

Table (2) : Blood urea mg/dl .

No.	control	Pat R.				
		1st.	2nd.	3rd.	4th.	5th.
1	31	168.3	121.1	87.2	77.4	75
2	36	140	114	109	90	87
3	39	230.1	175.2	140.9	107.9	99
4	28	197.3	149.2	133.4	97	65
5	35	240.3	167.1	139.9	107.2	102
6	27	177.2	149.4	111.4	60.9	49.9
7	33	140.9	96.9	93.8	79.2	70
8	26	197.1	167.3	113.9	97.2	90
9	38	230	190.4	176	150	130
10	34	270	187	160	147	120
M.	32.7	199.12	151.86	126.52	101.38	88.79
S.D	4.57	43.4	31.69	28.52	28.66	23.8939
S.E	1.44	13.73	10.022	9.0196	9.064	7.8728
T.		12.055	11.769	10.2716	7.4834	6.9723
P.		< .05	< .05	< .05	< .05	< .05

Table (3) : Bl. Creatinine mg/dl.

No.	control	Pat. R.				
		1st.	2nd.	3rd.	4th.	5th.
1	1.15	14.2	9.7	5.4	4.8	4.4
2	0.85	12.2	8.5	4.2	3.8	3.3
3	1.1	14	8.4	3.4	3.2	2.9
4	0.87	8.2	6.2	3.9	2.7	2.5
5	.089	12.4	7.9	4.1	2.7	2.5
6	0.97	9.2	6.3	2.2	2.3	2.3
7	1.17	4.2	3.2	4.3	2.4	2.5
8	0.92	7.4	5.4	6.2	3.2	2.99
9	0.88	12.6	8.3	7.9	4.9	4.5
10	1.2	9.3	15.3	4.2	5.4	4.9
M.	1.0	11.37	7.21	4.59	3.54	3.279
S.D	0.139	3.73	3.21	1.39	1.13	0.96503
S.E	0.044	1.1796	1.0152	0.4395	0.357	0.3051
T.		8.785	6.0604	7.7874	6.629	6.7949
P.		< .05	< .05	< .05	< .05	< .05

Table (4) : B. Cholesterol mg/dl

No.	control	P. R.				
		1st.	2nd.	3rd.	4th.	5th.
1	162	247	202	213	190	185
2	170	168	159	190	159	155
3	177	178	142	184	151	160
4	183	190	174	148	163	159
5	194	203	180	179	215	190
6	159	226	235	178	185	210
7	210	189	243	187	180	179
8	207	240	233	212	216	170
9	197	138	225	213	228	195
10	173	250	176	250	196	208
M.	183.2	202.9	196.9	195.4	188.3	181.1
S.D	18.085	37.24	35.58	27.74	26.008	19.969
S.E	5.719	11.777	11.252	8.773	8.225	6.3153
T.		1.5047	1.0854	1.16496	0.509	0.2465
P.		> .05	> .05	> .05	> .05	> .05

Table (5) : Blood Triglycerode mg.dl

No.	control	Pat. R.				
		1st.	2nd.	3rd.	4th.	5th.
1	61	195	109	217	213	210
2	107	120	120	210	113	130
3	87	68	45	150	40	50
4	115	155	149	160	140	140
5	97	150	130	225	162	160
6	124	140	140	183	190	150
7	114	171	213	180	191	170
8	127	143	149	195	178	175
9	123	94	182	203	85	80
10	109	170	162	115	190	170
M.	106.4	139.8	139.9	183.3	150.2	143.5
S.D	20.206	38.45	45.5	33.41	55.35	47.26
S.E	6.390	12.16	14.3896	10.566	17.5079	14.9465
T.		2.4314	2.1277	6.2278	2.35	2.2824
P.		< .05	< .05	< .05	< .05	< .05

Table (6) : HDL mg/dl

No.	control	Pat. R.				
		1st.	2nd.	3rd.	4th.	5th.
1	49	33.7	33.9	47.9	43.8	40.3
2	57	20.11	21.17	33.3	27.5	27
3	67	31	30	33.9	31.7	33.7
4	72	17.8	20.11	11.7	23.13	25
5	55	24.13	25.3	13.4	49.2	49
6	73	51.4	53.7	27.3	52.7	55
7	65	44.7	48.7	33.9	31.9	33
8	54	51.8	51.8	10.7	17.9	20
9	71	8.9	34.13	41.7	54.4	54
10	59	33.4	21.1	39.3	48.7	45
M.	62.2	31.694	33.991	29.33	38.113	38.2
S.D	8.5088	14.43	13.07	13.13	13.26	12.371
S.E	2.6909	4.5635	4.13345	4.1524	4.19354	3.9124
T.		5.758	5.7194	6.643	4.8342	5.0542
P.		< .05	< .05	< .05	< .05	< .05

Table (7) : LDL mg/dl.

No.	control	Pat. R.				
		1st.	2nd.	3rd.	4th.	5th.
1	98	174.3	146.3	121.7	103.6	105
2	105	125.49	113.83	117.7	108.9	110
3	110	133.4	103	120.3	112.3	115
4	115	141.8	126.09	104.3	148.87	120
5	127	148.87	127.1	121.6	133.4	130
6	132	146.6	153.3	114.1	125.1	115
7	123	110.8	151.7	117.1	114.9	113
8	119	159.6	151.4	162.3	126.5	117
9	109	110.3	154.47	130.7	134.66	119
10	137	177.6	113.5	175.7	141.3	140
M.	117.5	142.88	134.069	128.53	124.953	118.4
S.D	12.4029	23.58	19.6	22.56	14.84	10.0465
S.E	3.922	7.457	6.199	7.135	4.693	3.1772
T.		3.0123	2.2587	1.3547	1.2186	0.1783
P.		< .05	< .05	> .05	> .05	> .05

Table (8) : VLDL mg/dl.

