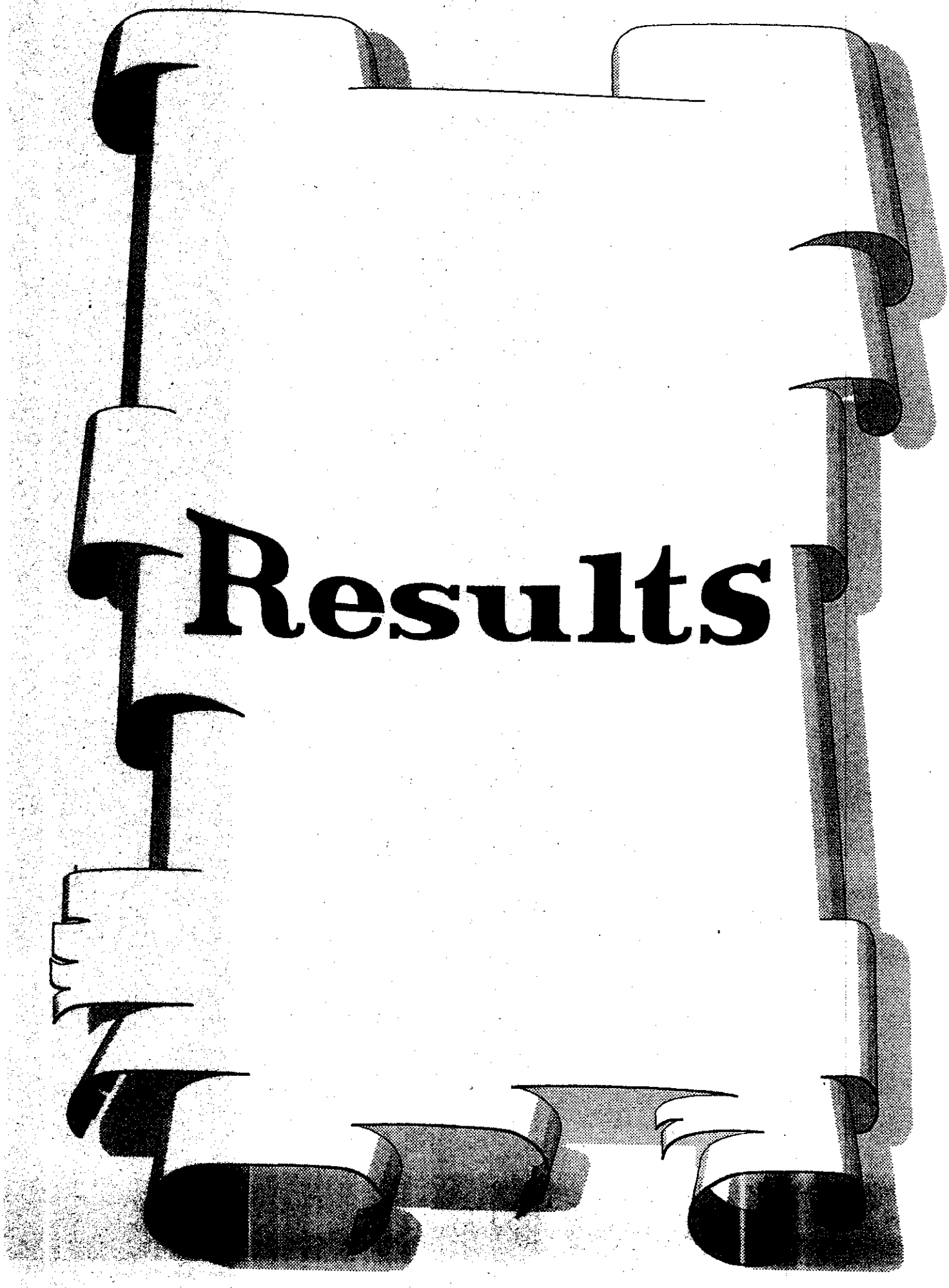

Results

Results

Table (1) :

Mean age, actual biopsy dating and menstrual cycle length in control females (group I) and patients on C.C. therapy (group II).

