Results

Table 14: Liver function tests at the beginning.

	Studied	Control
Serum Albumen		
Mean±SD	6.000±4.485	6.100±8.021
t. test	0.046	
p. value	0.0964	
Alkaline Phosphatase		
Mean±SD	101.44± 71.54	100.05±68.92
t. test	0.041	
p. value	0.985	
AST		
Mean±SD	40.469±38	40.44±36.33
t. test	0.066	
p. value	0.825	
ALT		
Mean±SD	41.94±36.76	40.18±33.47
t. test	0.034	
p. value	0.934	
Serum bilirubin		
Mean±SD	0.908±0.333	0.937±0.315
t. test	0.004	
p. value	0.982	
Indirect bilirubin		
Mean±SD	0.526±0.568	0.576±0.189
t. test	0.014	
p. value	0.858	
Prothrombin time		
Mean±SD	12.37±1.251	12.56±1.099
t. test	0.020	
p. value	0.882	

Table 14 showed that there is no statistically significant reduction in the level of serum albumen of studied than controls at the beginning of therapy. It also showed that there is no statistically significant difference in the level of serum alkaline phosphatase in the serum of studied and controls at the beginning of therapy.

There is no statistically significant increase in the level of AST enzyme in the serum of studied than controls at the beginning of therapy. While it also showed that there is no statistically significant increase in the level of ALT enzyme in the serum of studied than controls at the beginning of therapy.

From this table it is shown that there is no statistically significant difference in the total serum bilirubin level serum of both studied and controls at the beginning of therapy. And showed that there is no statistically significant increase in the level of indirect serum bilirubin in studied than controls at the beginning of therapy.

Finally, it showed that there is no statistically significant increase in prothrombin time in studied than controls at the beginning of therapy.

Table 15: Liver function tests at the end of treatment.

	Studied	Control
Serum Albumen Mean±SD	4.719±4.485	6.100±8.021
t. test	1.858	
p. value	0.069	
Alkaline Phosphatase Mean±SD	101.44± 71.54	100.05±68.92
t. test	0.041	
p. value	0.985	
AST Mean±SD	45.469±38	40.44±36.33
t. test	1.066	
p. value	0.525	
ALT Mean±SD	52.94±36.76	41.18±33.47
t. test	2.034	
p. value	0.034	
Serum bilirubin Mean±SD	1.908±0.333	0.937±0.315
t. test	0.704	
p. value	0.482	
Indirect bilirubin Mean±SD	1.326±0.568	0.576±0.189
t. test	0.614	
p. value	0.058	
Prothrombin time Mean±SD	13.37±1.251	12.86±1.099
t. test	2.320	
p. value	0.582	

Table 15 showed that there is a statistically significant reduction in the level of serum albumen of studied at the end of therapy. It also showed that there is no statistically significant difference in the level of serum alkaline phosphatase in the serum of studied and controls at the end of therapy.

There is a statistically significant increase in the level of AST enzyme in the serum of studied than controls at the end of therapy. While it also showed that there is a statistically significant increase in the level of ALT enzyme in the serum of studied than controls at the end of therapy.

From this table it is shown that there is no statistically significant difference in the total serum bilirubin level serum of both studied and controls at the end of therapy. And showed that there is a statistically significant increase in the level of indirect serum bilirubin in studied than controls at the end of therapy.

Finally, it showed that there is a statistical significant increase in prothrombin time in studied than controls at the end of therapy.

Table 16: CBC in studied and controls at the beginning.

CBC	Studied	Control
WBCs (cell/cc) Mean±SD	5900.42±2259.7	5887.49±2161.75
t. test p. value	0.047 0.963	
Hb concentration (gm/dL) Mean±SD	14.604±8.325	14.651±1.842
t. test p. value	0.056 0.210	
Platelet (Cell/cc) Mean±SD	$193.73±62.42 \ x10^3$	$190.53±71.26 \ x \ 10^3$
t. test p. value	0.394 0.628	

Table 16 showed that there is no statistically significant difference as regards WBCs count in studied and controls at the beginning of therapy. Also, showed that there is no statistically significant decrease in the Hb concentration in studied and controls at the beginning of therapy. And showed that there is no statistical significant difference as regards platelet count in the serum of studied and controls at the beginning of therapy.

Table 17: CBC in studied and controls at the end of treatment.

CBC	Studied	Control
Hb concentration (gm/dL) Mean±SD	11.604±8.325	14.651±1.842
t. test	1.256	
p. value	0.210	
Platelet (Cell/cc) Mean±SD	193.73±62.42 x10^3	190.53±71.26 x 10^3
t. test	0.394	
p. value	0.628	

Table 17 showed that there is a statistically significant decrease in the Hb concentration in studied than controls at the end of therapy. And showed that there is no statistical significant difference as regards platelet count in the serum of studied and controls at the end of therapy.

Table 18: Baseline characteristics of patients at the beginning of the study.