No.	control	Pat. R.				
		1st.	2nd.	3rd.	4th.	5th.
1	22	39	21.8	43.6	42.6	35
2	19	22.4	24	39	22.6	20
3	16	13.6	9	30	7	9
4	25	30.4	27.2	32	20	25
5	13	30	27.6	44	32.4	33
6	17	28	28	36.6	38	37
7	25	33.5	42.6	36	38.2	40
8	33	28.6	29.8	39	36	35
9	14	18.8	36.4	40.6	8.94	9
10	19	39	41.3	35	38	35
M.	20.3	28.33	28.77	37.58	28.374	27.8
S.D	6.093	8.196	9.856	4.586	12.895	11.5065
S.E	1.927	2.592	3.117	1.450	4.078	3.639
T.		2.4862	2.3113	7.1654	8.791	2.8214
P.		< .05	< .05	< .05	< .05	< .05

Table (9) : Apo. B. g/l.

No.	control	Pat. R.				
		1st.	2nd.	3rd.	4th.	5th.
1	1.3	1.52	1.52	1.37	1.52	1.5
2	1.2	1.34	1.41	1.37	1.39	1.32
3	1.1	1.39	1.147	1.5	1.49	1.44
4	1.5	1.01	1.63	1.31	1.26	1.3
5	1.00	1.32	1.21	1.34	1.23	1.25
6	0.73	1.75	1.56	1.27	1.43	1.4
7	0.9	1.52	1.31	1.51	1.57	1.3
8	0.87	1.55	1.51	1.54	1.39	1.39
9	1.08	1.79	1.47	1.57	1.62	1.66
10	1.02	1.34	1.51	1.51	1.35	1.2
M.	1.07	1.453	1.46	1.429	1.425	1.376
S.d	0.223	0.227	0.123	0.108	0.127	0.1343
S.E	0.0705	0.0718	0.0388	0.0341	0.0402	0.0424
T.		3.8062	4.8464	4.5841	4.3743	3.7196
P.		< .05	< .05	< .05	< .05	< .05

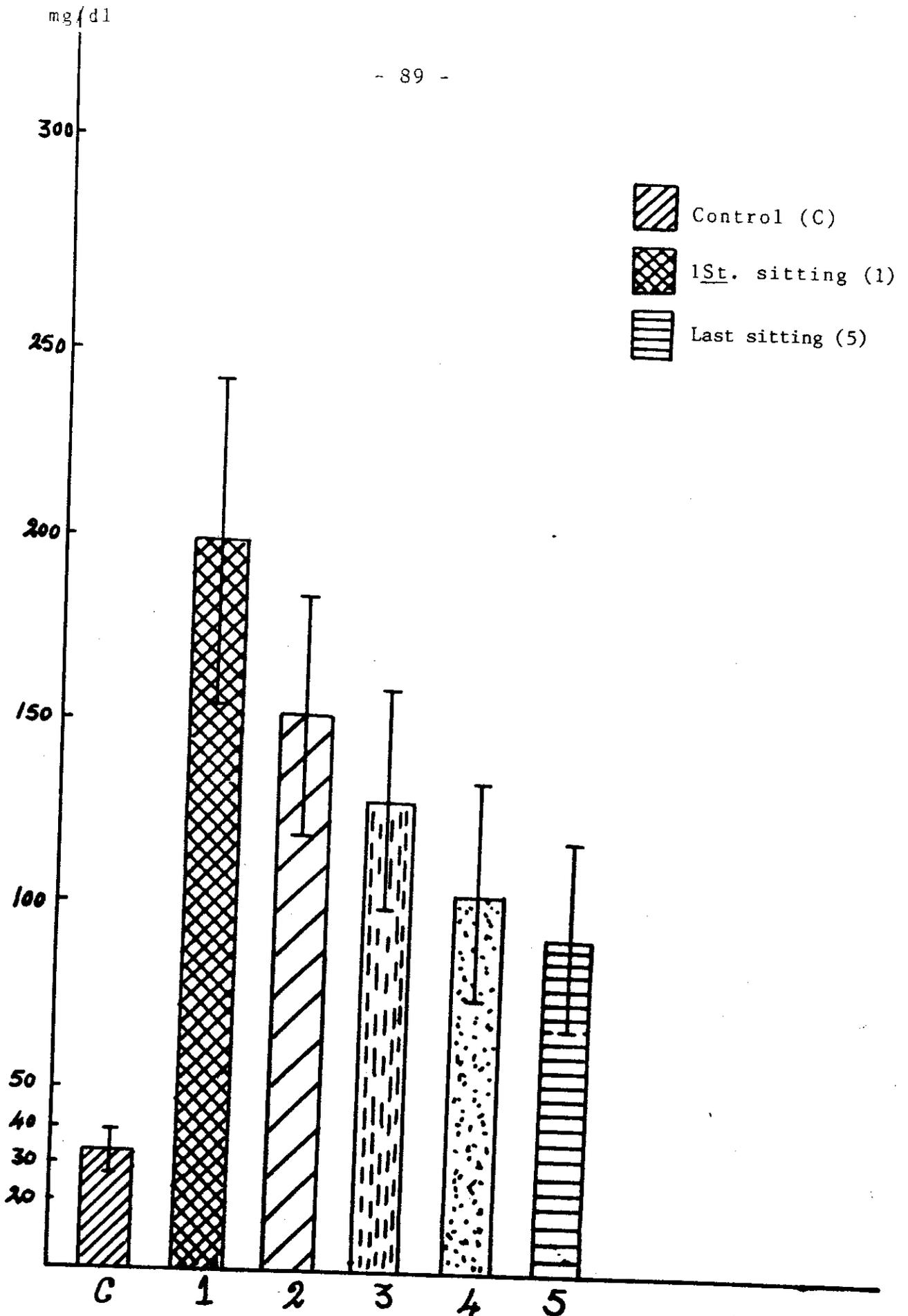


Fig. (1): Blood urea in control and 5 sitting haemodialysis
(Mean \pm S.D).

