STUDY OF ANTI-MULLERIAN HORMONE LEVELS IN A SAMPLE OF POLYCYSTIC OVARY SYNDROME WOMEN ACROSS AGE GROUPS

Mohamed Salah Abd-Rabbo, Ahmed Mostafa Fouad, Rasha Abdein El-Sayed
Department of Obstetrics & Gynecology, Faculty of Medicine, Alexandria University.

Introduction

Anti-Mullerian hormone (AMH) appears to be the most promising predictor of ovarian reserve in non-PCOS women, regardless of chronological age, of all the hormonal and sonographic approaches tested. Women with PCOS have somewhat similar evidence. PCOS-affected women exhibit higher AMH concentrations than non-PCOS women, suggesting that AMH concentration may be a sign of extended fertility in these women.

Aim of the Work

The aim of this study was to predict the age of AMH decline in PCO women.

Patients and Methods

This was a clinical trial study was carried out on 90 PCO patients in obstetrics and Gynecology department at Elshatby university hospital.

Results

The level of AMH show a highly significant difference between the five studied groups, AMH in group I ranged from 4.65-6.5 with mean value 5.60±0.62, in group II ranged from 3.55-5 with mean value 4.15±0.47, in group III ranged from 2.08-3.5 with mean value 2.76±0.46, in group IV ranged from 1.26-3 with mean value 1.94±0.58 and in group V ranged from 0.75-2.43 with mean value 1.26±0.54. There was statistical significant increase in groups I and II than groups III, IV.

Table 1: Compression between the different studied groups regarding AMH

	Group I (20-25 Years)	Group II (25 -30 Years)	Group III (30-35 Years)	Group IV (35-40 Years)	Group V (40-45 Years)
AMH					
Range	4.65-6.5	3.55-5	2.08-3.5	1.26-3	0.75-2.43
Mean	5.60	4.15	2.76	1.94	1.26
SD	0.62	0.47	0.46	0.58	0.54
ANOVA	45.3				
P value	0.001*				

Table 2: Compression between the different studied groups regarding Hirsuitism (MFG score

Hirsuitism (MFG score)	Group I (20-25 Years)		Group II (25 -30 Years)		Group III (30-35 Years)		Group IV (35-40 Years)		Group V (40-45 Years)	
	No	%	No	%	No	%	No	%	No	%
Hirsuitism (MFG score										
None (≤7)	1	5.6	2	11.1	1	5.6	3	16.7	0	0.0
Mild (8–15)	8	44.4	9	50.0	7	38.9	6	33.3	8	44.4
Moderate (16–25)	6	33.3	6	33.3	9	50.0	8	44.4	2	11.1
Severe (26–34)	3	16.7	1	5.6	1	5.6	1	5.6	8	44.4
X^2	18.98									
P value	0.002*									

Conclusion

In conclusion, age-related decline of AMH, using well-established advanced statistical methods could elegantly assess the value of AMH in discriminating PCOS patients and may be useful as an initial assay for PCOS diagnosis.