	Group I (n = 10)	Group II (n = 20)	"t"	"p" value
Age (years) :				
Range	25 - 32	23 - 32	1.111	N.S.
Mean	28.40	27.20		
S.E.M.	± 0.805	± 0.647		
Actual biopsy dating :				
Range	26 - 27	25 - 27	1.440	N.S.
Mean	26.4	26.0		
S.E.M.	± 0.163	± 0.178		
Mentrual cycle length :				
Range	28 - 29	27 - 31	1.249	N.S.
Mean	28.2	28.5		
S.E.M.	± 0.133	± 0.256		

Table I : shows the range, mean values and S.E.M. of the age, actual biopsy dating and menstrual cycle length among control females (group I) and patients on C.C. therapy (group II).

The age of all females ranged between 23 - 32 years. The mean (± S.E.M.) age was 28.4 ± 0.805 among control group and 27.2 ± 0.647 among patients on C.C. therapy.

The mean (± S.E.M.) actual biopsy dating was 26.4 ± 0.163 among control group and 26.0 ± 0.178 among patients on C.C. therapy.

The mean (± S.E.M.) menstrual cycle length was 28.2 ± 0.133 among control group and 28.5 ± 0.256 among patients on C.C. therapy.

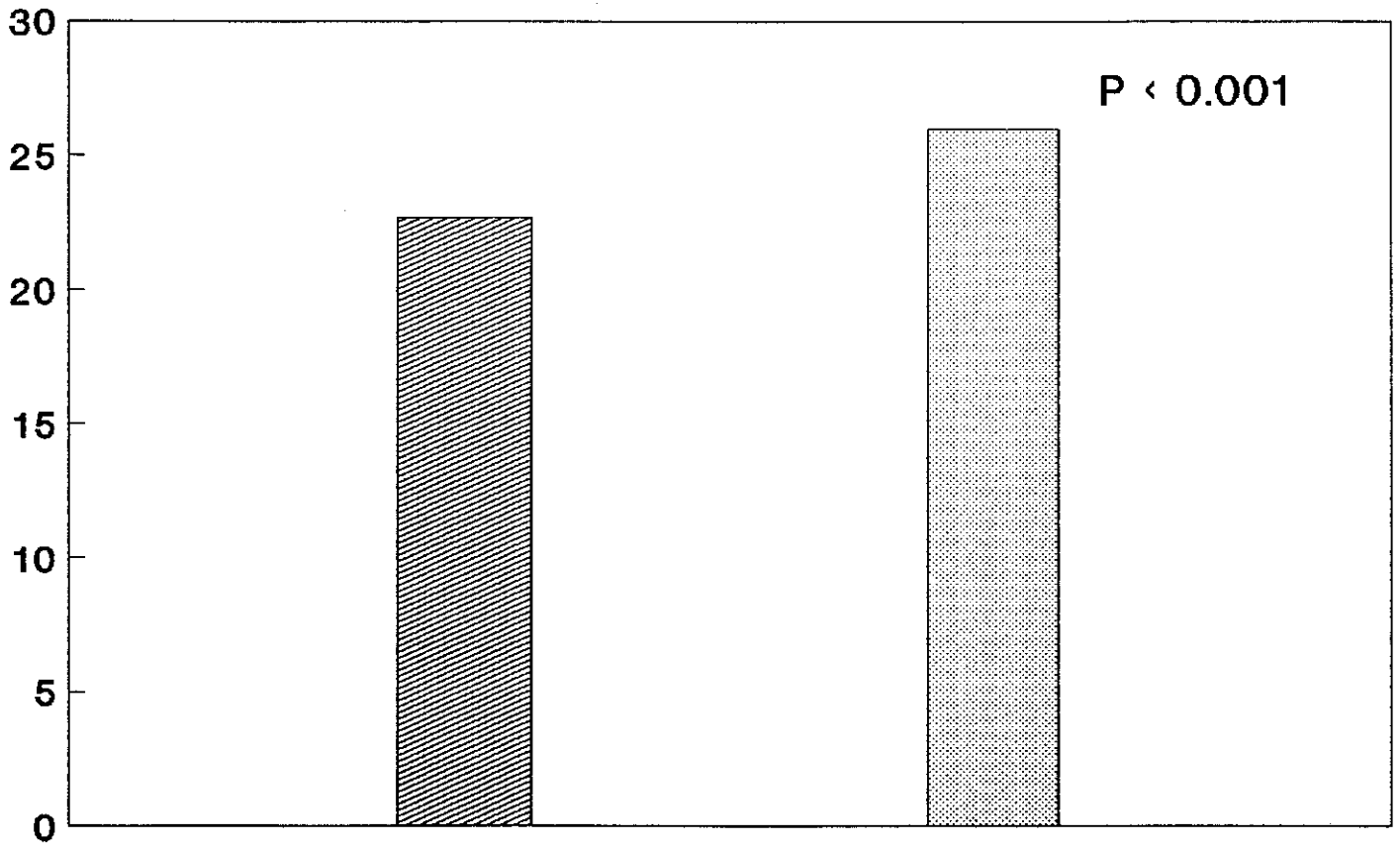
No statistical significant differences were found among the two groups as regard age, actual biopsy dating and menstrual cycle length.

