Results

The AMH level in the 60 patient ranged from 0.1 to 12.44 ng/ml (mean=2.30) (SD=2.72).

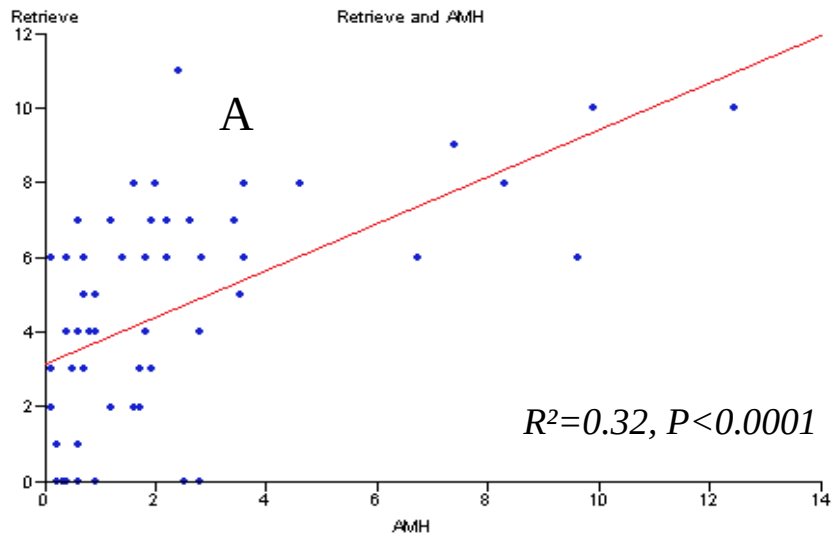
Ten patients out of the sixty (17%) did not complete the cycle(cancellation) because of poor ovarian response according to the criteria described before, and out of the remaining 50 patient ,18 became pregnant.

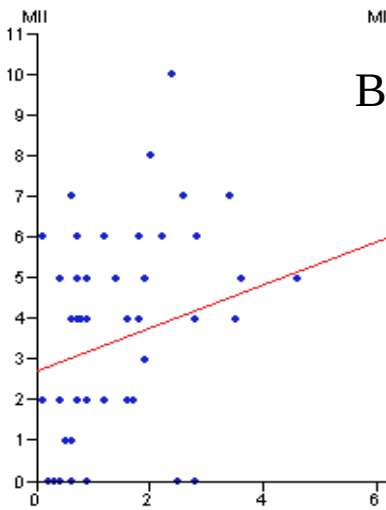
AMH and the Ovarian Response:

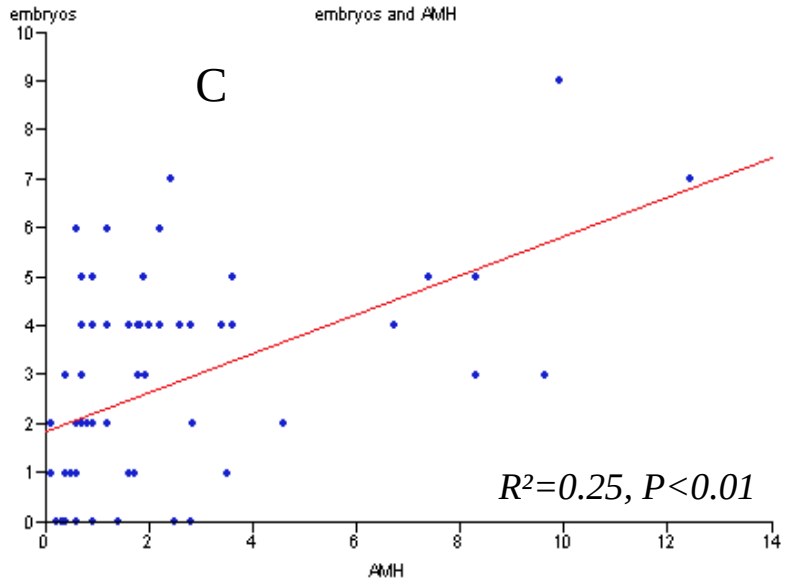
Simple regression analyses were performed between AMH level as an independent variable on one hand and the number of retrieved oocytes, number of MII oocytes, number of embryos and number of class A embryos as dependant variable(s) on the other hand. Positive relationship was found between the AMH level and;