Test	Normal range	Calculated value Mean ± SD
Pt%	60-100	84.59±10.46
ANA level	0.5-18.5	9.17±4.69
TSH level	0.1-3.652	2.632±1.241
HCV-RNA	1.2 – 907000	603045.9±114877.16
WBCs	5.80 – 57000	6300.05±5650.1
PCR	38-9430000	714437.3±142047

Table 18 showed that the baseline criteria of the patients at the beginning of therapy all were in the normal range of the corresponding test (Pt%, ANA, TSH, HCV-RNA, WBCs, PCR respectively) and this denoted that the studied were fit for beginning of therapy.

Table 19: Liver biopsy in studied at the beginning of the study.

Biopsy a	Number		Percentage	
	At start	At end	At start	At end
1-2	70	65	35%	32.5%
3	80	90	40%	45%
4-5	50	45	25%	22.5%
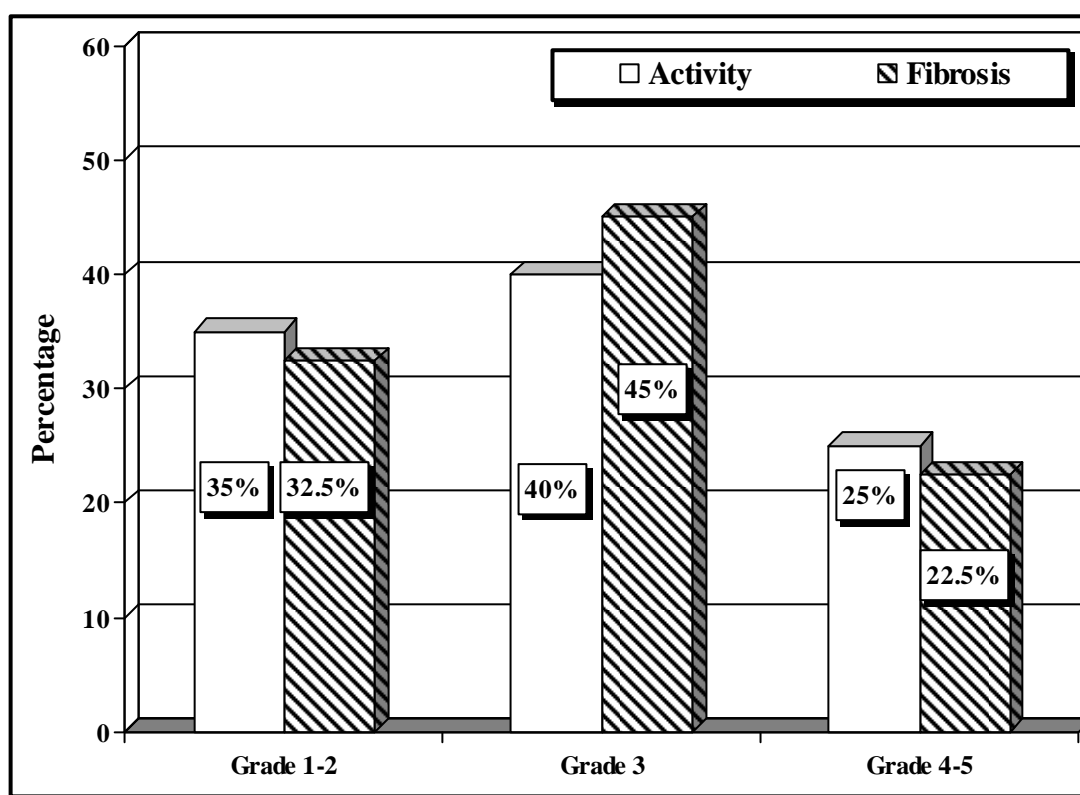
Fig. 10: Comparison between liver biopsy at the beginning and at the end of therapy.

Table 19 and Fig. 10 showed that 35% of studied belonged to grade 1-2 activity of liver biopsy, 40% belongs to grade 3 activity of liver biopsy while 25% belonged to grade 4-5 activity of liver biopsy at the beginning of therapy and showed the comparison between these results at te start and at the end of therapy.

Table 20: WBCs in studied and controls at 2 weeks after the beginning of therapy.