mg/dl

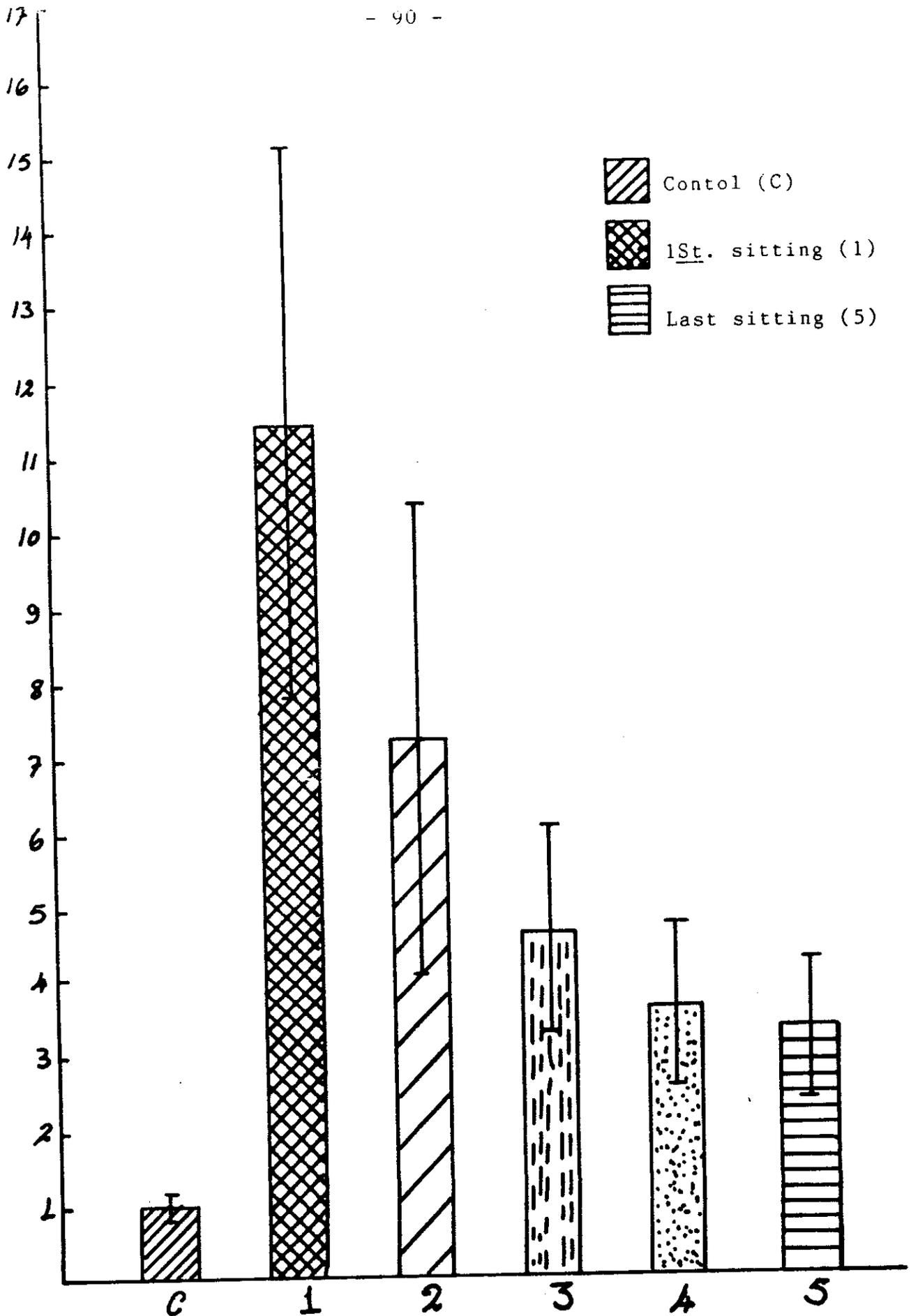


Fig. (2): Serumcreatinine in control and 5 sitting haemodialysis (Mean \pm S.D).

