RESULTS

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Fifty four patients participated in the present work during the period from November 1997 to May 2000. All cases had unexplained infertility and were chosen among those attending the infertility clinic of Benha University Hospital and Helwan Specialized Hospital of Obstetrics and Gynecology the results are shown in tables (1-9).

Table (1) showing the clinico-epidemiological data of the study cases. The cases included 35 patients with primary infertility and 19 cases with secondary infertility.

Table (1) : Clinico-epidemiological data of study cases (n = 54)

Parameter \ Index	Range	Mean +SD
Age :		
(Years)	21-40	31 ± 6
Parity	0-4	2 ± 1.6
Type of infertility		
1ry	-	35
2ry	-	19
Duration of infertility (years)	2-20	9.6 ± 5.4

Table (2) : Shows clinico epidemiological data according to the type of infertility cases with secondary infertility, showed statistically significance, older age ($P < 0.001$), cases with primary infertility showed statistically significance compared to secondary infertility, increase longer duration of marriage ($P < 0.05$) and duration of infertility ($P < 0.05$) compared to those with secondary infertility between both groups. No statistically significant difference regarding history of pelvic infection and D & C ($P > 0.05$).

Table (2) : Clinico-epidemiological data according to type of infertility (n = 54) :

Index / Parameters	1ry infertility (n = 35)	2ry infertility (n = 19)	"t" test P value	Significance
Age (year)				
Range	21 – 40	27- 40		
Mean ± SD	28.68±5.99	34.47±5.39	P< 0.001	Significant
Duration of infertility (years)				
Range	3-20	2-11		
Mean ± SD	9.6±5.4	6.5 ± 3.43	P < 0.05	Significant
Duration of marriage (years)				
Range	4-21	3-12		
Mean ± SD	9.8±5.9	6.7 ± 3.7	P < 0.05	Significant
Pelvic infection				
D & C	8 (22.9%)	9 (47.4%)	P > 0.05	Non-significant
	20 (57.1%)	15 (78.9%)	P > 0.05	Non-significant

Table (3) shows age distribution and type of infertility in primary infertility the number of cases ≤ 30 years is statistically higher (P > 0.05) while the number of cases ≥ 31 years is statistically lower (P < 0.05) in cases with secondary infertility.

Table (3) : Age distribution and type of infertility (n = 54)

Index / Parameters	1ry infertility (n = 35)	2ry infertility (n = 19)	"t" test P value	Significance
≤ 30 (years	26 (74.3%	4 (12.1%)	P < 0.05	Significant
≥ 31 (years)	9 (25.7%)	15 (78.9%)	P < 0.05	Significant

Table (4) shows hysteroscopic finding of study cases. Hysteroscopy shows normal endometrium appearance in 74% of cases, and abnormal endometrial appearance in 26% (adhesioon 12%, septum 2%, myoma 6% and endometrial polyp 6%).

Table (4) : Hysteroscopy of study cases (n = 54)

Normal	40 cases	(74%)
Adhesions	7 cases	(12%)
Septum	1 case	(2%)
Myoma	3 cases	(6%)
Polyp	3 cases	(6%)

Table (5) shows hysteroscopy findings in relation to age distribution. Normal endometrial pattern is significantly prevalent in cases ≤ 30 years old ($P < 0.05$) while endometrial adhesions are significantly prevalent in cases ≥ 31 years ($P < 0.05$). No statistically significant difference is detected between both age groups as septa, myoma or polyp ($P > 0.05$).

Table (5) : Hysteroscopy and age distribution (n = 54)

Age / Finding	≤ 30 (years) (n = 32)	≥ 31 (years) (n = 22)	"t" test P value	Significance
Normal	28 (87.6%)	12 (54.5%)	P < 0.05	Significant
Adhesions	1 (3.1%)	6 (27.3%)	P < 0.05	Significant
Septum	1 (3.1%)	- (0%)	P > 0.05	Non-significant
Myoma	1 (3.1%)	2 (9.1%)	P > 0.05	Non-significant
Polyp	1 (3.1%)	2 (9.1%)	P > 0.05	Non-significant

Table (6) shows hysteroscopy and type of infertility. No statistically significant difference is detected between primary and secondary infertility cases as regards normal endometrial pattern, adhesions, septa, myoma and polypie ($P > 0.05$).