WBCs-W_2	studied	Control
Mean	4624.39	5887.49
±SD	1891.12	2161.75
t. test	4.915	
p. value	0.002	
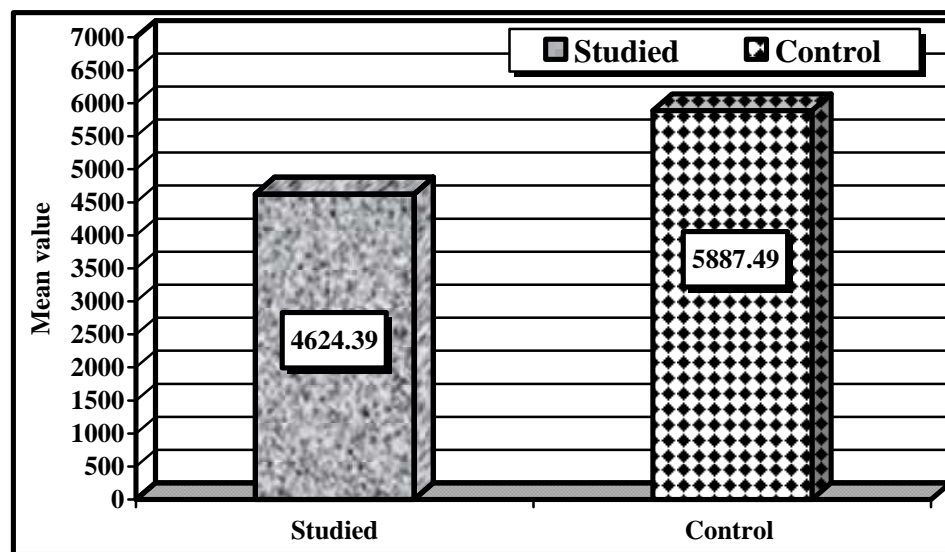
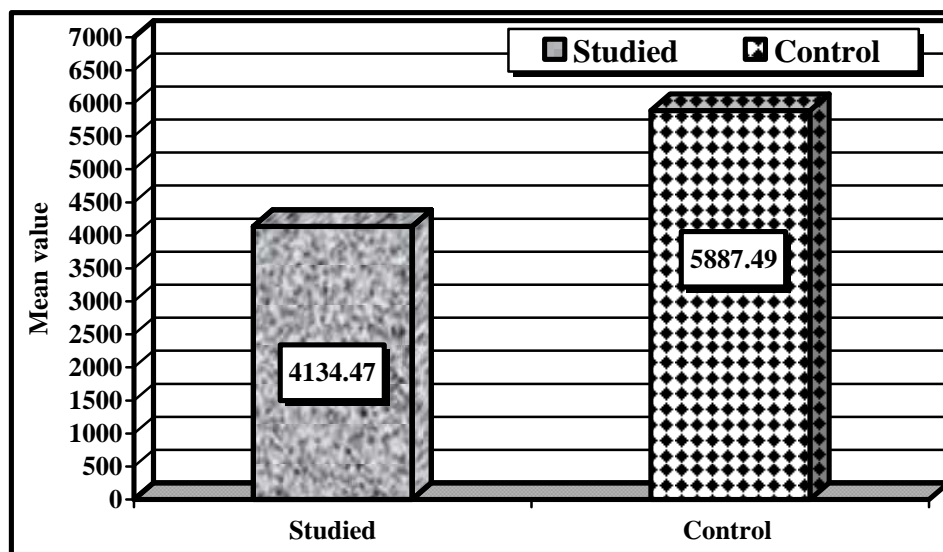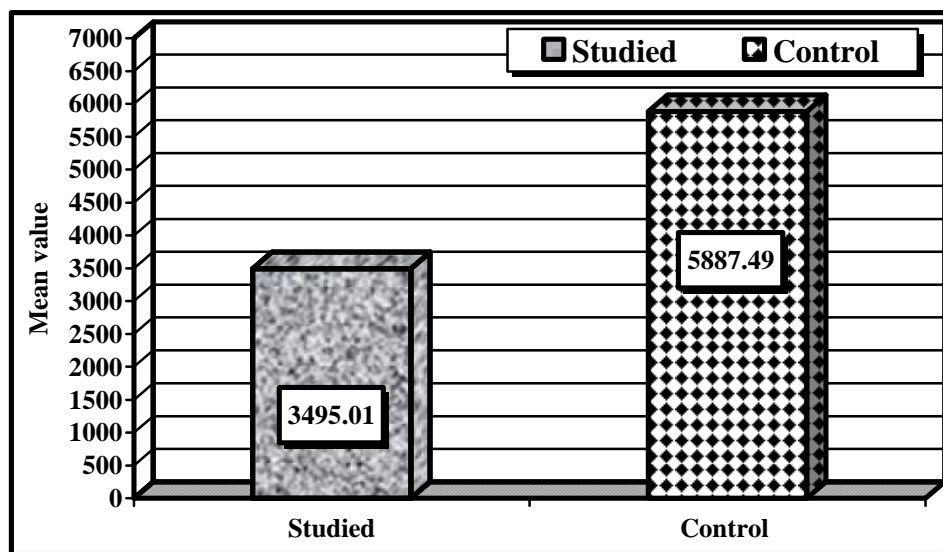**Fig. 11: WBCs in studied and control at the beginning of the study.**

Table 20 and Fig. 11 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of two weeks of therapy.

Table 21: WBCs in studied and controls at 4 weeks after the beginning of therapy.

WBCs-W_4	Studied	Control
Mean	4134.47	5887.49
±SD	1677.15	2161.75
t. test	7.343	
p. value	0.001	

Fig. 12: WBCs in patients and control at the end of four weeks of the study.

Table 21 and Fig. 12 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of four weeks of therapy.

Table 22: WBCs in studied and controls at 8 weeks after the beginning of therapy.

| WBCs-W_8	Studied	Control
Mean	3495.01	5887.49
±SD	1865.6	2161.75
t. test	9.483	
p. value	0.001	

Fig. 13: WBCs in studied and control at the end of eight weeks of the study.

