

RESULTS

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Table 1

Duration of Dialysis among the studied groups

Duration of dialysis Patient groups	Duration "years"		Test of significance		
	X	± S.D	between	T	P
I Patients using AN69 membrane (no = 10)	1.7	±0.9	NI	0.114	> 0.05
II Patients using polysulphone membrane (no=10)	1.8	±1.0	II*III	0.969	> 0.05
III Patients using cupro-phane membrane (no=10)	1.4	±0.8	I*III	0.909	> 0.05

This table showed that there was no statistically significant difference in the duration of dialysis between the different patient groups.

Table 2

Dialyzer reactions among the studied cases.

Reaction	Hypoten- sion		Chest pain		Backache		Nothing		Total	
Patient groups	No	%	No		No		No		No	
I Patients using AN69 membrane (no = 10)	2	20.0	0	0.0	0	0.0	8	80.0	10	100.0
II Patients using polysulphone membrane (no=10)	3	30.0	0	0,0	0	0.0	7	70.0	10	100.0
B1 Patients using cuprophane membrane (no=10)	7	70.0	2	20.0		1.0	0	0.0	10	100.0

This table showed that dialyzer reactions in patients using cuprophane membrane were much more when compared with the reactions in the other patients using **polysulphone** or AN69 membrane.

Table 3

Total leucocytic count ($10^3/\text{cmm}$) among the studied groups
(Before dialysis).

Studied groups	X`	S.D	Test of significance versus control	
			T	p
I Patients using AN69 membrane (no = 10)	5.29	± 1.07	2.381	<0.05
H Patients using polysul-phone membrane (no=10)	5.08	± 1.09	2.851	<0.05
III Patients using cupro-phane membrane (no=10)	4.90	± 1.00	3.445	<0.05
IV Controls (no=10)	6.30	± 0.81		

This table showed that there was statistically significant decrease in total leucocytic count in all patient groups when compared to control group.

Table 4

Effect of dialysis on total leucocytic count among the studied cases

W.B.cs count (10^3 / cmm)	Before dialysis	After dialysis	Paired t	P
Studied groups	X'± S.D	X'± S.D		
I Patients using AN69 membrane (no = 10)	5.29 ±1.07	5.06 ±1.17	2.644	<0.05
II Patients using polysul-phone membrane (no=10)	5.08 ±1.09	4.85 ±1.10	15.057	<0.01
DI Patients using cupro-phane membrane (no=10)	4.90 ±1. 00	4.57 ±0.98	21.604	<0.01

This table showed that dialysis caused significant reduction in total W.B.cs count in all patient groups.

Table 5

Platelets count (10^3 /cmm) among the studied groups(Before dialysis).

Studied groups	Platelet count (10^3 / cmm)	X	$\pm$	Test of significance versus control	
				T	
I Patients using AN69 membrane (no = 10)		131.5	± 4.6	13.420	<0.01
II Patients using polysul- phone membrane (no=10)		132.4	± 5.4	13.292	<0.01
III Patients using cupro-phane membrane (no=10)		120.5	± 4.8	14.399	<0.01
IV Controls (no=10)		280.3	± 34.8		

This table showed statistically significant reduction in platelet count in all patient groups when compared to control group.

Table 6

Effect of dialysis on platelet count among the studied cases

latelet count (10^3 /cmm)	Before dialysis	After dialysis	Paired t	P
Studied groups	S.D	S.D		
I Patients using AN69 membrane (no = 10)	131.5 $\pm$ 4.6	131.2 $\pm$ 4.5	3.973	<0.05
II Patients using polysul-phone membrane (no=10)	132.4 $\pm$ 5.4	132.2 $\pm$ 5.4	8.834	<0.01
DI Patients using cupro-phane membrane (no=10)	120.5 $\pm$ 4.8	120.3 $\pm$ 4.9	5.161	<0.01

This table showed that the platelet count was significantly reduced after dialysis .

Table 7

Effect of different dialyzer membranes on platelet count

Platelet count		
	$\bar{X}$	$\pm$ SD
Studied groups		
I Patients using AN69 membrane (no = 10)	131.5	± 4.6
II Patients using polysul- phone membrane (no=10)	132.4	± 5.4
III Patients using cupro-phane membrane (no=10)	120.5	± 4.8
F	17.734	
P	<0.01	

This table showed all types of dialyzer caused significant reduction of platelet count., The most significant reduction was present with cuprophane membrane (Anova test).