Table (2) :

Comparison of histological biopsy dating between control females (group I) and patients on C.C. therapy (group II).

	Group I (n = 10)	Group II (n = 20)
Range	25 - 27	21 - 26
Mean	26.00	22.7
S.E.M.	± 0.211	± 0.384
"t"	8.876*	
"p"	< 0.001	

Fig 1



Comparison of histological biopsy dating control females (group I) and patients C.C. therapy (group II)

Table 2 and Figure 1 : shows comparison of histological biopsy dating between control females (group I) and patients on C.C. therapy (group II).

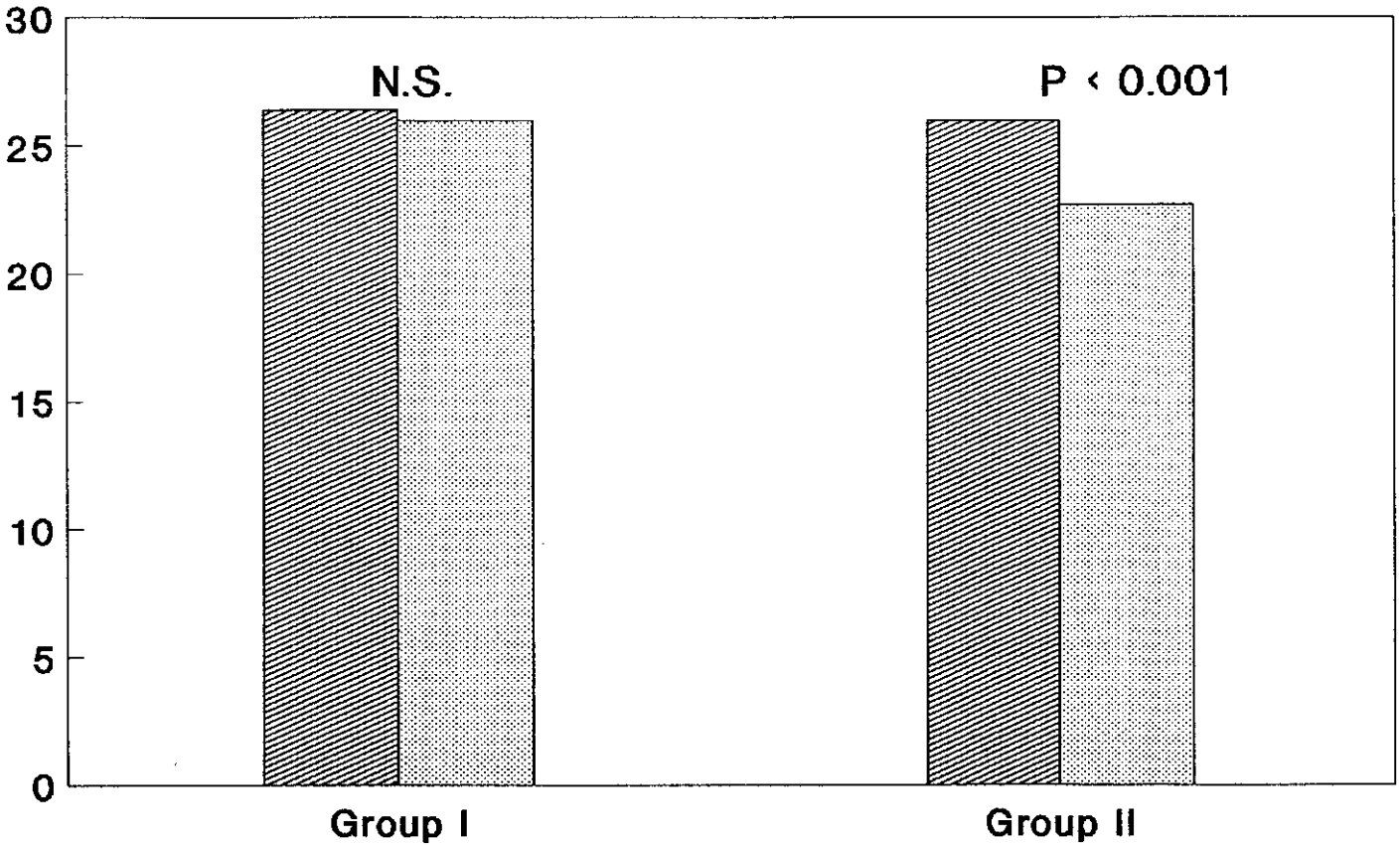
In (group I) the mean histological biopsy dating (26.0) was found to be higher than the mean histological biopsy dating (22.7) in (group II). Such difference was found to be statistically singificant ($P < 0.001$).

