Abstract: The antimullerian hormone which is a marker of aging and of ovarian reserve is 2-3 times higher in PCOS patients. In these patients the AMH production is higher in anovulatory patients when compared to ovulatory ones, although both being hyperandrogenic. Aim: To determine the values of AMH in patients with PCOS who were treated at the Gynecology office of the University Hospital of Caracas between March to September 2013. Methods: A prospective, descriptive and longitudinal study with simple sequential sampling of 30 patients between the ages of 18-39 who met the Rotterdam criteria was performed. AMH determinations were performed using a 3.5 value as a control for PCOS. AMH levels were determined in the different age groups and hormone values were then correlated according to the presence of ovulatory or anovulatory cycles and its relationship with BMI and androgen levels. Results: 30 patients were recruited for the study: 20% (6/30) between 18 and 24 years old, 56.57% (17/30) between 25-30 years old, 16.7% (5/30) between 31-36 years old and 6.7% (2/30) between 37-40 years old. The BMI ranged between 19 and 48 kg/m2 with a median of 26.10 kg/m2. The AMH values ranged between 1.90 and 22.20, $x = 10.22$. 3.33% (1/30) had values less than 3 and 96.67% (29/30) exceeded this value. AMH values were established for the different age groups. The Pearson correlation coefficient between BMI and AMH yielded a value of $r = 0.03$ suggesting a very low direct relationship between the two variables. When considering the anovulatory cycles condition dependent of AMH, the eta coefficient value reached 0.95 with a very high relationship, where 24 anovulatory patients with AMH values ranging between 4.80 and 22.20, $x = 10.86$. The Pearson correlation coefficient $r = -0.03$ indicates a very low inverse relationship between the AMH and the 17OHPG. Also the Pearson correlation coefficient $r = 0.04$ indicates a very low direct relationship between AMH and testosterone. Conclusions: The AMH is elevated in patients with PCOS (values greater than 3). No significant relationship was found between AHM and BMI levels and a very low direct relationship with the presence of biochemical hyperandrogenism. However, a dependency among the anovulatory cycles dependent of the higher values of AMH was found.