Results

The results were summarized and grouped in tables and figures for illustration as follow:

Table (5), demonstrates the range of prolactin hormone level in all patients' plasma before laparoscopic ovarian drilling. The mean and standard deviation of the values were calculated.

***Table* (5): Prolactin hormone level in plasma in all patients before LOD.**

	N	Minimum by(ng/ml)	Maximum by (ng/ml)	Mean ± SD
Non-ovulating	**24**	**6.5**	**29.5**	**19.38 ± 7.76**
Ovulating	**26**	**6.2**	**19.7**	**11.32 ± 2.91**

Table (6), compares progesterone hormone levels in all patients on day 21 of the cycle after operation. The mean and standard deviation of the values were calculated.

Table (6): Comparison of progesterone level in non-ovulating and ovulating patients after LOD.

	N	Min by (ng/ml)	Max by (ng/ml)	Mean±SD	t. test	p. value
Non- ovulating	**24**	**0.19**	**1.7**	**0.76±0.38**	**15.209**	**<0.001**
Ovulating	**26**	**12.30**	**24.64**	**18.33±2.81**		

Ovulation were recognized when serum progesterone level more than or equal to 10 ng/ml ***(Chang, 1983)***.

Table (7), shows the number and percentage of ovulation in the patients after LOD.

***Table* (7): Rate of ovulation on day 21 of the cycle.**

	N	%
Non-ovulating	**24**	**48**
Ovulating	**26**	**52**

Table (8), demonstrates the range of prolactin hormone level in all patients' plasma after laparoscopic ovarian drilling. The mean and standard deviation of the values were calculated.

***Table* (8): Prolactin hormone level in plasma one month after LOD.**

	N	Minimum by (ng/ml)	Maximum by (ng/ml)	Mean ± SD
Non-ovulating	**24**	**7.9**	**39.5**	**27.34 ± 4.02**
Ovulating	**26**	**6.2**	**18.9**	**11.36 ±2.95**

Figure (6), illustrates the means of prolactin hormone level in the two groups after operation graphically.

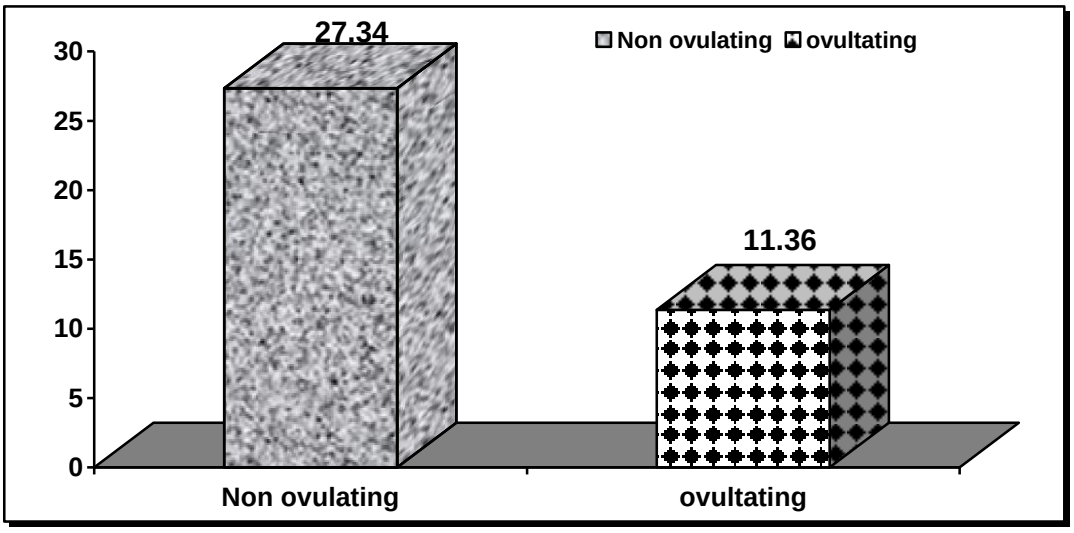

***Figure* (6): Prolactin hormone level in plasma one month after LOD.**

Table (9); shows comparison of the results of prolactin hormone level in non-ovulating patients before and after operation. There were statistical significant differences between both results.

***Table* (9): Comparison of prolactin hormone level in non ovulating patients before and after LOD.**

	PRL before LOD by(ng/ml)	PRL after LOD by(ng/ml)
Range	**6.5 - 29.5**	**7.9 – 39.5**
Mean ± SD	**19.38 ± 7.76**	**27.34 ± 4.02**
t. test	**2.214**	
p. value	**0.049***	

The t-test assesses whether the means of two groups are statistically different from each other.