Table (3) :

Comparison between actual and histological biopsy dating in control females (group I) and in patients on C.C. therapy (group II).

	Group I (n = 10)		Group II (n = 20)	
	Actual biopsy dating	**Histological biopsy dating**	**Actual biopsy dating**	**Histological biopsy dating**
Range	26 - 27	25 - 27	25 - 27	21 - 26
Mean	26.4	26.0	26.0	22.7
S.E.M.	0.163	0.211	0.178	0.384
"t"	1.424		6.924*	
"p"	N.S.		< 0.001	

Fig 2



Comparison between actual and histological biopsy dating in control females(groupI)&in patients on C.C.therapy(groupII)

Table 3 and Figure 2 : shows comparison between actual and histological biopsy dating in group I (control females) and in group II (patients on C.C. therapy).

In control women the mean actual biopsy dating was 26.4 and the mean histological biopsy dating was 26. The difference between actual and histological biopsy dating in this group was found to be statistically non significant.

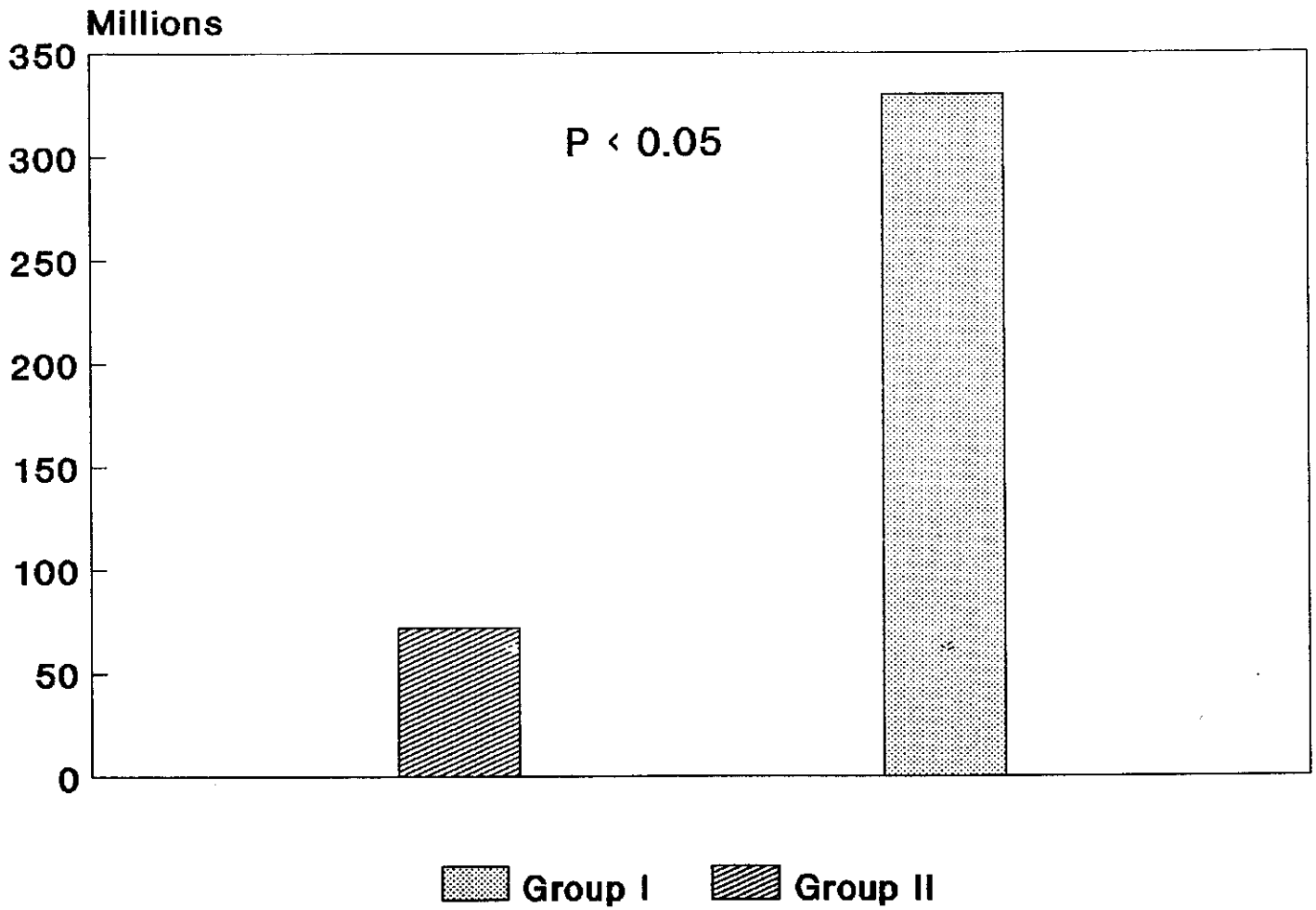
In patients recieved C.C. the mean actual biopsy dating was 26 and mean histological biopsy dating was 22.7 such difference was found to be statistically significant ($P < 0.001$).