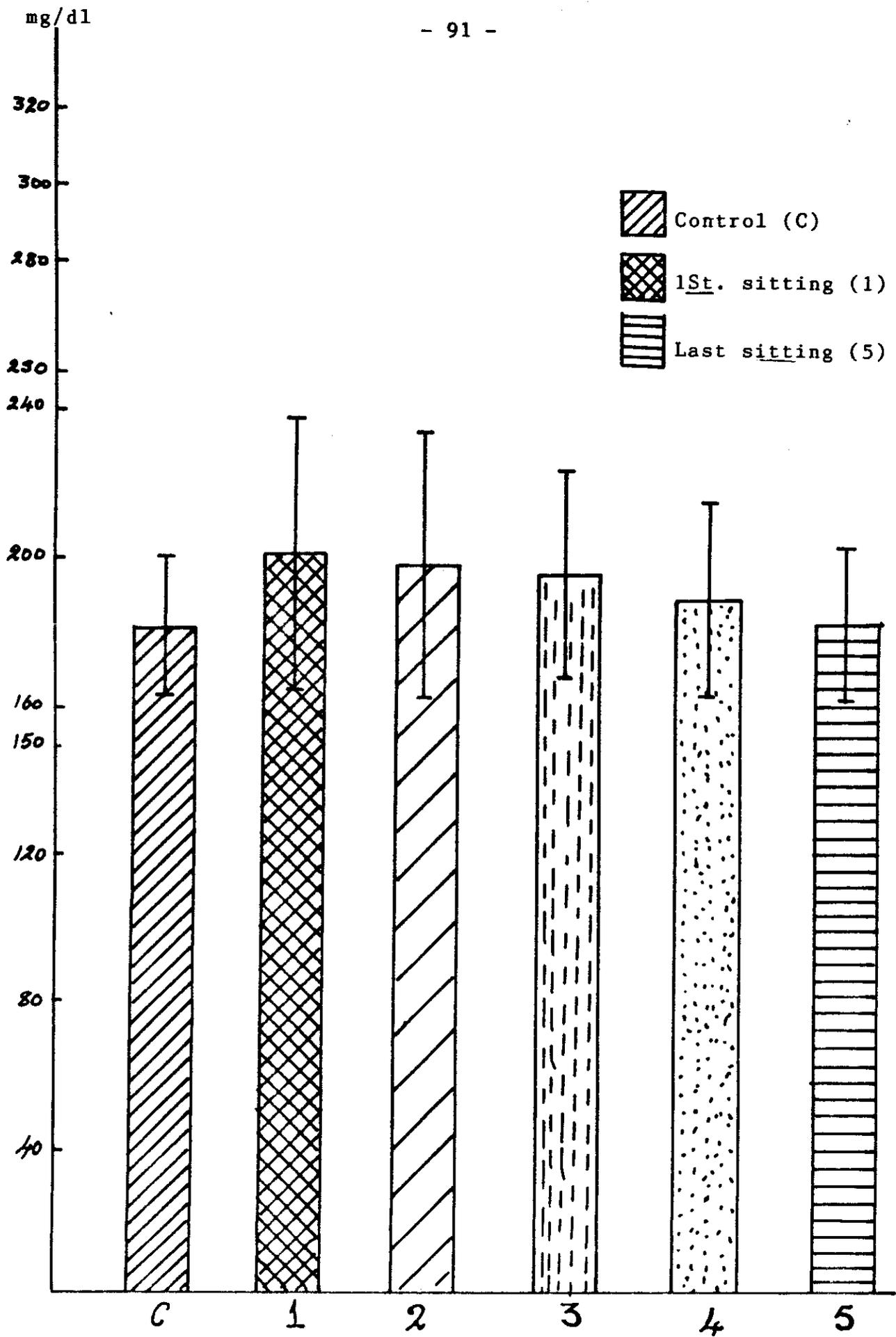


Fig.(3) : Serum cholesterol in control and 5 sitting haemodialysis (Mean \pm S.D).