Table 22 and Fig. 13 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of eight weeks of therapy.

Table 23: WBCs in studied and controls at 12 weeks after the beginning of therapy.

| WBCs-W_8	Studied	Control
Mean	3205.20	5887.49
±SD	1715.58	2161.75
t. test	11.090	
p. value	0.001	
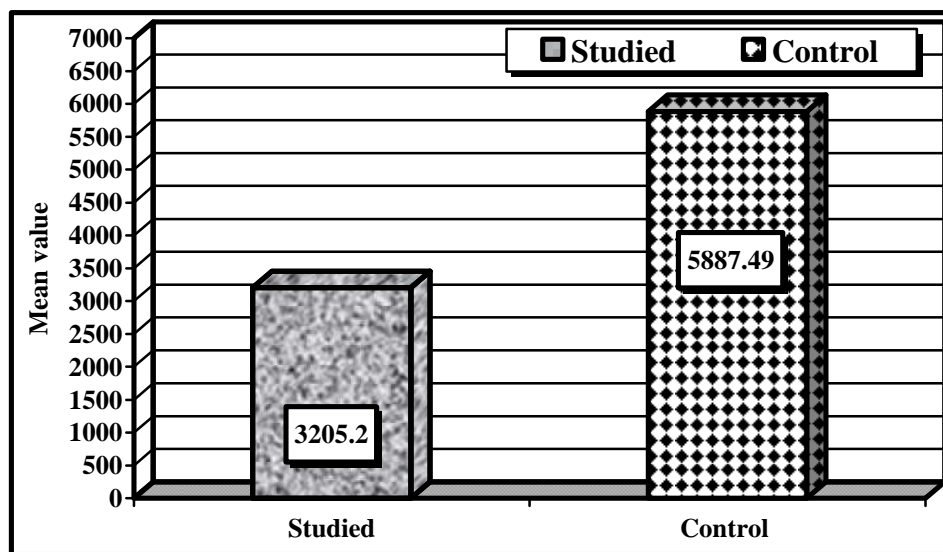
Fig. 14: WBCs in studied and control at the end of twelve weeks of the study.

Table 23 and Fig. 14 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of twelve weeks of therapy.

Table 24: WBCs in studied and controls at 16 weeks after the beginning of therapy.

WBCs-W_{16}	Studied	Control
Mean	2989.78	5887.49
±SD	1824.54	2161.75
t. test	11.961	
p. value	0.001	
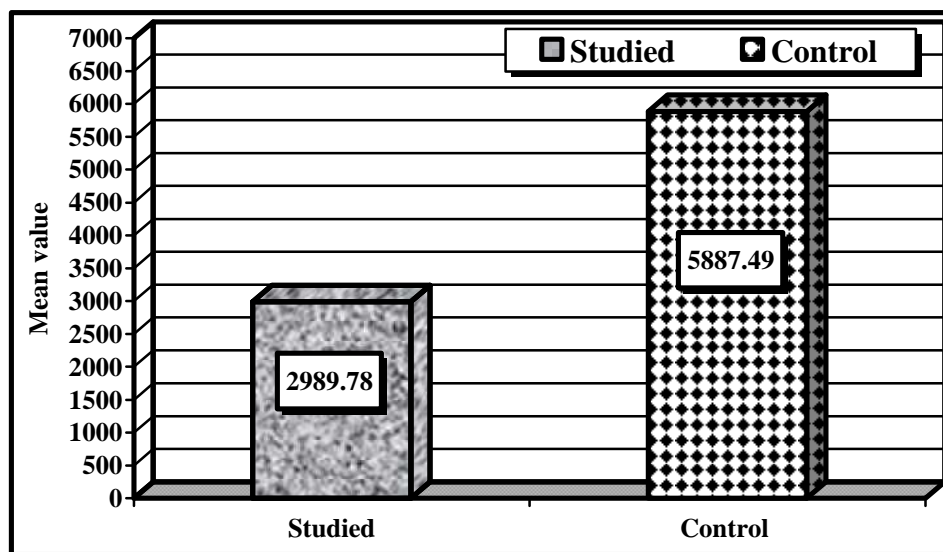
Fig. 15: WBCs in studied and control at the end of sixteen weeks of the study.

Table 24 and Fig. 15 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of sixteen weeks of therapy.

Table 25: WBCs in studied and controls at 20 weeks after the beginning of therapy.