Total W.B.cs & Time Membrane	Before dialysis	10 min within dialysis	20 min within dialysis	30 min within dialysis	1 hr within dialysis	2 hr within dialysis	3 hr within dialysis	4 hr within dialysis	F	P
	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$		
I AN69 membrane (n=10)	5.290 $\pm$ 1.07	4.870 $\pm$ 0.89	4.140 $\pm$ 0.77	3.530 $\pm$ 0.52	3.990 $\pm$ 0.82	4.270 $\pm$ 0.86	4.760 $\pm$ 1.07	5.150 $\pm$ 1.11	4.573	<0.05
II Polysulphone membrane (n=10)	5.080 $\pm$ 1.09	4.590 $\pm$ 0.98	3.990 $\pm$ 0.90	3.330 $\pm$ 0.57	3.750 $\pm$ 0.69	4.030 $\pm$ 0.78	4.490 $\pm$ 0.95	4.850 $\pm$ 1.10	4.290	<0.05
III Cuprophane membrane (n=10)	4.900 $\pm$ 1.00	3.860 $\pm$ 0.80	2.780 $\pm$ 0.66	1.730 $\pm$ 0.59	2.600 $\pm$ 0.81	3.330 $\pm$ 0.94	3.990 $\pm$ 0.96	4.570 $\pm$ 0.98	15.510	<0.01
F	0.344	3.390	9.039	31.053	9.159	5.213	4.545	3.740	-	-
P	>0.05	<0.05	<0.01	<0.001	<0.01	<0.05	<0.05	<0.05	-	-

This table showed that cuprophane membrane had the most significant effect on reducing W.B.cs
The most significant reduction in W.B.cs occurs in the 1st 30 min.

Table 9

Effect of different dialyzer membranes & time of dialysis on neutrophil count ($10^3 / \text{mm}^3$).

Total W.B. cs Membrane	Before dialysis	10 min within dialysis	20 min within dialysis	30 min within dialysis	1 hr within dialysis	2 hr within dialysis	3 hr within dialysis	4 hr within dialysis	F	P
	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$		
I AN69 membrane (n=10)	3.082	2.990 ± 0.62	2.465	2.433	2.346 ± 0.51	2.6 ± 0.51	2.4	2.5 ± 0.8	12.3	<0.01
II Polysulphone membrane (n=10)	3.088 ± 0.89	2.79 ± 0.8	2.303 ± 0.57	1.85	2.152 ± 0.51	2.1	2.698 ± 0.13	2.96 ± 0.92	0.82	<0.01
III Cuprophane membrane (n=10)	2.83	2.79 ± 0.5	1.50 ± 0.30	0.9	1.400 ± 0.34	1.8 ± 0.51	2.53	2.6	25.273	<
F	0.927	5.738	13.789	28.227	12.560	4.698	2.050	3.198	-	-
P	>0.05	<0.05	<0.01	<0.001	<0.01	<0.05	<0.05	<0.05	-	-

st significant
first hour

Table 10

Effect of different dialyzer membranes & time of dialysis on lymphocytic count (10^3 /cmm).