- The number of retrieved oocytes*($R^2=0.32$, $P<0.001$)*,
- The number of MII oocytes*($R^2=0.33$, $P<0.001$)*,
- The number of embryos*($R^2=0.24$, $P<0.001$)*,
- The number of class A embryos *($R^2=0.14$, $P<0.01$)*.

The diagrams of simple regression between AMH levels and the number of retrieved oocytes, the number of MII oocytes, the number of embryos and the number of class A embryos are shown in page 76.







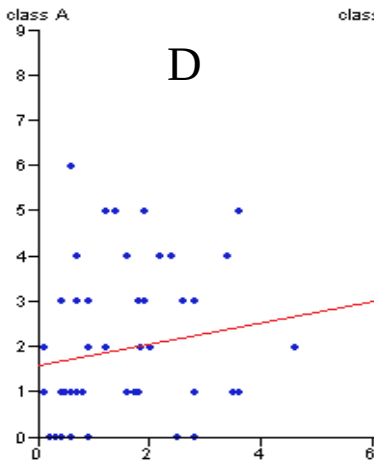


Figure . Correlation of no. of oocytes (**A**), no. of MII oocytes (**B**), no. of embryos(**C**), no. of class A embryos(**D**

Comparison between the two AMH groups:

When the patients are classified into two groups according to the AMH levels, the group with AMH ≥ 1.2 ng/ml (n=34) compared with the group of AMH <1.2 ng/ml (n=26) shows:

- Higher number of retrieved oocytes *(mean=5.97, SD=2.71)* versus *(mean=2.81, SD=2.37) (P<0.001).*
- Higher number of MII oocytes*(mean=4.85, SD=2.31)*versus *(mean=2.27, SD=2.20) (P<0.001).*
- Higher number of embryos (*mean =3.85, SD=2.06*) versus (*mean=1.85, SD=1.87*) *(P<0.001).*
- Higher number of class A embryos *(mean= 2.74, SD=1.69)* versus *(mean=1.27, SD=1.51) (P<0.001).*
- Lower percentage of cancellation *(0.06% versus 31%) (P= 0.0104).*
- Higher percentage of pregnancy *(38% versus 19%) (P=0.1114*).

The results of the two groups are summarized in table (2).

AMH and prediction of pregnancy:

- 13 women of the 34 with AMH ≥1.2 ng/ml became pregnant (38%).
- 5 women of the 26 with AMH <1.2 ng/ml became pregnant (19%).

Although the percentage of pregnant women was higher in the group with AMH level ≥1.2ng/ml(Sensitivity, 72%& Specificity, 50%) ***this deference is not statistically significant (P=0.1114).***

	Study group (n=60)	*Group ≥1.2 ng/ml (n=34)*	*Group <1.2ng/ml (n=26)*	*P value*
AMH level (ng/ml)	*2.30±2.72*	*3.66±2.95*	*0.52±0.27*	
No of retrieved oocytes	*4.60±3*	*5.97 ±2.71*	*2.81±2.37*	*P<0.001*
No of MII oocytes	*3.73±2.59*	*4.85±2.31*	*2.27±2.20*	*P<0.001*
No of embryos	*2.98±2.21*	*3.85±2.06*	*1.85±1.87*	*P<0.001*
No of class A embryos	*2.10±1.76*	*2.74±1.69*	*1.27±1.51*	*P<0.001*
Cancellation	*10(17%)*	*2(0.06%)*	*8(31%)*	*P= 0.0104*
Percent of pregnancy	*18(30%)*	*13(38%)*	*5(19%)*	*P=0.1114*

Table (2) the result of the two study group, values are presented as mean±SD.