Table (4) :

Endometrial estrogen receptor mean levels (m RNA / mg tissue) among control females (group I) and patients on clomiphene citrate therapy (group II).

	Group I (n = 10)	Group II (n = 20)
Range	1.5×10^5 - 3×10^9	3×10^5 - 12×10^9
Mean	3.3×10^8	7.2×10^7
S.E.M.	1.4×10^4	4.9×10^3
"t"	2.090^*	
"p"	< 0.05	

Fig 3

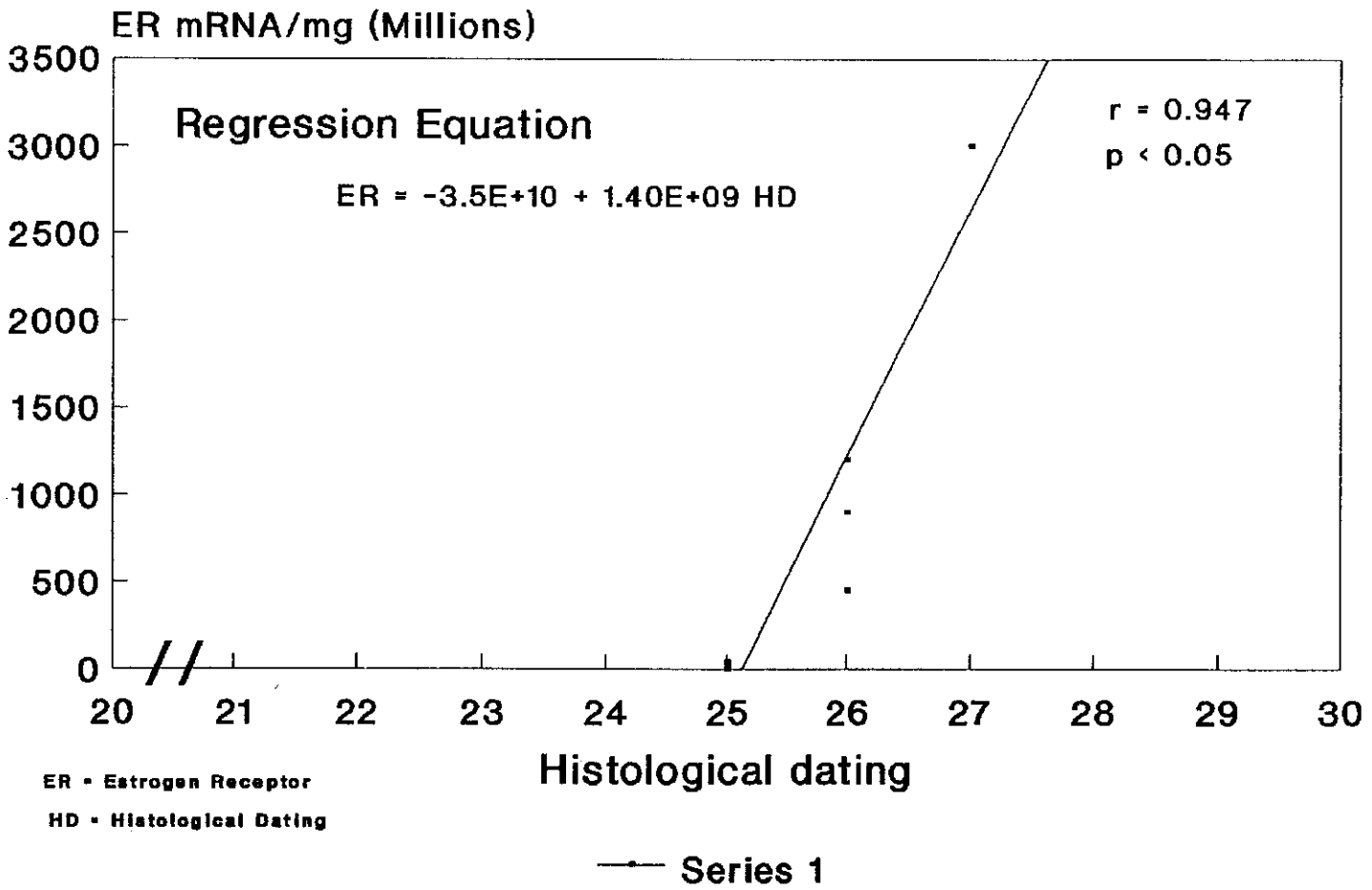


Endometrial estorgen receptor mean levels (m RNA / mg tissue) among control females (group I) and patients on clomiphene citrate therapy (group II)