Total lymph count & Time	Before dialysis	10 min within dialysis	min thin dial.	30 min dialysis	1 hr within dialysis	2 hr within dialysis	3 hr within dialysis	4 hr within dialysis	F	P
Memb. e	$\bar{X} \pm S.D.$	$\bar{X} \pm S.D.$	$\bar{X} \pm S.D.$	$\bar{X}$	$\bar{X} \pm S.D.$	$\bar{X} \pm S.D.$	$\bar{X} \pm S.D.$	$\bar{X} \pm S.D.$		
	$\bar{X} \pm S.D.$	$\bar{X} \pm S.D.$	$\bar{X} \pm S.D.$	$\bar{X}$	$\bar{X} \pm S.D.$	$\bar{X} \pm S.D.$	$\bar{X} \pm S.D.$	$\bar{X} \pm S.D.$		
I AN69 membrane (n=10)	1.8 ± 0.45	1.793 ± 0.4	1.610 ± 0.35	1.588 ± 0.31	1.595 ± 0.49	1.699 ± 0.56	1.784 ± 0.56		2.0	<0.01
II Polysulphone membrane (n=10)	1.90 ± 0.45	1.80 ± 0.34	1.422 ± 0.21	1.550 ± 0.31	1.516 ± 0.35	1.714 ± 0.40	1.80 ± 0.51		13.3	<0.01
III Cuprophane membrane (n=10)	1.993 ± 0.51	1.6 ± 0.40	1.248 ± 0.21	1.122 ± 0.24	1.438 ± 0.24	1.6 ± 0.48	1.8 ± 0.56		26.8	<0.01
F	0.26	3.412	16.769	5.021	4.592	3.0	0.38			
P	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			

This table showed that cuprophane membrane had the most significant effect on reducing lymphocytes.

The most significant reduction of lymphocytes occurs in the first hour.

Tab 11

Effect of different dialyzers, membranes & dialysis on monocytic count ($10^3/\text{cmm}$).

Membrane	α
I AN69 n (n=10)	
II Polysulfone membrane	
III Cuprophane membrane	

hr	4 hr within dialysis	F	P
S.D	X' ± S.D		
±0.06	0.065 ± 0.07	3.722	<0.05
±0.06	0.044 ± 0.07	3.410	<0.05
±0.04	0.041 ± 0.06	4.330	<0.05
3	2.355	—	—
5	<0.05	—	—

This table showed that cuprophane membrane had the most significant effect on reducing monocytes. The most rapid reduction of monocytes occurs in the 30 min.

Table 12

Effect of different dialyzer membranes & time of dialysis on eosinophilic count (103 /cmm).

Eosinophilic count & Time Membrane	Before dialysis	10 min within dialysis	20 min within dialysis	30 min within dialysis	1 hr within dialysis	2 hr within dialysis	3 hr within dialysis	4 hr within dialysis	F	P
	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$		
I AN69 membrane (n=10)	0.0105	0.0104	0.017 ± 0.003	0.014 ± 0.002	0.017 ± 0.002	0.021 ± 0.004	0.026 ± 0.005	0.032 ± 0.006	0.319	0.5
II Polysulphone membrane (n=10)	0.037 ± 0.004	0.024 ± 0.003	0.022 ± 0.002	0.014 ± 0.002	0.017 ± 0.002	0.019 ± 0.003	0.028 ± 0.004	0.029 ± 0.004	51	>0.05
III Cuprophane membrane (n=10)	0.03 ± 0.005	0.022 ± 0.003	0.018 ± 0.002	0.006 ± 0.001	0.009 ± 0.001	0.017 ± 0.003	0.029 ± 0.004	0.035 ± 0.005	1.394	0.05
F	0.049	0.012	0.182	0.596	0.262	0.019	0.0003	0.023	-	-
P	>0.05	>0.05	>0.05	>0.05	>0.05	>0.05	>0.05	>0.05	-	-

This table showed that the three membranes had insignificant effect on eosinophilic count. There is no difference between the membranes regarding their effect on eosinophilic count during dialysis.

Table 13

Effect of different dialyzer membranes & time of dialysis on basophilic count ($10^3/\text{cmm}$).

Basophilic count & Time Membrane	Before dialysis	10 min within dialysis	20 min within dialysis	30 min within dialysis	1 hr within dialysis	2 hr within dialysis	3 hr within dialysis	4 hr within dialysis	F	P
	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$		
I AN69 membrane (n=10)	0.00 ± 0	0.008 ± 0.0	0.007 ± 0.0	0.006 ± 0.01	0.007 ± 0.01	0.00 ± 0.0	0.008 ± 0.02	0.009 ± 0	0.170	>0.05
II Polysulphone membrane (n=10)	0.00 ± 0.02	0.009 ± 0.0	0.007 ± 0.0	0.006 ± 0.01	0.007 ± 0	0.00 ± 0.01	0.008 ± 0.02	0.009 ± 0.02	0.191	>0.05
III Cuprophane membrane (n=10)	0.006 ± 0.0	0.005 ± 0.01	0.00 ± 0.01	0.002 ± 0.01	0.003 ± 0	0.00 ± 0.01	0.0035 ± 0	0.00 ± 0.02	0.211	>0.05
F	0.117	0.151	0.363	0.601	0.376	0.216	0.157	0.141	-	-
P	>0.05	>0.05	>0.05	>0.05	>0.05	>0.05	>0.05	>0.05	-	-

This table showed that the three membranes had insignificant effect on basophilic count.