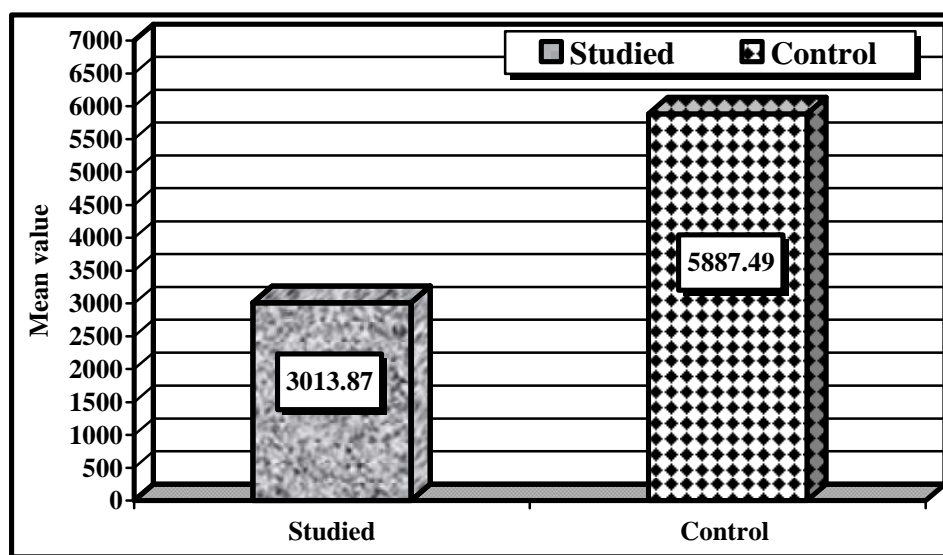| WBCs-W_{20}	Studied	Control
Mean	3013.87	5887.49
±SD	1629.04	2161.75
t. test	4.582	
p. value	0.009	

Fig. 16: WBCs in studied and control at the end of twenty weeks of the study.

Table 25 and Fig. 16 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of twenty weeks of therapy. But in the studied with decrease of WBCs count less than 3.000 some of them stopped therapy for 15 days and other take Granulocyte Colony Stimulating Factor then continuous the therapy.

Table 26: WBCs in studied and controls at 24 weeks after the beginning of therapy.

WBCs-W_{24}	Studied	Control
Mean	3783.41	5887.49
±SD	2242.53	2161.75
t. test	5.325	
p. value	0.007	
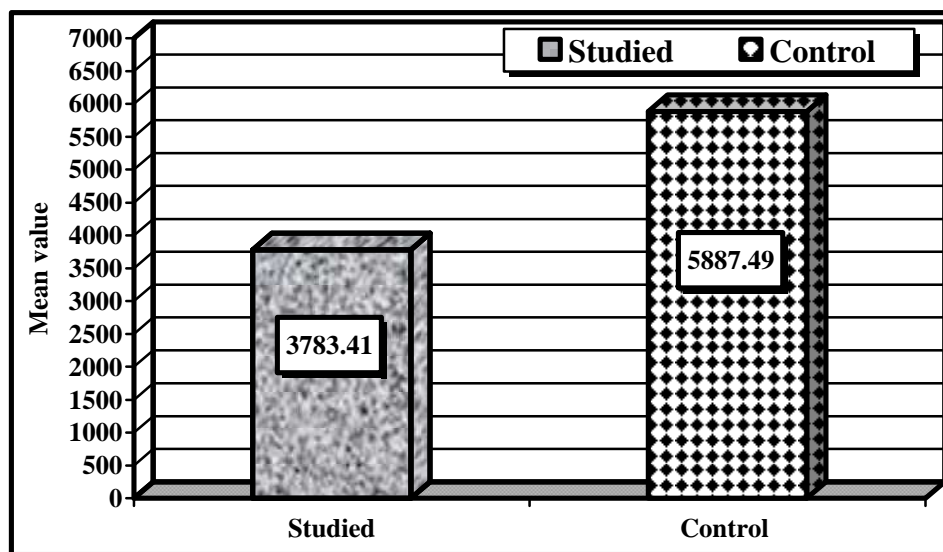
Fig. 17: WBCs in studied and control at the end of twenty-four weeks of the study.

Table 26 and Fig. 17 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of twenty-four weeks of therapy.

Table 27: WBCs in studied and controls at 28 weeks after the beginning of therapy.

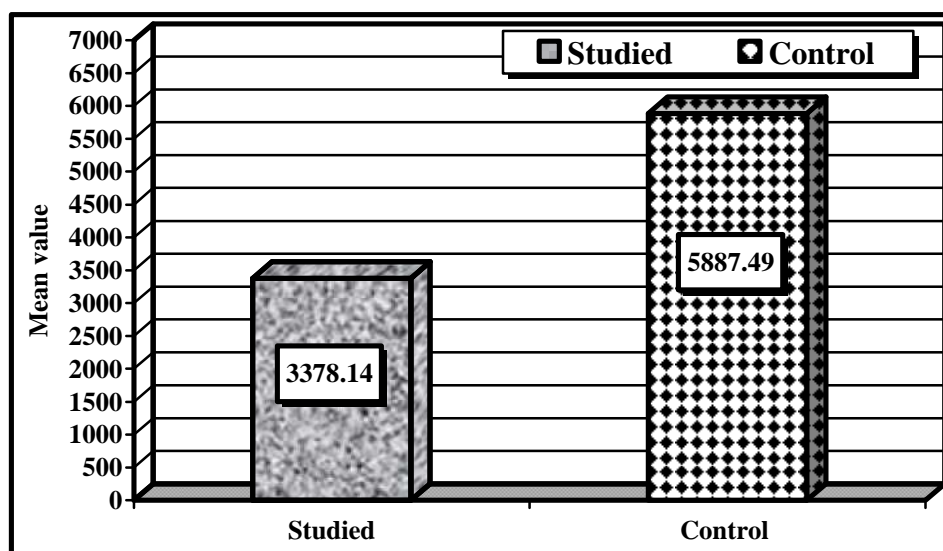| WBCs-W$_{28}$	Studied	Control
Mean	3378.14	5887.49
±SD	1442.75	2161.75
t. test	4.107	
p. value	0.008	

Fig. 18: WBCs in studied and control at the end of twenty-eight weeks of the study.

