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**Background and Aims:** Since AMH reflects the number of antral follicles and the pronounced androgen secretion from follicles/stroma in women with polycystic ovary syndrome (PCOS) remains until late reproductive age, the age related relationship between AMH in women with PCOS are of interest.

**Methods:** Women with PCOS (aged 15–42 years) (n=537) participated in the study. AMH level according to age groups were investigated. PCOS was diagnosed using Rotterdam criteria. The relationships between AMH and androgenic, metabolic, hormonal and ovarian parameters were also studied. Finally, multiple regression analysis was done to evaluate determinants of serum AMH level in women with PCOS.

**Results:** From 537 women with PCOS, 375 patients showed clinical and/or biochemical hyperandrogenism, and the remaining 162 patients did not show. Mean serum AMH level was significantly higher in hyperandrogenic patients (10.38 ng/ml, 95% CI 9.71 - 11.09) compared with that of non-hyperandrogenic ones (8.74 ng/ml, 95% CI 7.98 - 9.58) ( $P = 0.004$ ). Serum AMH levels showed no differences according to different age groups (Table 1) and remained stable throughout the ages (Figure 1). In Pearson's correlation analysis, serum AMH showed significant positive correlations with total testosterone, free testosterone, log free androgen index, androstenedione, DHEAS, LH levels, mean antral follicle number and ovarian volume. A multiple linear regression model was used to determine variables which were associated with AMH level. Age did not contribute significantly to the model. Only LH, total testosterone, and mean antral follicle number contributed significantly to serum AMH levels.

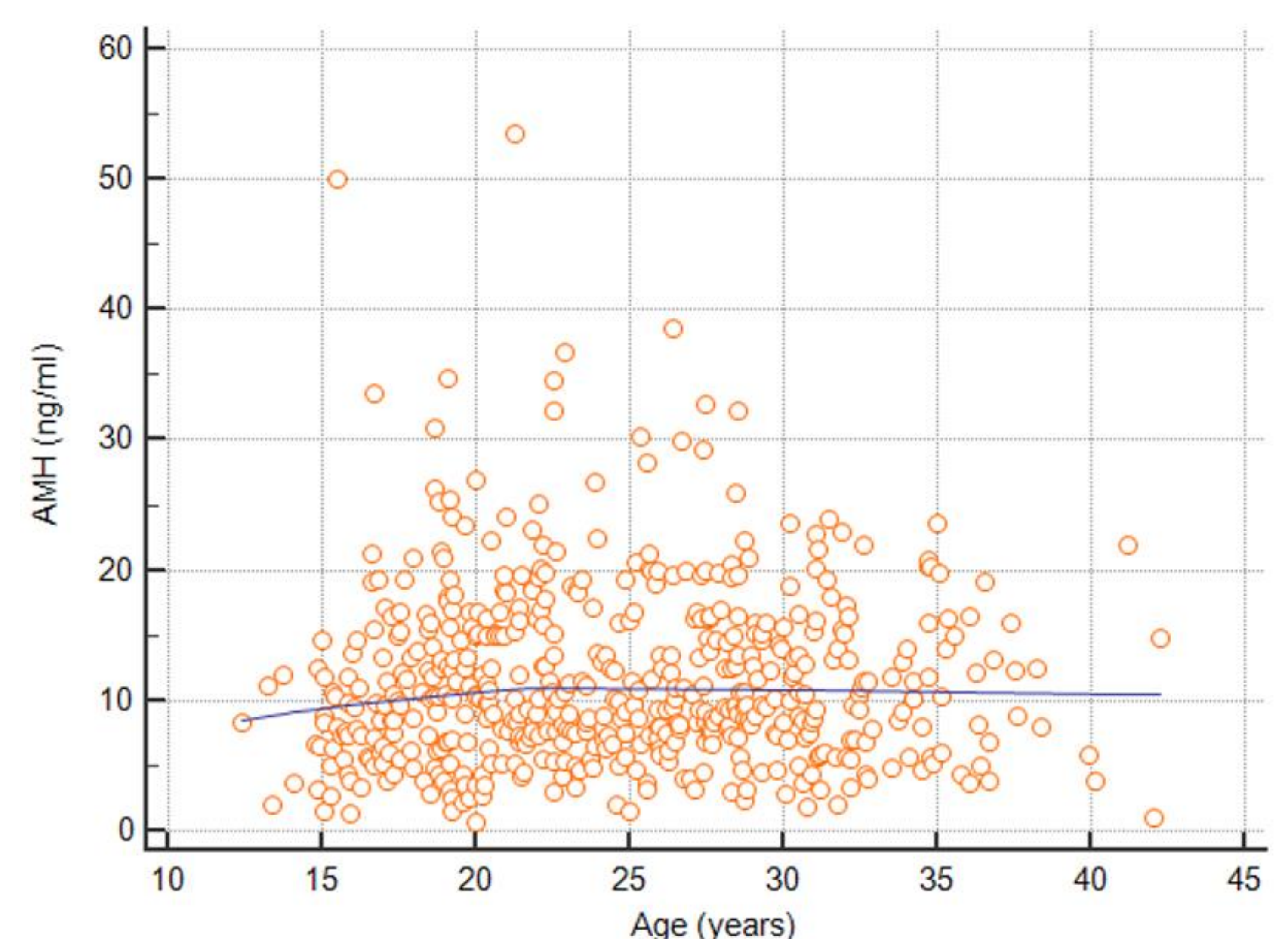
Table 1. Serum anti-Müllerian hormone levels according to age groups in

women with polycystic ovary syndrome

Age (years)	Number of subjects	Anti-Müllerian hormone (ng/ml)	<i>P</i> value *
<20	141	9.11 (8.15, 10.19)	
20.0-29.9	277	10.49 (9.76, 11.27)	0.147
30.0-34.9	84	9.36 (8.24, 10.63)	
35.0-42.2	28	11.1 (8.75, 13.45)	

\* ANOVA

Figure 1. Scatter plot depicting the relationship between serum levels of anti-Müllerian hormone (AMH; ng/ml) and ages in women with polycystic ovary syndrome.



**Conclusions:** Serum AMH levels remained high until late reproductive age and did not show significant variation according to the age groups. Hyperandrogenic PCOS patients showed higher AMH levels than that of non-hyperandrogenic patients. LH, total testosterone, and antral follicle number were main contributors to serum AMH levels irrespective of age.