There is no difference between the membranes regarding their effect on basophils during dialysis.

Table 14.

Comparison between the studied groups regarding B2- Microglobulin level (before dialysis).

Studied groups	B2- Microglobulin ng/ml	X`	± S.D	Test of significance versus control	
				T	P
I Patients using AN69 membrane (no = 10)		10618.0	±763.5	37.110	<0.001
II Patients using polysul- phone membrane (no=10)		14818.6	±785.2	52.306	<0.001
III Patients using cupro-phane membrane (no=10)		28763.5	±4150.4	20.966	<0.001
IV Controls (no=10)		1196.3	±248.2		

This table showed that B2-M levels was statistically significantly increase in all patient groups when compared to control group.

Table 15

Effect of dialysis with different membranes on **B2-Microglobulin** level.

B2-Microglobulin ng/ml	Before dialysis	After dialysis	Paired t	P
Studied cases	X'± S.D	X'± S.D		
I Patients using AN69 membrane (no = 10)	10618 ±763.5	10785.4 ±934.4	2.259	<0.05
II Patients using polysulphone membrane (no=10)	14818.6 ±785.2	15049.5 ±747.3	2.538	<0.05
III Patients using cupro-phane membrane (no=10)	28763.5 ±4150.4	30124.8 ±4044.5	3.457	<0.05

This table showed a significant increase in B2-M level after dialysis in all patient groups.

Table 16

Effect of different dialyzer on **B2-Microglobulin** level.

B2-Microglobulin ng/ml	X	± S.D
Studied cases		
I Patients using AN69 membrane (no = 10)	10618	±763.5
II Patients using polysulphone membrane (no=10)	14818.6	±785.2
III Patients using cupro-phane membrane (no=10)	28763.5	±4150.4
F	146.904	
P	<0.001	

Cuprophane membrane had the most statistically significant influence on **B2-Microglobulin** level (Anova test).

Table 17

Comparison between the studied groups regarding **interleukin-1** level (before dialysis).

Studied groups	X [̄]	± S.D	Test of significance versus control	
			T	P
I Patients using AN69 membrane (no = 10)	102.8	±6.7	41.965	<0.001
II Patients using polysul-phone membrane (no=10)	142.3	±8.8	46.437	<0.001
III Patients using cupro-phane membrane (no=10)	203.9	±7.9	73.923	<0.001
IV Controls (no =10)	3.0	±3.4		

This table showed that **interleukin** level was statistically significantly increased in all patient groups when compared to control group.

Table 18

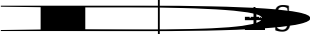
Effect of dialysis with different membranes on interleukin-1 level.

Interleukin-1 Beta pg/ml	Before dialysis	After dialysis	Paired t	P
Studied cases	$\bar{X} \pm S.D$	$\bar{X} \pm S.D$		
I Patients using AN69 membrane (no = 10)	102.8 16.7	123 ±9.2	15.591	<0.01
II Patients using polysul- phone membrane (no=10)	142.3 18.8	174.6 110.2	38.112	<0.01
III Patients using cupro-phane membrane (no=10)	203.9 17.9	264.9 111.4	23.149	<0.01

This table showed a significant increase in **Interleukin-1** level after dialysis in all patient groups.

Table 19

Effect of different dialyzer on **Interleukin-1** level.

Interleukin-1 Beta pg/ml Studied cases		
I Patients using AN69 membrane (no = 10)	102.8	± 6.7
II Patients using polysulphone membrane (no=10)	142.3	± 8.8
III Patients using cupro-phane membrane (no=10)	203.9	± 7.9
F	447.863	
P	<0.001	

Cuprophane membrane had the most statistically significant influence on **Interleukin-1** level (Anova test).