mg/dl

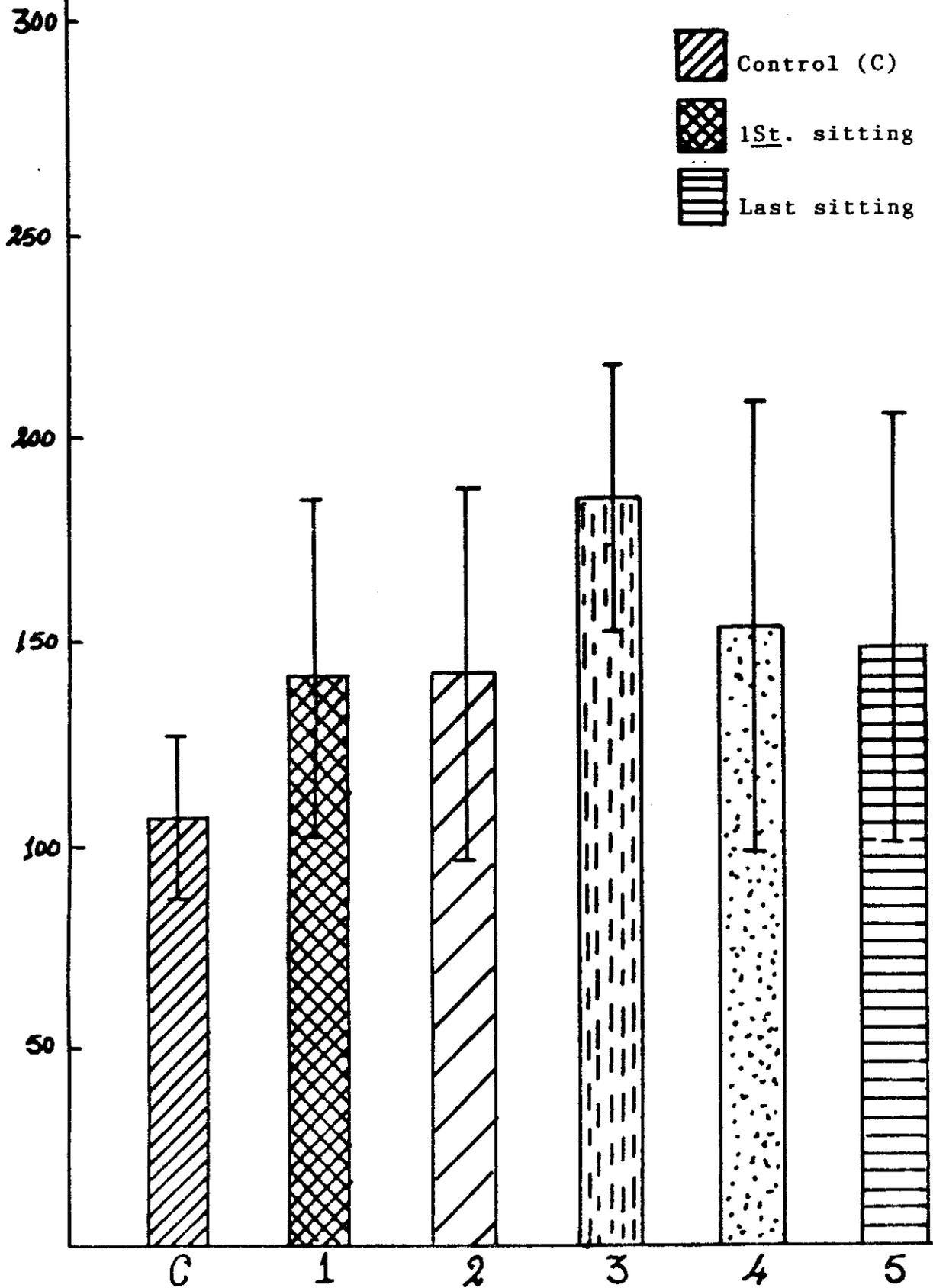


Fig. (4): Serum Triglyceride in control and 5 sitting haemodialysis (Mean \pm S.D).

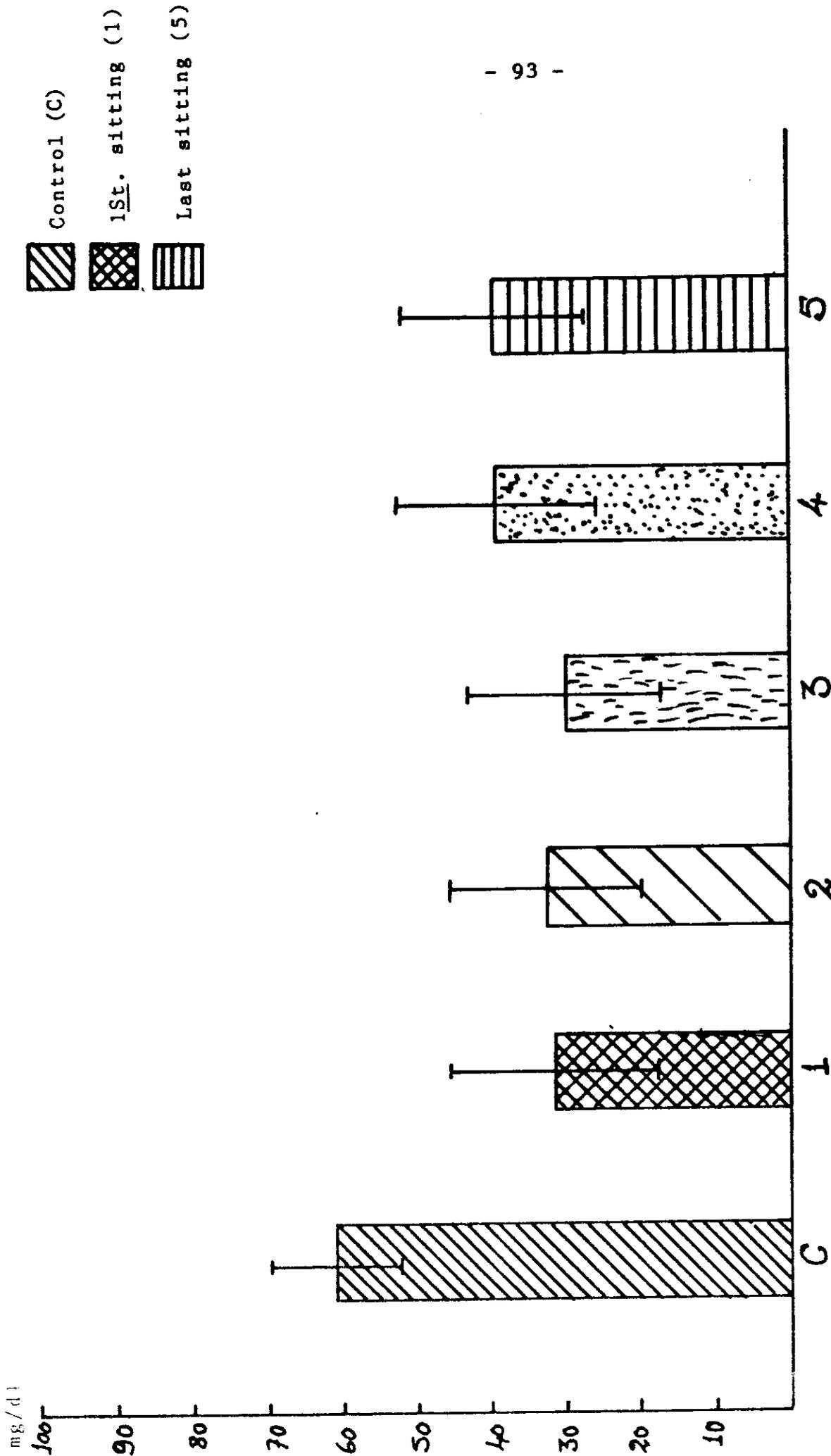


Fig.(5) : Serum HDL-C in control and 5 sitting haemodialysis (Mean \pm S.D).