Table 4 and Figure 3 : represent endometrial estrogen receptor range and mean levels (mRNA / mg tissue) among control females (group I) and patients on C.C. therapy (group II).

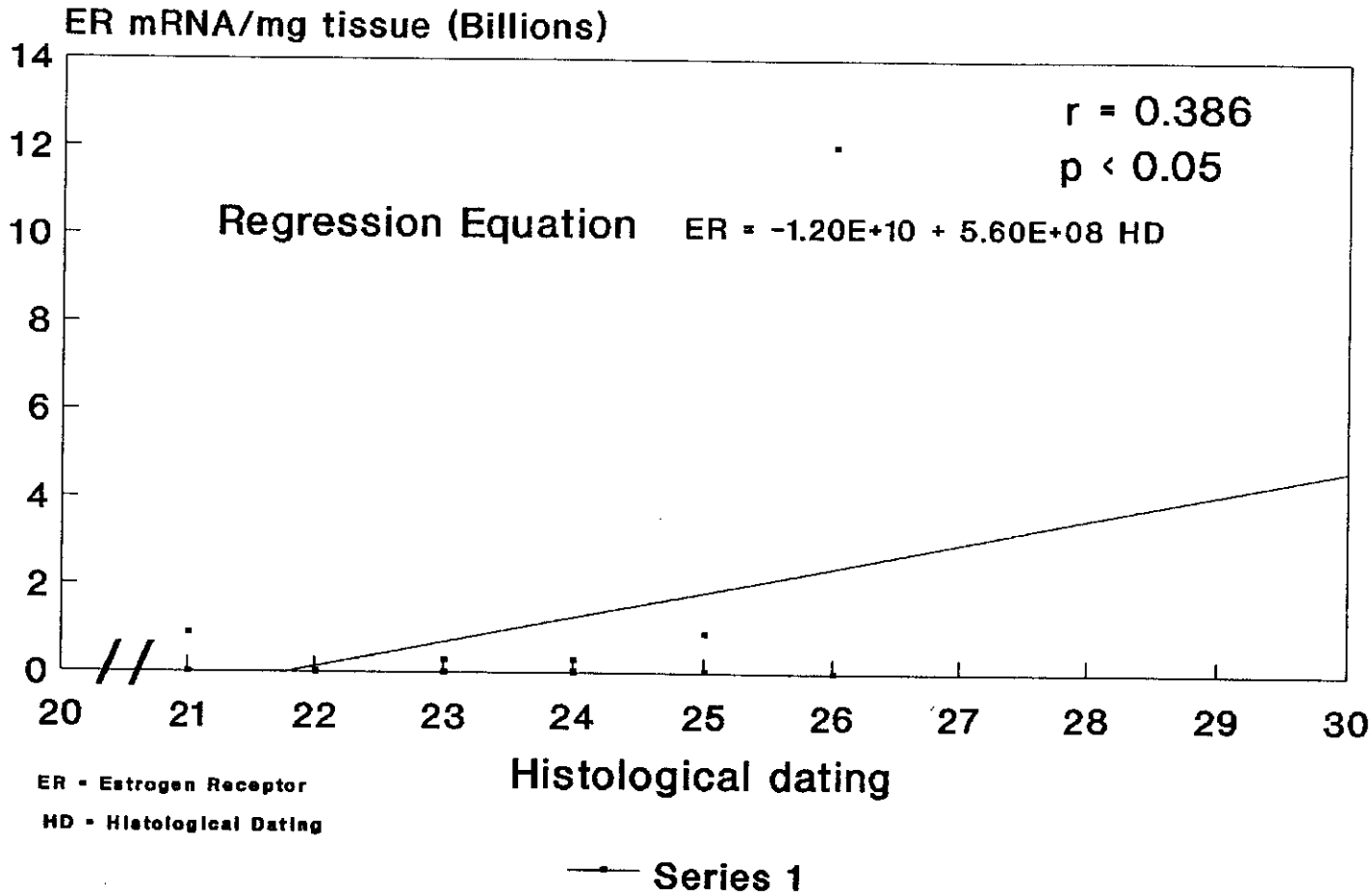
It is evident from this table that the mean endometrial estrogen receptor levels (3.3×10^8 mRNA / mg tissue) in group I was found to be higher than the mean endometrial estrogen receptor levels (7.2×10^7 mRNA / mg tissue) in group II and this difference was found to be of statistically singificance ($p < 0.05$).