No	Cause of renal failure		Frequency & Duration of dialysis		Dialyzer reaction	Blood urea mg/dl		Serum creatinine mg/dl	
	failure	A	si	ou		before dialysis	after dialysis	before dialysis	after dialysis
1	6	6	6	6	si	0			
2	3	3	3	3	8	N	00		
3	4	4	4	4	0	08	60		
4	4	4	4	4	on	6	00		5 N
5	4	4	4	4	ch	0	N		
6	4	4	4	4	0	50	50		
7	4	4	4	4	I	80	00		
8	4	4	4	4	si	00	40		9 0
9	4	4	4	4	n	00	40		
10	4	4	4	4	I	00	40		
11	4	4	4	4	I	00	40		
12	4	4	4	4	I	00	40		
13	4	4	4	4	I	00	40		
14	4	4	4	4	I	00	40		
15	4	4	4	4	I	00	40		
16	4	4	4	4	I	00	40		
17	4	4	4	4	I	00	40		
18	4	4	4	4	I	00	40		
19	4	4	4	4	I	00	40		
20	4	4	4	4	I	00	40		
21	4	4	4	4	I	00	40		
22	4	4	4	4	I	00	40		
23	4	4	4	4	I	00	40		
24	4	4	4	4	I	00	40		
25	4	4	4	4	I	00	40		
26	4	4	4	4	I	00	40		
27	4	4	4	4	I	00	40		
28	4	4	4	4	I	00	40		
29	4	4	4	4	I	00	40		
30	4	4	4	4	I	00	40		
31	4	4	4	4	I	00	40		
32	4	4	4	4	I	00	40		
33	4	4	4	4	I	00	40		
34	4	4	4	4	I	00	40		
35	4	4	4	4	I	00	40		
36	4	4	4	4	I	00	40		
37	4	4	4	4	I	00	40		
38	4	4	4	4	I	00	40		
39	4	4	4	4	I	00	40		
40	4	4	4	4	I	00	40		
41	4	4	4	4	I	00	40		
42	4	4	4	4	I	00	40		
43	4	4	4	4	I	00	40		
44	4	4	4	4	I	00	40		
45	4	4	4	4	I	00	40		
46	4	4	4	4	I	00	40		
47	4	4	4	4	I	00	40		
48	4	4	4	4	I	00	40		
49	4	4	4	4	I	00	40		
50	4	4	4	4	I	00	40		
51	4	4	4	4	I	00	40		
52	4	4	4	4	I	00	40		
53	4	4	4	4	I	00	40		
54	4	4	4	4	I	00	40		
55	4	4	4	4	I	00	40		
56	4	4	4	4	I	00	40		
57	4	4	4	4	I	00	40		
58	4	4	4	4	I	00	40		
59	4	4	4	4	I	00	40		
60	4	4	4	4	I	00	40		
61	4	4	4	4	I	00	40		
62	4	4	4	4	I	00	40		
63	4	4	4	4	I	00	40		
64	4	4	4	4	I	00	40		
65	4	4	4	4	I	00	40		
66	4	4	4	4	I	00	40		
67	4	4	4	4	I	00	40		
68	4	4	4	4	I	00	40		
69	4	4	4	4	I	00	40		
70	4	4	4	4	I	00	40		
71	4	4	4	4	I	00	40		
72	4	4	4	4	I	00	40		
73	4	4	4	4	I	00	40		
74	4	4	4	4	I	00	40		
75	4	4	4	4	I	00	40		
76	4	4	4	4	I	00	40		
77	4	4	4	4	I	00	40		
78	4	4	4	4	I	00	40		
79	4	4	4	4	I	00	40		
80	4	4	4	4	I	00	40		
81	4	4	4	4	I	00	40		
82	4	4	4	4	I	00	40		
83	4	4	4	4	I	00	40		
84	4	4	4	4	I	00	40		
85	4	4	4	4	I	00	40		
86	4	4	4	4	I	00	40		
87	4	4	4	4	I	00	40		
88	4	4	4	4	I	00	40		
89	4	4	4	4	I	00	40		
90	4	4	4	4	I	00	40		
91	4	4	4	4	I	00	40		
92	4	4	4	4	I	00	40		
93	4	4	4	4	I	00	40		
94	4	4	4	4	I	00	40		
95	4	4	4	4	I	00	40		
96	4	4	4	4	I	00	40		
97	4	4	4	4	I	00	40		
98	4	4	4	4	I	00	40		
99	4	4	4	4	I	00	40		
100	4	4	4	4	I	00	40		