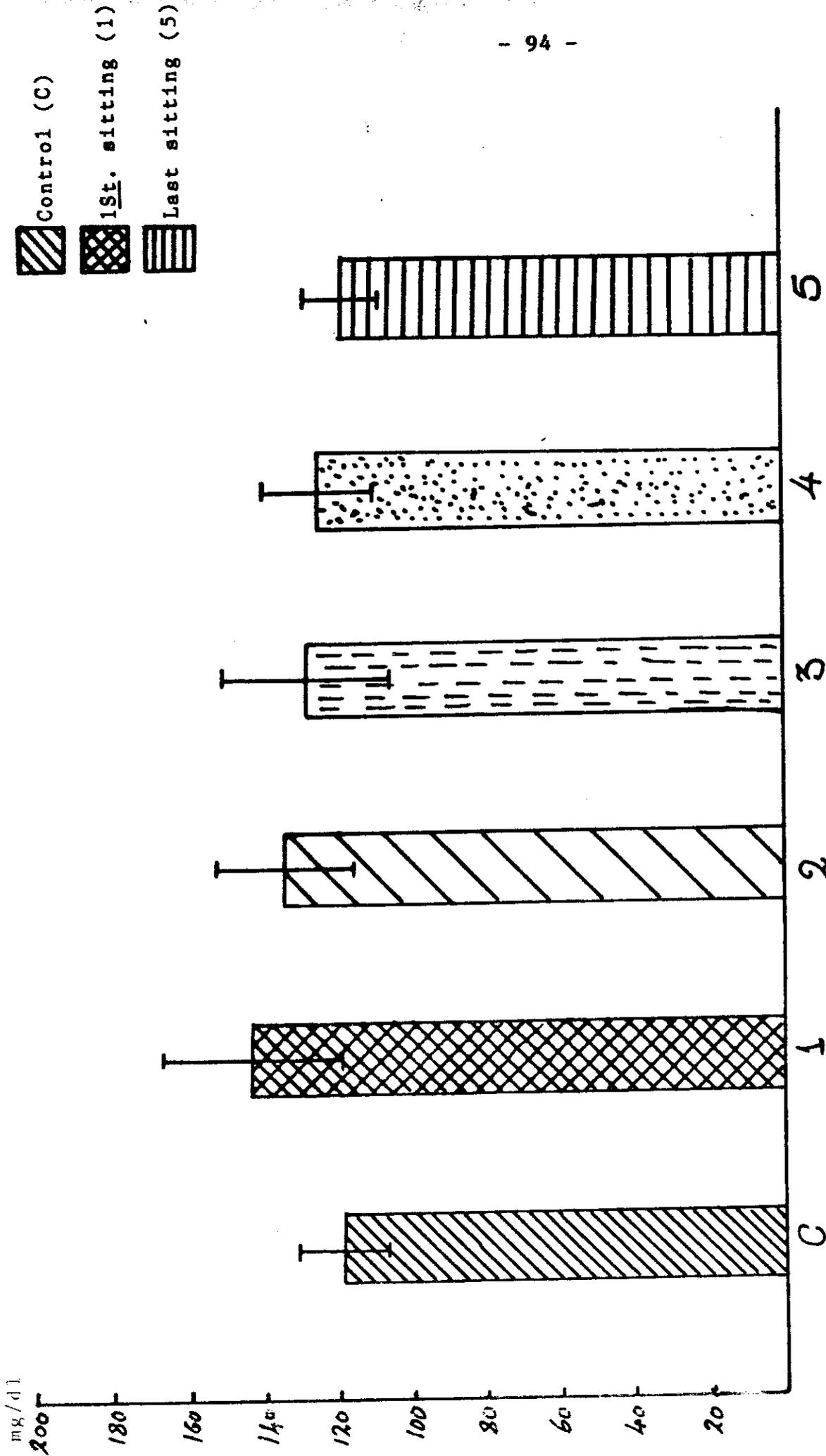


Fig. (6) : Serum LDL-C in control and 5 sitting haemodialysis (Mean \pm S.D).