Table 27 and Fig. 18 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of twenty-eight weeks of therapy.

**Table 28: WBCs in studied and controls at 32 weeks
after the beginning of therapy.**

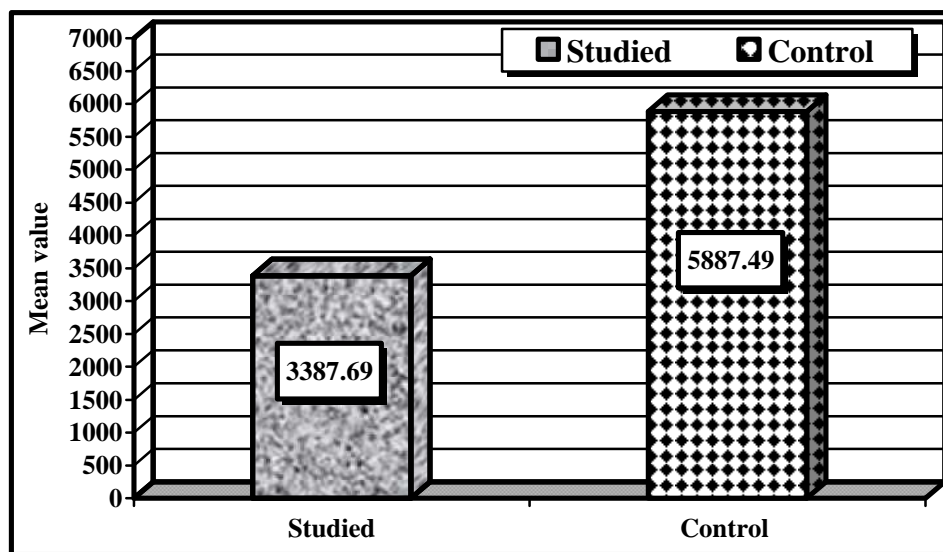| WBCs-W_{32}	Studied	Control
Mean	3387.69	5887.49
±SD	1207.67	2161.75
t. test	6.582	
p. value	0.001	

**Fig. 19: WBCs in studied and control at the end of
thirty-two weeks of the study.**

Table 28 and Fig. 19 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of thirty-two weeks of therapy.

Table 29: WBCs in studied and controls at 36 weeks after the beginning of therapy.

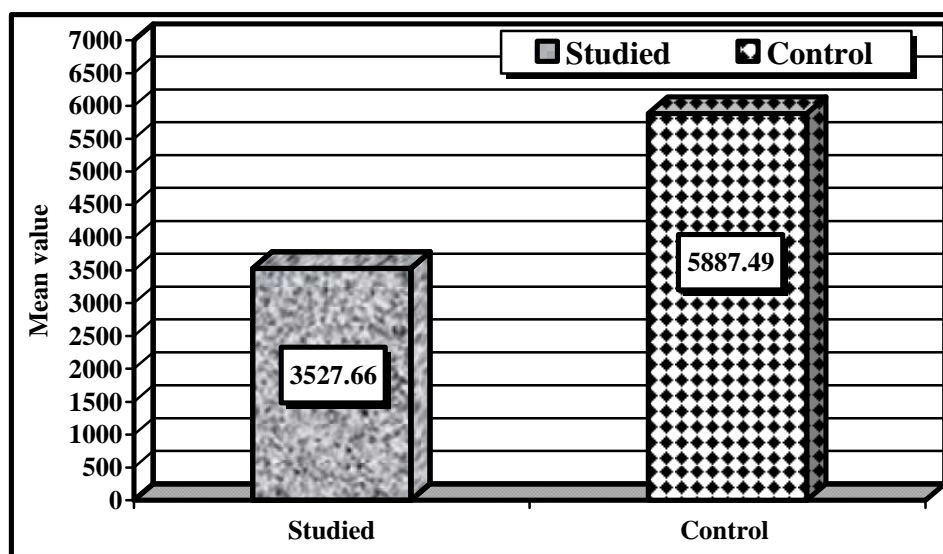| WBCs-W_{36}	Studied	Control
Mean	3527.66	5887.49
±SD	1190.40	2161.75
t. test	5.896	
p. value	0.004	

Fig. 20: WBCs in studied and control at the end of thirty-six weeks of the study.

Table 29 and Fig. 20 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of thirty-six weeks of therapy.