No	Hb (g/dl)		R.B.C. (milli n/cmm)		Platelet count/cmm		Interleukin-1 B (pg)		B core dialysis		After dialysis
	before dialysis	After dialysis	before dialysis	After dialysis	before dialysis	After dialysis	before dialysis	After dialysis	before dialysis	After dialysis	
1	6.3	5.9	2.6	2.0	125.200	123.000	20.55	20.69	280.254	280.174	
2	11.8	10.1	4.9	3.5	123.10	123.000	10.35	25.2	28.02	3.521	
3	8.1	7.2	2.2	2.6	124.500	124.200	20.26	220.9	30.001	33.66281	
4	9.9	4.8	1.3	1.6	115.0	115.500	210.13	2	28005.04	310.22	
5	5.2	6.4	1.3	2.1	117.900	11.00	20.9	265.14	176.928	18.6091	
6	3.2	4.6	1.2	1.5	124.600	12.30	20.9	224.75	30983.44	31411.82	
7	4.4	6.6	2.5	2.2	120.0	120.0	22.56	28.50	31.25	318.288	
8	6.6	6.8	2.2	2.8	116.200	116.00	29.12	24.01	22.41	3.968	
9	10.2	8.9	3.2	3.9	112.20	112.300	25.22	29.34	308.8.8	31290.86	
10	10.1	9.0	3.2	3.1	12.90	124.0	202.11	272.98	3.9820	3122.5	

Total WBCs, and different count before dialysis at(0 time)

No	WBCs/cmm%	poly %	lymph %	Mono %	esino %	B ₈ %	WBCs/cmm %	poly %	lymph%	mono %	esino %	B %
1	600	54	42	0	0	0	4400	56	44	0	0	0
2	4200	52	46	0	2	0	2000	51	47	0	2	0
3	3900	40	60	0	0	0	2800	38	67	0	0	0
4	5900	58	42	0	0	0	4800	55	45	0	0	0
5	4600	46	41	0	0	0	4300	42	53	0	0	0
6	5800	60	59	0	0	1	5000	58	41	0	0	1
7	4700	61	56	2	2	0	4100	58	58	2	2	0
8	3000	58	40	2	0	0	5100	55	44	1	0	0
9	3000	64	30	4	2	0	3200	62	34	5	1	0
10	6100	72	24	2	2	0	4000	20	28	1	1	0

Total WBCs, and different count at 30 minutes within dialysis

Total WBCs, and different count at 20 minutes within dialysis

No	WBCs/cmm%	poly %	lymph %	Mono %	esino %	Baseo %	WBCs/cmm %	poly %	lymph%	mono %	esino %	B %
1	7000	54	46	0	0	0	2000	52	47	0	0	0
2	7000	51	48	0	1	0	1200	5	48	0	1	0
3	2000	45	55	0	0	0	1100	45	55	0	0	0
4	2000	5	4	0	0	0	2100	54	46	0	0	0
5	2000	47	55	0	0	0	700	0	2	0	0	0
6	3900	55	44	0	0	1	2000	41	45	0	0	1
7	2900	6	42	1	0	0	1200	54	44	1	1	0
8	2400	54	45	1	0	0	1500	52	4	0	0	1
9	2000	59	36	3	2	0	1300	56	22	1	1	0
10	3000	63	35	1	1	0	2900	58	20	1	1	0

Total WBCs, and different count at 30 minutes within dialysis

T tal Cs, and diffe ent count at 1 hour within dial

No	V	%	%	%	%	%	%	C	%	Cs,	en count at 2	within	ysis
1		000	54					1		5	4	0	0
2		10	51			48	1	22		52	06	0	0
3		10	44			16	0	2700		40	60	0	0
4		3900	55			45	0	4800		52	48	0	0
5		2500	48				0	3		55	53	0	0
6		3600	55				0	4 00		52	42	0	0
7		21	55				1	31		50	38	0	0
8		21	53			46	0	2		50	41	2	0
9			8			59	0	200		60	3	0	0
10			0			38	1	4 100		62	3	1	0