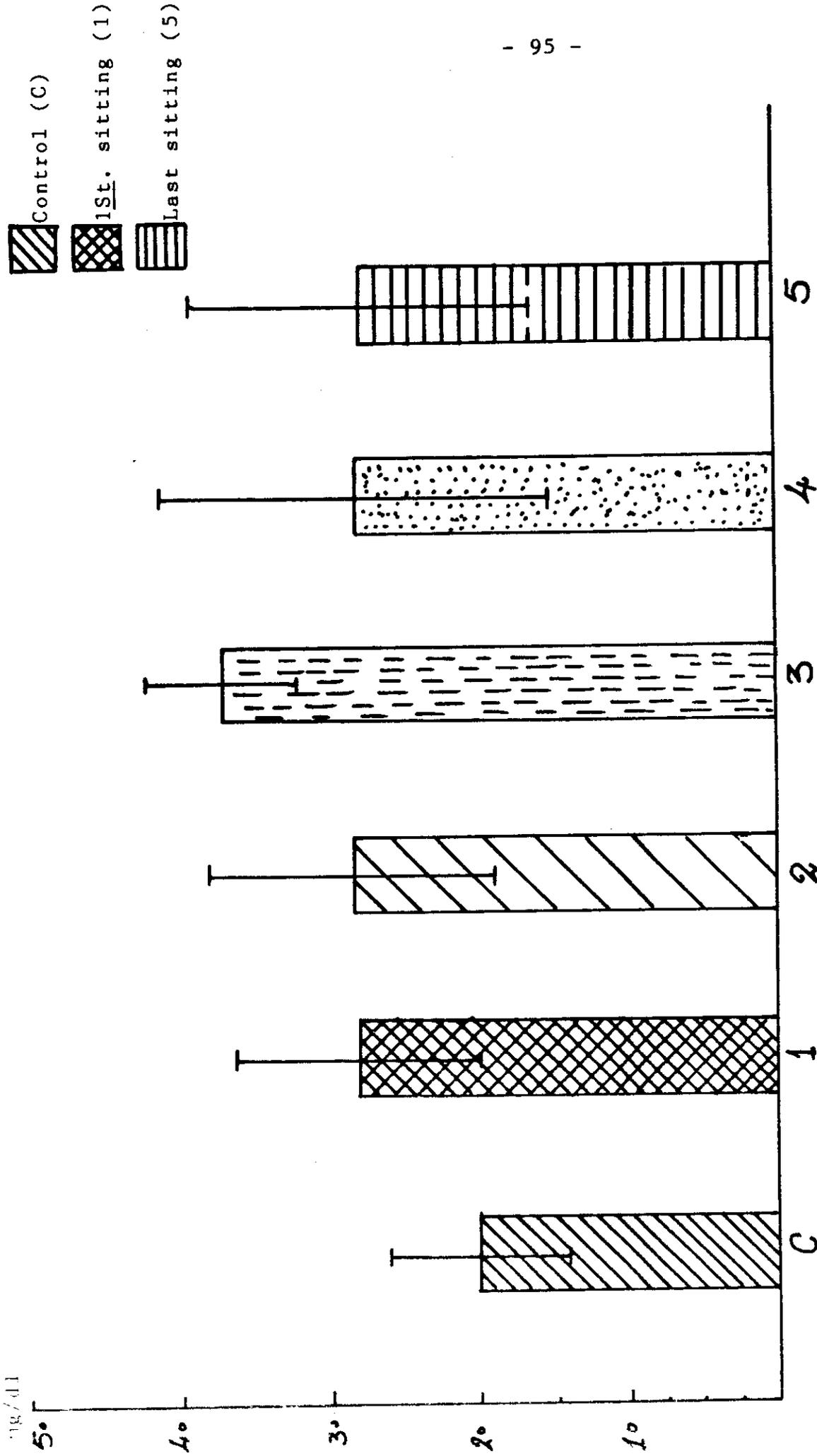


Fig.(7) : Serum VLDL-C in control and 5 sitting haemodialysis (Mean \pm S.D).