Fig. 4



Regression linear equation and correlation coefficient "r" between individual values of hisological biopsy dating and endometrial receptor levels in control group

Fig. 5



Regression linear equation and correlation coefficient "r" between individual values of hisological biopsy dating and endometrial receptor levels in C.C. users group

Table (5) :

Correlation between histological biopsy dating and endometrial estrogen receptor levels (m RNA / mg tissue) in the two study groups.

	Group I	Group II
r	0.947*	0.386*
n	10	20
p	< 0.05	< 0.05

Table 5 : demonstrates the correlation coefficients (r) and their corresponding (p) values between histological biopsy dating and endometrial estrogen receptor levels (mRNA / mg tissue) in the two study groups.

Multiple regression analysis between histological biopsy dating and endometrial estrogen receptors levels in control group and in C.C. users group was found to be significant where the correlation coefficients "r" equal 0.947 and 0.386 respectively and their corresponding "p" values were found to be statisitically significant ($p < 0.05$ for each).

The linear positive associations for the correlated relationship between hisological biopsy dating and endometrial estrogen receptor levels in control group and in clomiphene citrate users group are represented in figures 4 and 5 respectively.

Table (6) :

Number of cases with -ve and with +ve endometrial estrogen receptors in the two study groups as estimated by the qualitative method.

	No. of cases with -ve estrogen receptors	No. of cases with +ve estrogen receptors	Total
Group I	8	2	10
Group II	18	2	20
Total	26	4	30