T tal Cs, and diffe ent count at 1 hour within dialys

N	mm%	po y %	ymp %	icno %	es no 0	Baseo °	Cs/c	%	po y %	ip 1%	ono %	o%	eo
2	00	7	43	0	0	0	5 100	58	58	42	0	0	1
et	500 1	2	40	0	2	0	3 10 1	52	52	46	0	12	1
	00	9	61	0	2	0	3600	58	58	62	0	0	1
	5200	8	42	0	2	0	56 10	58	58	42	0	0	1
	0 10	6	54	0	2	0	7 100	46	46	50	0	0	1
	48	8	4	0	2	1	5400	60	60	39	0	0	1
	3800	9	37	2	2	1	4 100	60	60	36	2	0	0
	500	8	40	2	0	0	00	58	58	40	2	0	0
	9	3	35	2	2	0	3 100	64	64	30	4	2	0
	00	8	8	2	2	0	5 100	21	21	25	2	1	0

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Cause of renal failure		Frequency & Duration of dialysis		Duration of renal failure		Dialyzer reaction		Blood urea mg/dl		Serum creatinine mg/dl	
								before dialysis		after dialysis	
1	60	♂	Hypertension	twice/week 4 hours	10 months	No		132.5	80	10.5	6.6
2	50	♂	Hypertension	twice/week 4 hours	1 year	hypotension		121	56	9.5	4.9
3	42	♂	No cause	twice/week 4 hours	2 years	No		214	99	9.0	4.3
4	34	♂	No cause	twice/week 4 hours	1 year	No		150	90	11.0	5.5
5	52	♂	No cause	twice/week 4 hours	3 years	hypotension		141	63	10.0	5.2
6	54	♂	Hypertension	twice/week 4 hours	11 months	No		119	65	9.3	5.1
7	64	♂	Hypertension	twice/week 4 hours	6 months	hypotension		191	90	10.5	6.0
8	46	♂	No cause	twice/week 4 hours	3 years	No		119	60	9.0	4.5
9	38	♂	No cause	twice/week 4 hours	2.5 years	No		163	80	11.5	6.7
10	56	♂	Hypertension	twice/week 4 hours	3 years	No		110	70	8.0	4.4

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No	Hb gm/dl		R.B. Cs millions/cmm		Platelet count/cmm		Interleukin-1 Beta		B2-Microglobulin	
	before dialysis	After dialysis	before dialysis	After dialysis	before dialysis	After dialysis	before dialysis	After dialysis	before dialysis	After dialysis
1	10.9	10.7	3.9	3.5	125.500	125.300	150.30	180.71	13800.17	14200.23
2	6.7	6.3	2.2	2.0	127.900	127.600	130.67	159.94	15445.32	15900.77
3	11.3	11.1	4.0	3.8	136.400	136.100	135.34	170.26	14748.16	15100.52
4	11.0	11.0	4.2	4.4	138.300	138.200	153.15	186.04	15500.14	15900.47
5	7.9	7.7	2.7	2.9	139.200	139.000	138.22	168.79	15800.28	15500.36
6	4.2	4.0	1.8	1.7	129.400	129.100	145.21	177.14	13700.03	14100.46
7	3.1	3.0	1.5	1.4	128.300	128.200	140.09	175.65	14196.55	14700.76
8	9.3	9.1	3.6	3.5	135.600	135.300	149.09	184.09	14443.66	14200.56
9	7.6	7.4	2.5	2.6	137.400	137.100	129.30	157.51	15770.74	15990.37
10	4.5	4.3	1.9	2.0	126.200	126.000	152.68	185.60	14780.62	14900.42