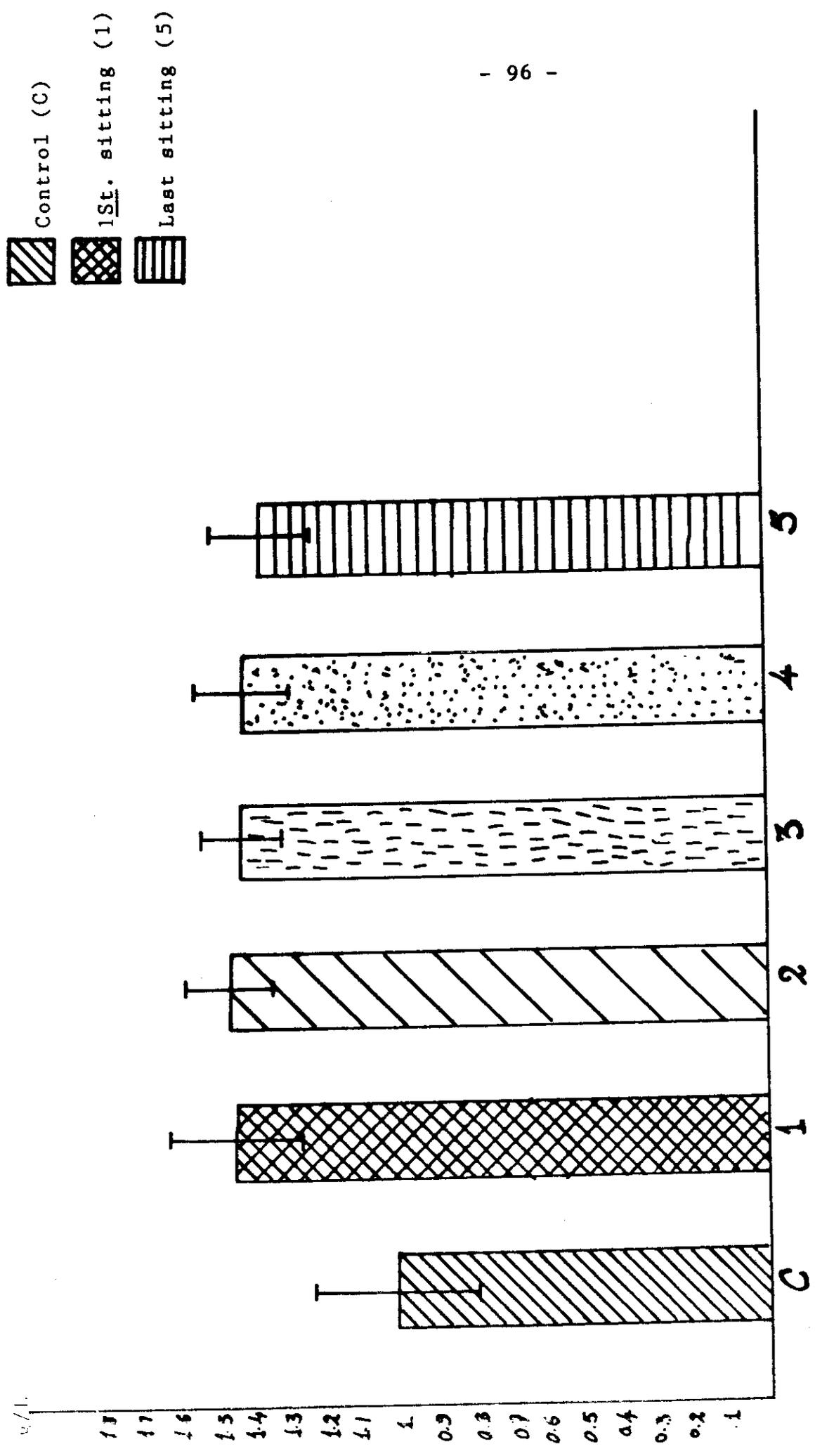


Fig.(8) : Apolipoprotein (B) in control and in 5 haemodialysis sitting
(Mean \pm S.D).

ANALYSIS OF RESULTS

The analysis of the results of estimation of serum urea, creatinine, cholesterol triglyceride, lipoprotein (HDL - C, LDL - C and VLDL - C) and apolipoprotein for the selected patients on regular haemodialysis and control subjects is as follows :-

Table (1) :- Shows the serum level of urea. The serum urea for control subjects ranges from 26 - 39 mg/dl with a mean of (32.7 ± 4.57 mg/dl) while in the 1st sitting haemodialysis serum urea ranges from 140 - 270 mg/dl with a mean of (199.12 ± 43.4 mg/dl) but for the last sitting ranges from 49.9 -- 130 mg/dl with a mean of (88.79 ± 24.89 mg/dl) which is lower than the previous sittings. So the dialysis can ameliorate the higher levels of serum uera in patients of chronic renal failure but not return to the normal value as the results is still significantly higher than that for normal controls ($P < 0.05$).

Table (2) :- Presents the serum level of creatinine. The serum creatinine for control subjects ranges from 0.85 -- 1.2 mg/dl with a mean of (1.0 ± 0.139 mg/dl) while in the 1st sitting dialysis serum creatinine ranges from 4.2 -- 14.2 mg/dl with a mean of (11.37 ± 3.73 mg/dl) while for the last sitting ranges from 2.3 -- 4.9

mg/dl with a mean of (3.279 ± 0.965 mg/dl) the results is lower than the other sittings. So dialysis can modify the levels of serum creatinine but still significantly higher than the corresponding mean for controls ($P < 0.05$).

Table (3) :- Shows the serum level of total cholesterol. In control subjects ranges from 159 -- 210 mg/dl with a mean of (183.2 ± 18.085 mg/dl) while for haemodialysis sittings, the 1st ranges from 138 -- 250 mg/dl with a mean of (202.9 ± 37.24 mg/dl), but for the last sitting ranges from 155 -- 210 mg/dl with a mean of (181.1 ± 19.969 mg/dl). So the serum cholesterol level in dialysis not significantly different from that in control subjects ($P > 0.05$).

Table (4) :- Shows the serum level of triglyceride, The serum triglyceride for control subjects ranges from 61 - 127 mg/dl with a mean of (106 ± 20.206 mg/dl) while in the 1st sitting dialysis ranges from 69 - 195 mg/dl with a mean of (139.8 ± 38.45 mg/dl). In the last sitting ranges from 50 - 210 mg/dl with a mean of (143.5 ± 47.26 mg/dl). So the level of triglyceride is significantly higher than control subjects, ($P < 0.05$).

Table (5) :- Shows the serum level of HDL-C. In control subjects ranges from 49 - 73 mg/dl with a mean of

(62.2 ± 8.509 mg/dl) while in the 1st sitting dialysis serum HDL-C ranges from 8.9 - 51.8 mg/dl with a mean of (31.694 ± 14.43 mg/dl) but in the last sitting ranges from 20 - 55 mg/dl with a mean of (38.2 ± 12.371 mg/dl). So the level of HDL-C in the dialysis is significantly decreased than that in controls ($P < 0.05$).

Table (6) :- Shows the serum level of LDL-C, The serum LDL-C in control subjects ranges from 98 - 137 mg/dl with a mean of (117.5 ± 12.403 mg/dl) while in the 1st dialysis ranges from 110.3 - 177.6 mg/dl with a mean of (142.88 ± 23.58 mg/dl) but in the last sitting ranges from 105 - 140 mg/dl with a mean of (118.4 ± 10.046 mg/dl). So after dialysis the level of serum LDL-C changes from higher to normal level ($P > 0.05$).

Table (7) :- Shows the serum level of VLDL-C, The serum VLDL-C in control subjects ranges from 13 - 33 mg/dl with a mean of (20.3 ± 6.093 mg/dl) while in the 1st sitting dialysis ranges from 13.6 - 39 mg/dl with a mean of (28.33 ± 8.196 mg/dl) but in the last sitting ranges from 9 - 40 mg/dl with a mean of (27.8 ± 11.507 mg/dl). So the serum level of VLDL-C in dialysis is significantly higher than controls ($P < 0.05$).

Table (8) :- Shows the serum level of apolipoprotein(B). The serum apolipoprotein (B) for control subjects ranges from 0.73 - 1.5 g/l with a mean of (1.07 ± 0.223 gm/l) while in the 1st sitting dialysis ranges from 1.01 - 1.79 gm/l with a mean of (1.453 ± 0.227 g/l) but in the last sitting ranges from 1.2 - 1.66 g/l with a mean of (1.376 ± 0.134 gm/l). So the serum level of apolipoprotein (B) dialysis is significantly higher than controls. ($P < 0.05$).