RESULTS

RESULTS

Table (1): Patients characters in the study groups (number =30) at the start of study:

Group⟍ Data	IUI with MFD < 20mm	IUI with MFD ≥20	P
Number of the patients	15	15	.
Wife Mean age ± SD (y) Range(y)	28.31 ± 5.08 23-32.16	28.52 ± 5.16 22-35	N.S
Husband Mean age ± SD(y) Range (y)	32.18 ± 7.01 25-39.75	33.1 ± 6.98 26-41.16	N.S
Infertility (y) Mean duration ± SD(y) Range (y)	5.1 ± 1.21 3- 6.25	4.95 ± 1.16 3.25 – 6.5	N.S

MFD: Mean follicular diameter of the leading follicle

Table (1): shows the characteristics of thirty infertile couples with primary unexplained infertility. They were divided randomly into 2 groups each of which was 15 patients, no significant difference was detected between the two group as regard wife age, husband age or duration of infertility.

Table (2): Number and percentage of pregnancy in the study group:

	IUI with MFD <20	IUI With MFD ≥ 20	Total
Number of patients	15	15	30
Number of treatment cycles	76	78	154
Number of pregnancies	6	1	7
% of preg. /pt.	40%	6.66%	23.33%
% of preg./ Cycle.	7.89%	1.28%	4.54 %

Table (2): Shows that a total of 154 inseminations were done, 76 were IUI with MFD < 20mm (49%) and 78 were IUI with MFD $\geq$ 20mm (51%). The overall pregnancy rate was 23.33% per patient and 4.54% per cycle, the higher pregnancy rate was in IUI with MFD < 20 (40% and 7.89%), and the lower pregnancy rate was in IUI with MFD $\geq$ 20 (6.66% and 1.28).

Table (3): Number and percentage of pregnancy in the treatment cycles:

Cycle	Number of inseminations	Number of pregnancy	Percentage of preg./cycle	
1	30	3	10%	
2	27	2	7.4%	7.31%
3	25	1	4%	
4	24	-	0.00%	
5	24	-	0.00%	1.38%
6	24	1	4.16%	
Total	154	7	4.54%	

Table (3): shows that the higher percentage of pregnancy was in the first 3 treatment cycles (7.31 %) as compared to the next 3 treatment cycle (1.38%).

Table (4): Comparison of patients characters in pregnant and non pregnant groups:

Character	Pregnant group (n=7)	Non pregnant group (n=23)	P
Wife			
Mean age ± SD (y)	26.7 ±3.65	28.8 ± 4.16	N.S
Range(y)	22-34.25	23-35	
Husband			
Mean age ± SD(y)	32.8 ±4.43	33.6 ± 6.86	N.S
Range (y)	26-39.16	25-41. 16	
Infertility			N.S
Mean duration ± SD (y)	4. 85 ± 1.23	5.16 ± 1.26	
Range (y)	3-6	3.5- 6.5	

Table (4): Compares the characters of pregnant with that of non pregnant cases. There was no significant difference as regard wife age, husband age or duration of infertility.

Table (5): Comparison between mean number of follicles, endometrial thickness on day of hCG injection in pregnant and non pregnant groups :

Character	Pregnant group (n=7)	Non pregnant group (n=23)	P.
Follicls number: Mean ± SD	2.41± 0.67	2.43 ±0.96	NS
Endometrial thickness : Mean ± SD (mm)	10.51 ±1.65	10.12 ±1.4	NS

Table (5): Shows that there was no significant difference between the mean number of follicles 16-23 mm and endometrial thickness in day of hCG injection, in pregnant and non pregnant cases.

Table (6): Comparison of sperm character before and after processing in pregnant and non pregnant cycles:

Character	Pregnant cycles (n=7)	Non pregnant cycle (n=23)	P
Sperm concentration/ml:			
Before (Mean ± SD)	$61.88 \pm 9.57 \times 10^6$	$66 \pm 10.87 \times 10^6$	NS
After (Mean ± SD)	$106.78 \pm 14.61 \times 10^6$	$107.17 \pm 20.11 \times 10^6$	NS
	$P < 0.001$	$P < 0.001$	
Sperm motility*:			
Before (Mean ± SD)	$52.33 \pm 8.66\%$	$51.02 \pm 9.44\%$	NS
After (Mean ± SD)	$87.78 \pm 4.4\%$	$85.67 \pm 8.25\%$	NS
	$P < 0.001$	$P < 0.001$	
Total Number Of sperm:			
Before processing	$184.87 \pm 22.37 \times 10^6$	$193.12 \pm 24.27 \times 10^6$	NS
Number Inseminated	$53.24 \pm 8.31 \times 10^6$	$54.17 \pm 8.44 \times 10^6$	NS

* Sperm motility

    Before: progressive motile sperm within 30 minutes after ejaculation

    After : progressive motile sperm immediately after processing

Table (6): compares the sperm characters (sperm concentration /ml, sperm motility and total number of sperm) before and after processing. No significant difference was found between pregnant and non pregnant group. Processing significantly increased the sperm concentration and the percentage of progressive motile sperm.

Table (7): Side effect of IUI in the study group (n =30):

Side effect	IUI cases	Percentage
Difficult application	3	10%
Sperm reflux	2	6.66%
Abdominal cramps	1	3.33%
Vasovagal attack	-	-
Total	6	20%

Table (7): shows the side effects of IUI, difficult application of the IUI catheter was present in 3 cases even after traction on the external os by a volsellum, sperm reflux was observed in 2 cases and abdominal cramps in 1 case which responded to conservative therapy by hyoscine-N butylbromide *(Buscapan 10 mg/tab: Boehringer Ingelheim, Germany).*

Table (8): Outcome of pregnancy by T.V. U/S (n = 7):

Outcome of preg.	Number	Percentage
Single pregnancy	6	85.71%
Twin pregnancy	1	14.28%
Triplet pregnancy	-	0.0 %
Ectopic pregnancy	-	0.0 %

Table (8): Shows the outcome of 7 pregnant cases there were 6 cases with single pregnancy (85.71%) and 1 case with twin pregnancy (14.28%), no cases with triplet pregnancy or ectopic pregnancy.