However, adhesions and myomata are more prevalent in cases with secondary infertility cases compared with primary infertility cases (26.3% VS 5.7% respectively). This may be attributed to age and previous obstetric history.

Table (6) : Hysteroscopy and type of infertility (n = 54)

Type of infertility / Finding	1ry infertility (n = 35)	2ry infertility (n = 19)	"t" test P value	Significance
Normal	29 (82.8%)	11 (57.9%)	P > 0.05	Non-significant
Adhesions	2 (5.7%)	5 (26.3%)	P > 0.05	Non-significant
Septum	1 (2.9%)	0 (0%)	P > 0.05	Non-significant
Myoma	1 (2.9%)	2 (10.5%)	P > 0.05	Non-significant
Polyp	2 (5.7%)	1 (5.3%)	P > 0.05	Non-significant

Table (7) shows histopathology of study cases. Normal endometrial histopathology is detected in (83.33%) of cases. (16.66%) of cases showed abnormal histopathology (3.70%) of cases show dys-synchronous endometrium (5.55%) of cases show hyperplastic endometrium (7.45%) of cases show chronic non-specific endometritis.

Table (7) : Histopathology of study cases (n =54) :

Finding	Number
Normal (proliferative)	45 (83.33%)
Dys-synchronous endometrium	2 (3.70%)
Hyperplastic	3 (5.55%)
Chronic non-specific endometritis	4 (7.45%)

Table (8) : Histopathology and age distribution (n = 54). Normal endometrial histopathology is detected in (90.61%) of cases ≤ 30 years and in (72.71%) of cases ≥ 31 years. No statistically significant difference is detected between age groups as regard normal endometrium pattern, dys-synchronous endometrium, hyperplasia or chronic endometritis. However hyperplasia is prevalent in age group ≥ 31 years.

Table (8) : Histopathology and age distribution (n = 54):

Age / Finding	≤ 30 years (n = 32)	≥ 31 years (n = 22)	"t" test P value	Significance
Normal (proliferative)	29(90.6%)	16(72.7%)	P > 0.05	Non-significant
Dys-synchronous endometrium	1 (3.1%)	1 (4.6%)	P > 0.05	Non-significant
Hyperplasia	0 (0%)	3 (13.6%)	P > 0.05	Non-significant
Chronic endometritis	2 (6.3%)	2 (9.1%)	P > 0.05	Non-significant

Table (9) : Show histopathology and type of infertility. No statistically significant difference is detected between primary and secondary infertility cases as regard normal endoemtrial histopathology, dys-synchrous endometrium hyperplasia, chronic endometritis. However chronic endometritis are more prevalent in cases with secondary infertility cases (15.8%) compared with primary

infertility (2.9%), this may be attributed to previous obstetric history and D & C intervention.

Table (9) : Histopathology and type of infertility (n = 54)

Type of infertility / Finding	1ry infertility (n = 35)	2ry infertility (n = 19)	"t" test P value	Significance
Normal (proliferative)	32 (91.3)	13 (68.4%)	P > 0.05	Non-significant
Dys-synchronous endometrium	1 (2.9%)	1 (5.3%)	P > 0.05	Non-significant
Hyperplasia	1 (2.9%)	2 (10.5%)	P > 0.05	Non-significant
Chronic endometritis	1 (2.9%)	3 (15.8%)	P > 0.05	Non-significant

Table (10) : Chi-square (X^2) test (2 x 2) contingency table) :

Test		Hysteroscopy		Total
		Positive	Negative	
		14	40	54
Histopathology	Positive	8	1	9
	Negative	6	39	45
Total		14	40	54