The P value is a probability, with a value ranging from zero to one. It observes the significance level. Results are considered significant when P value less than 0.05.

Figure (7), is a graphic illustration of the comparison between the means of prolactin hormone level before and after the operation in the non-ovulating group. There were statistical significant differences between both results.

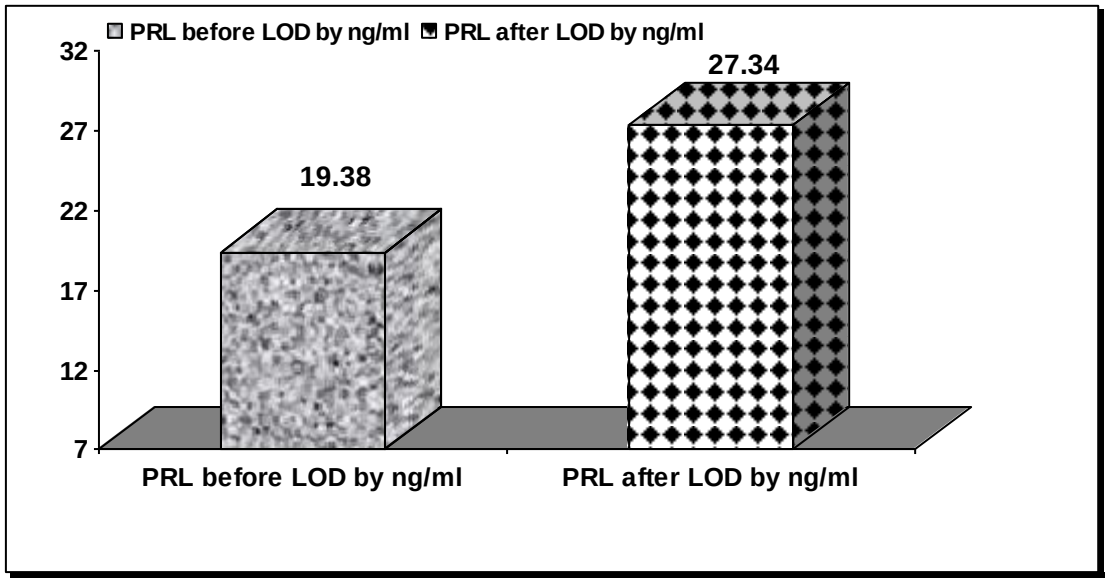

***Figure* (7): Comparison of mean of prolactin hormone level in non ovulating patients before and after LOD.**

Table (10), demonstrates the number of patients who developed hyperprolactinemia one month after operation.

***Table* (10): Percentage of hyperprolactinemia one month after LOD.**

	N of patients	N of hyperprolactinemic patients	%	p. value
All patients	**50**	**7**	**14**	**>0.05**
Non-ovulating	**24**	**7**	**29.16**	**0.049***
Ovulating	**26**	**0**	**0**	**>0.05**

Hyperprolactinemia were defined as serum prolactin level more than or equal to 30 ng/ml ***(Chang, 1983)***. It was insignificant in ovulating and all patients, but significant in the non ovulating group.

Figure (8), is a graphic presentation of the percentage of patients who developed hyperprolactinemia in all patients one month after operation.