Table 30: WBCs in studied and controls at 40 weeks after the beginning of therapy.

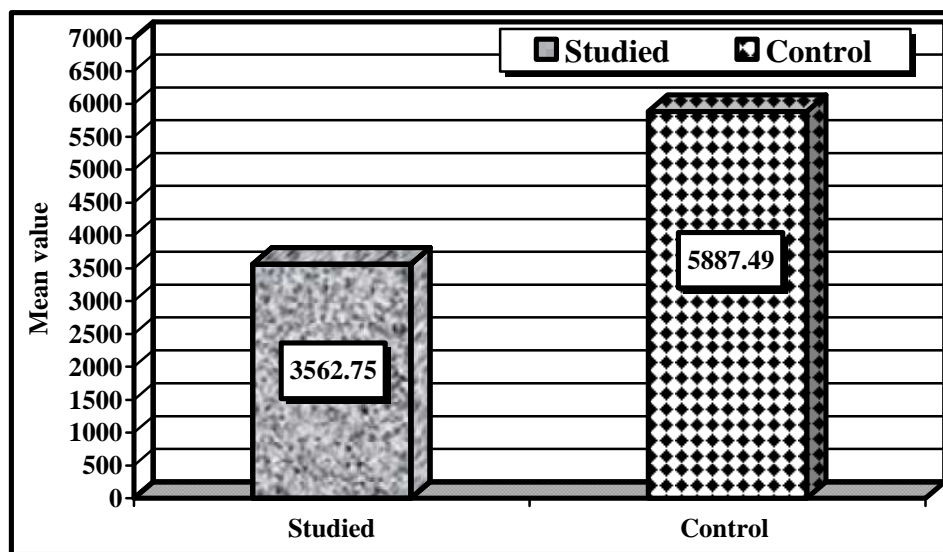| WBCs-W_{40}	Studied	Control
Mean	3562.75	5887.49
±SD	1390.56	2161.75
t. test	7.520	
p. value	0.002	

Fig. 21: WBCs in studied and control at the end of forty weeks of the study.

Table 30 and Fig. 21 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of forty weeks of therapy.

**Table 31: WBCs in studied and controls at 44 weeks
after the beginning of therapy.**

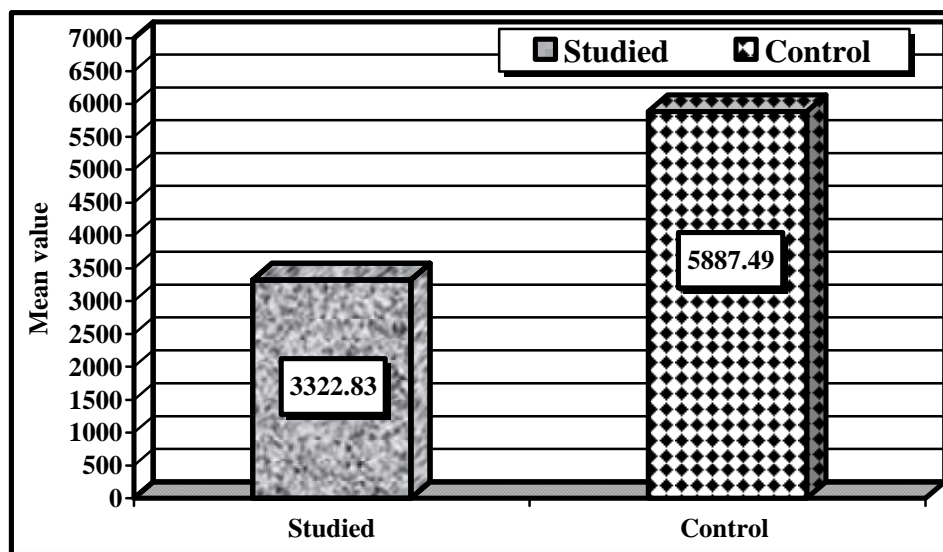| WBCs-W$_{44}$	Studied	Control
Mean	3322.83	5887.49
±SD	1112.91	2161.75
t. test	12.756	
p. value	0.003	

**Fig. 22: WBCs in studied and control at the end of
forty-four weeks of the study.**

Table 31 and Fig. 22 showed that there is a
statistically significant decrease as regards WBCs count in
studied and controls at the end of forty-four weeks of
therapy.

Table 32: WBCs in studied and controls at 48 weeks after the beginning of therapy.