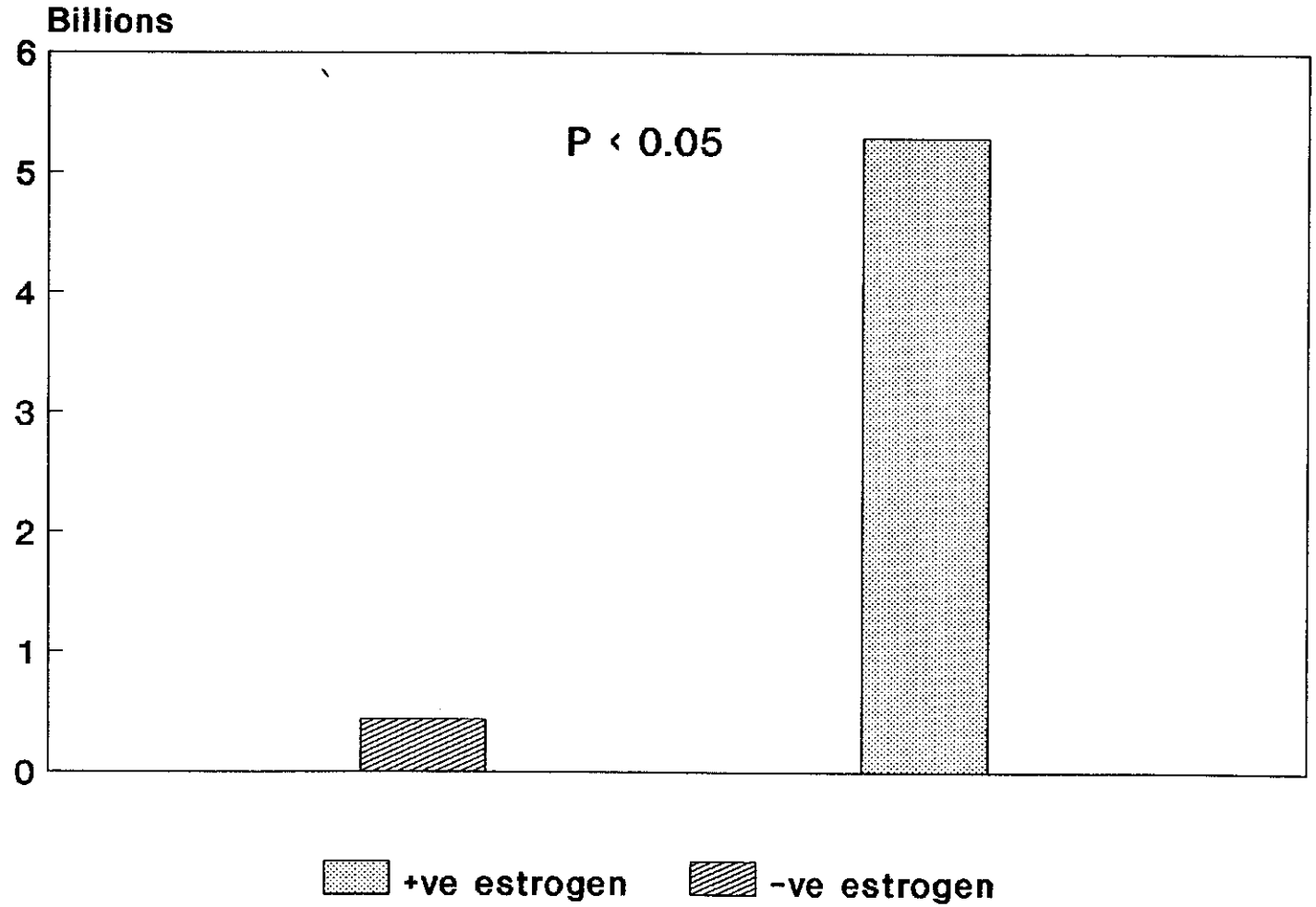
Table 6 : shows number of cases with negative and with positive endometrial estrogen receptors in the two groups as estimated by the qualitative method. Only two cases of each group had positive estrogen receptors by this qualitative method of evaluating estrogen receptors. The remaining samples (8 from control women and 18 from C.C. users) showes negative estrogen receptors.

Table (7) :

Endometrial estrogen receptor mean levels (m RNA / mg tissue) in cases with qualitative negative estrogen receptors and cases with qualitative positive estrogen receptors.

	Cases with -ve estrogen receptors (n = 26)	**Cases with +ve estrogen receptors (n = 4)**
Range	1.5×10^5 - 3×10^8	3×10^9 - 12×10^9
Mean	4.4×10^8	5.3×10^9
SEM	1.6×10^3	2.8×10
"t"	3.057^*	
"p"	< 0.05	

Fig 6



Endometrial estorgen receptor mean levels (m RNA / mg tissue) in cases with qualitative negative estrogen receptors and cases with qualitative positive estrogen receptors

Table 7 and Figure 6 : illustrate endometrial estrogen receptor range and mean levels (mRNA / mg tissue) in cases with qualitative negative estrogen receptors and cases with qualitative positive estrogen receptors.

The mean endometrial estrogen receptor levels (5.3×10^9 mRNA / mg tissue) in cases with qualitative positive estrogen receptors was found to be higher than the mean endometrial estrogen receptor levels (4.4×10^8 / mRNA / mg tissue) in cases with qualitative negative estrogen receptors and this was found to be of statistical singnificance ($p < 0.05$).