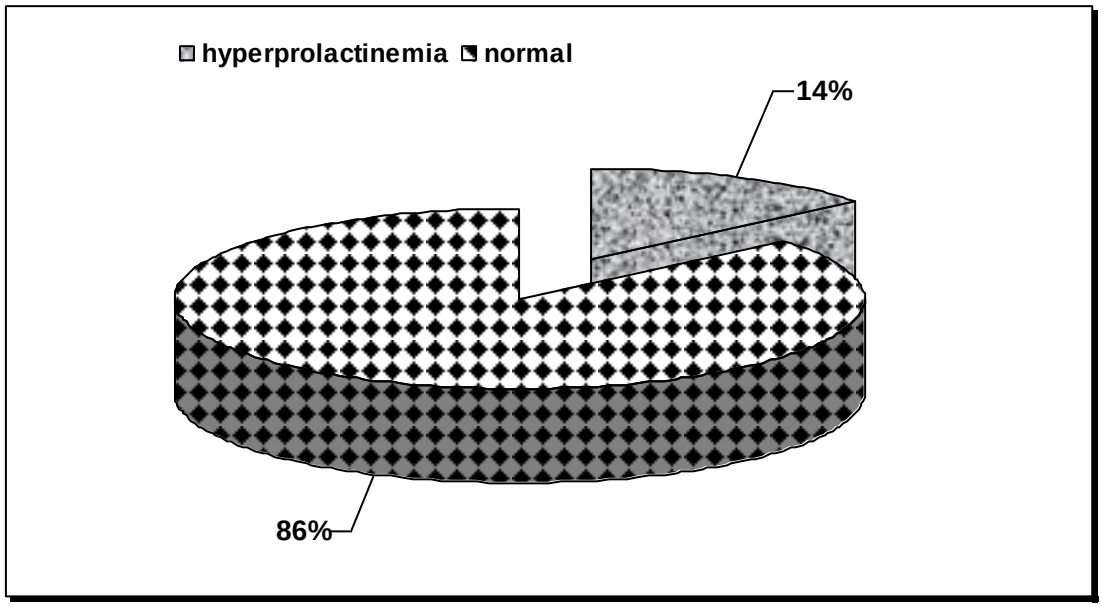

***Figure* (8): Percentage of hyperprolactinemia in all patients one month after LOD.**

Figure (9), is a graphic presentation of the percentage of patients who developed hyperprolactinemia in the non-ovulating group one month after operation.

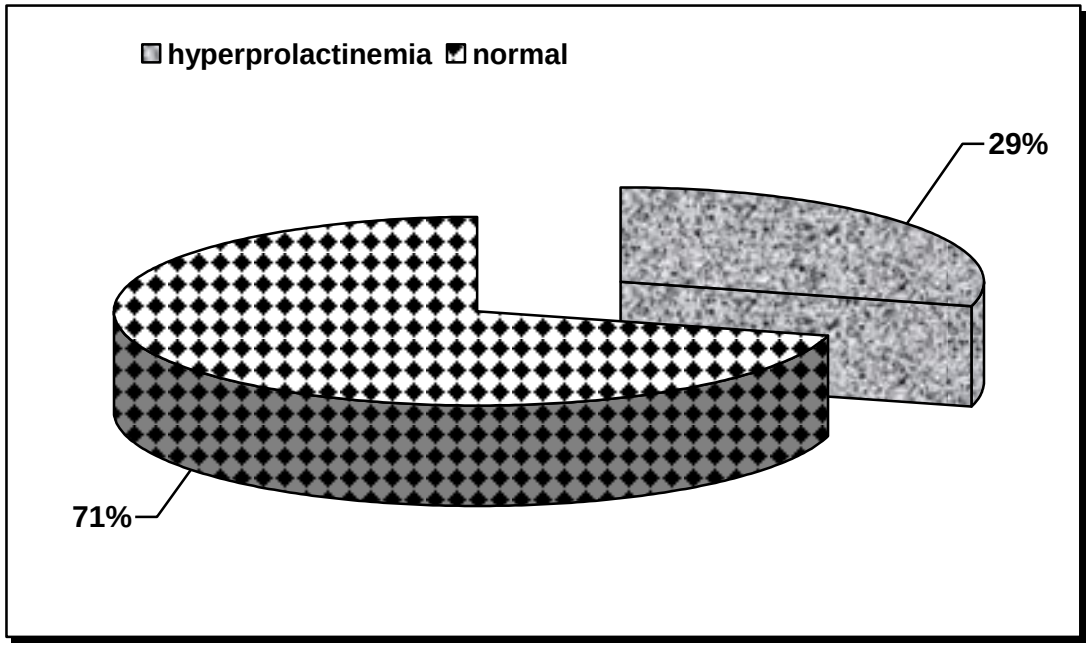

***Figure* (9): Percentage of hyperprolactinemia in non ovulating patients one month after LOD.**

Table (11), assesses the correlation of postoperative hyperprolactinemia with other data of the patients. There were no correlations between them.

***Table* (11): Correlation of post LOD Hyperprolactinemia with other findings.**

	Post LOD Hyperprolactinemia (n = 7)	
	r	P
Age	**-0.635**	**0.325**
BMI	**-0.587**	**0.580**
Duration	**0.147**	**0.058**
pre-LOD prolactin	**0.475**	**0.096**

r means the Linear Correlation Coefficient and P is Pearson Correlation Coefficient; they are used to measure the degree of correlation.

Table (12), shows the correlation of pre and post-operative prolactin level with other data and with each other. There were no correlations between them.

***Table* (12): Correlation of pre & post LOD prolactin level with age and BMI in non ovulating patients.**

	pre-LOD prolactin		post -LOD prolactin	
	r.	P	r.	P
Age	**0.365**	**0.869**	**-0.369**	**0.328**
BMI	**-0.524**	**0.320**	**0.204**	**0.077**
pre-LOD prolactin	**-**	**-**	**-0.307**	**0.287**
post -LOD prolactin	**-0.024**	**0.269**	**-**	**-**