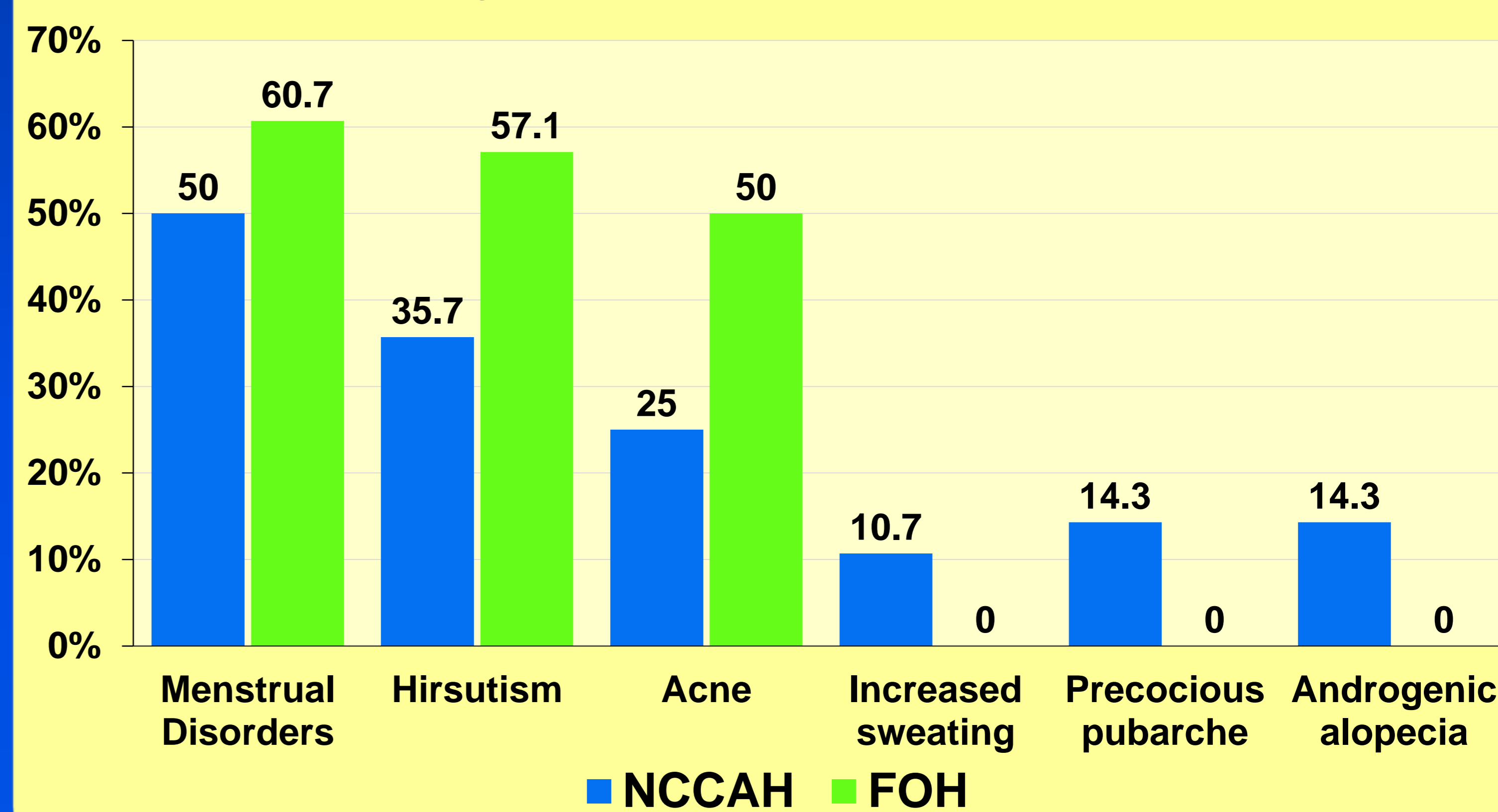
**Statistical Analysis:** Fisher's exact test (categorical variables) and Mann Whitney Test (continuous variables).

## RESULTS

### Clinical Parameters



### Clinical Manifestations



HORMONAL PARAMETERS	17OHP (ng/mL) Md (range)	To (ng/mL) Md (range)	$\Delta$ 4 (ng/mL) Md (range)	DHEAS (ng/mL) Md (range)	LH (IU/L) Md (range)	FSH (IU/L) Md (range)
NCCAH	13.3 (2.3-54)	0.73 (0.26-1.4)	4.5 (1.7-10.3)	2715 (151.8-4500)	6.4 (2.0-21.6)	5.2 (2.4-18.3)
FOH	1.45 (0.35-4.0)	0.26 (0.26-1.5)	4.2 (1.2-10)	2450 (895-6000)	9.1 (1.6-24.4)	5.9 (3.9-12.9)

p < 0,0001

p < 0.054

METABOLIC PARAMETERS	Glucose (mg/dL) Md (range)	Insulin ( $\mu$ U/mL) Md (range)	Total Chol (mg/dL) Md (range)	HDL-C (mg/dL) Md (range)	LDL-C (mg/dL) Md (range)	Triglycerides (mg/dL) Md (range)
NCCAH	87.5 (71-104)	10.5 (4.6-17.3)	180 (117-251)	55 (39-89)	115 (50-148)	89.5 (33-306)
FOH	89 (72-103)	12.4 (3.6-35.7)	169 (103-303)	54,5 (22-77)	101 (55-206)	71 (29-237)

## CONCLUSIONS

- During the transition period, the time of onset and clinical manifestations in hyperandrogenic patients, in addition to 17OHP and LH measurements, may provide better guidance regarding etiology.
- The NCCAH group was characterized by earlier clinical manifestations, perhaps related to the pathophysiology of this condition, as hyperandrogenism would be present since earlier stages.
- No differences were found in the metabolic profile regardless of etiology, suggesting that metabolic aspects could be influenced by hyperandrogenism rather than by the underlying condition.