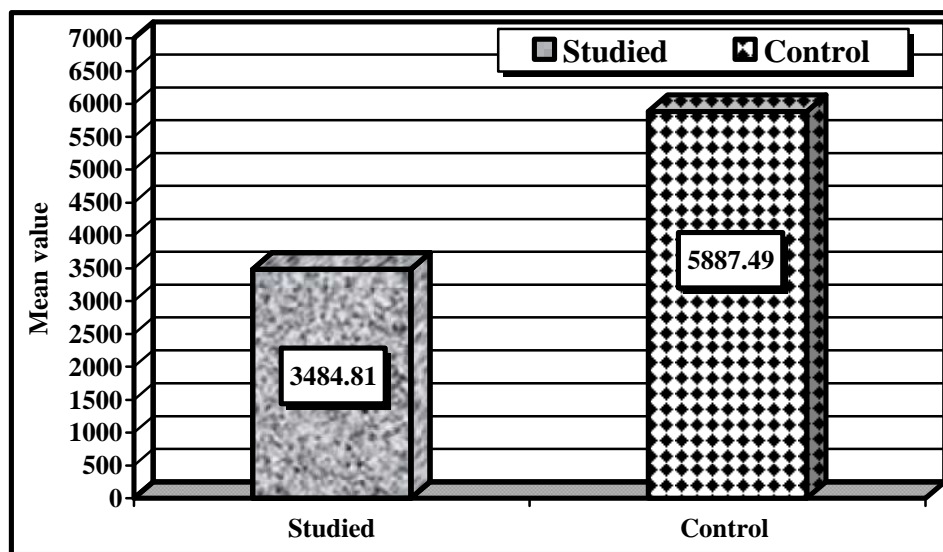| WBCs-W$_{48}$	Studied	Control
Mean	3484.81	5887.49
±SD	1207.61	2161.75
t. test	6.396	
p. value	0.008	

Fig. 23: WBCs in studied and control at the end of forty-eight weeks of the study.

Table 32 and Fig. 23 showed that there is a statistically significant decrease as regards WBCs count in studied and controls at the end of forty-eight weeks of therapy.

Table 33: Comparison between WBCs in studied and controls during the whole period of therapy.

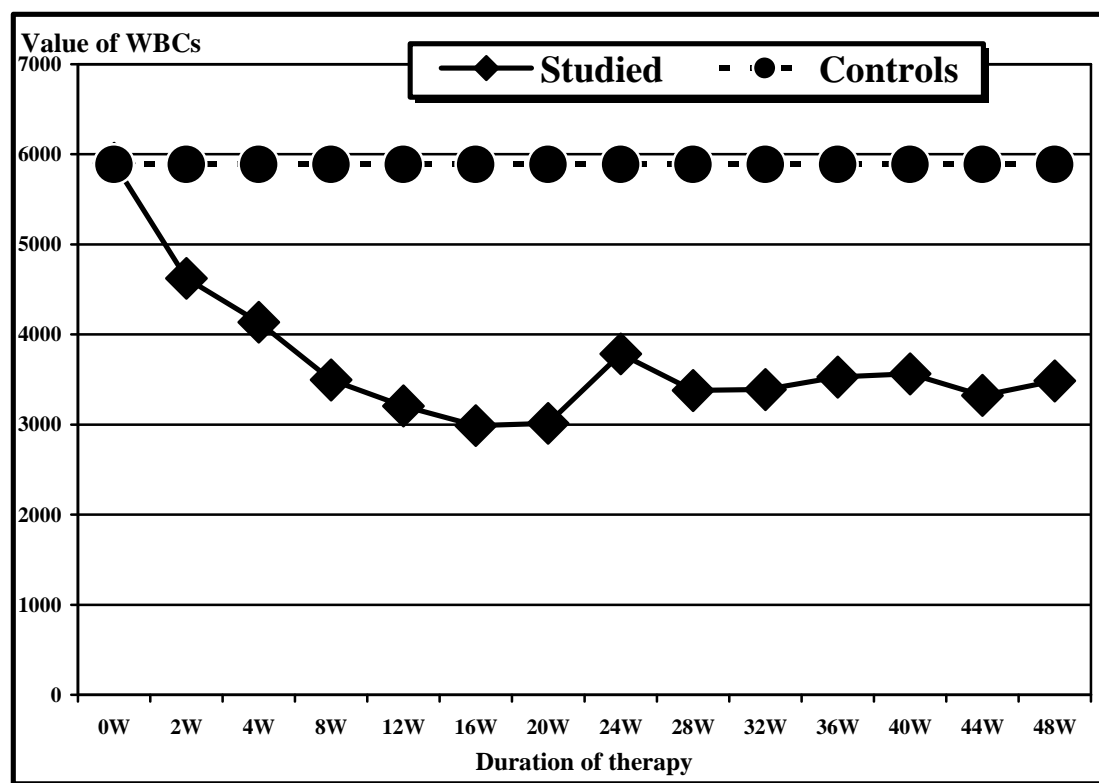| WBCs	Studied	Control
W_0	5900.42	5887.49
W_2	4624.39	5887.49
W_4	4134.47	5887.49
W_8	3495.01	5887.49
W_{12}	3205.20	5887.49
W_{16}	2989.78	5887.49
W_{20}	3013.87	5887.49
W_{24}	3783.41	5887.49
W_{28}	3378.14	5887.49
W_{32}	3387.69	5887.49
W_{36}	3527.66	5887.49
W_{40}	3562.75	5887.49
W_{44}	3322.83	5887.49
W_{48}	3484.81	5887.49

Fig. 24: Comparison between WBCs in studied and control during the whole period of therapy.