No	WBCs/cmm%	poly %	lymph %	Mono %	esino %	Baseo %	WBCs/cmm%	poly %	lymph %	Mono%	esino%	Baseo %
1	6900	62	38	0	0	0	6000	60	40	0	0	0
2	4500	56	42	0	2	0	4000	55	43	0	2	0
3	4000	45	53	2	0	0	3800	46	53	1	0	0
4	6000	62	36	2	0	0	5800	60	38	2	0	0
5	4700	50	48	0	2	0	4000	50	48	0	2	0
6	5900	66	33	0	0	1	5000	65	34	0	0	1
7	4800	60	35	3	1	0	4100	58	38	3	1	0
8	4000	62	38	0	0	0	3800	60	40	0	0	0
9	3800	69	26	2	2	1	3500	66	30	2	1	1
10	6200	70	30	0	0	0	5900	67	33	0	0	0

No	WBCs/cmm%	poly %	lymph %	Mono %	esino %	Baseo %	WBCs/cmm %	poly %	lymph%	Mono %	esino %	Baseo %
1	5100	58	42	0	0	0	4000	58	42	0	0	0
2	3800	54	45	0	1	0	3000	52	46	0	2	0
3	3000	46	52	2	0	0	2900	46	52	2	0	0
4	4900	59	39	2	0	0	3900	56	43	1	0	0
5	3800	50	49	0	1	0	3000	50	49	0	1	0
6	4900	62	37	0	0	1	3800	59	40	0	0	1
7	3500	56	41	2	1	0	3200	56	41	2	1	0
8	3000	58	42	0	0	0	2900	55	45	0	0	0
9	2900	64	32	2	1	1	2500	61	36	1	1	1
10	5000	65	35	0	0	0	4100	63	37	0	0	0

No	WBCs/cmm%	poly	lymph %	Mono %	esino %	baso %		lymph			
1	3000		40	0	0	0	5300	60	0	0	0
2	3500	54		0		0	3800	55	0		0
3	3100		SZ		0	0	3300	46	2	0	0
4	4100	58	41	1	0	0	4300	59	1	0	0
5	3400	SO	49	0	1	0	3900	50	0	1	0
6	4200	61	38	0	0	1	4700	63	0	0	
7	3800	56	40		1	0	21000	58	1	1	0
8	3000	51	43	0	0	0	3100	59	0	0	0
9	2900	62		1	1	1	3000	65	1	1	
				0				61	0	0	

No	WBCs/cmm%	poly%	lymph %	mono %	esino%	Baso %		lymph%			
1	6000	61	39	0	0	0	6100	63	0		0
2	3900	57	44	0		0	4300	56			0
3	3500	45	53		0	0	3700	4	2	0	0
4	5000	61	37		0	0	5800	62	2	0	0
5	4300	0	48	0		0	4500	0	0		0
6	5000		35	0	0	1	5600	61	0	0	
7	21500	61	34		1	0	21600	1			
8	3500	61		0	0	0	3800	62	0	0	0
9	32100	66	29				3500	63	2	1	
				0				71	0	0	0

		cause	Frequency & Duration of dialysis	of				Serum creatinine mg/dl before dialysis	
	55	Hypertension	twice/week 4 hours	11 months	NO	135	83		
2	57	No cause	twice/week 4 hours	2 years	Hypertension	160	100	18	
		No cause	twice/week 4 hours	year	NO	146	94	16	
4	59	Hypertension	twice/week 4 hours	2 year	NO	114	111	17.5	9.9
5	43	hypertension	twice/week 4 hours	3 year	NO	195	132	16.5	11.0
6	60	No cause	twice/week 4 hours	6 months	hypertension	151	95	11.39	12
7		Hypertension	twice/week 4 hours	9 months	NO	148	91	12.3	6.5
8	59	No cause	twice/week 4 hours	2.5 years	NO	155	95	11.5	15
	41	No cause	twice/week 4 hours		NO	110	89	14.3	9.2
			twice/week 4 hours				130	16	10.5

No	Hb		R.B.Cs mil						n-1 Beta			
	before	After	before	After	before	After	before	After	before	After	before	After
1	11.1	10.9	4.0	1.8	126.100	126.000	100.78	120.71	105.20	111100.05		
2	9.8	9.6	3.7	2.1	128.200	128.000	105.56	123.44	10994.86	11400.76		
3	9.0	9.0	3.3	3.2	135.300	135.100	10.87	132.47	11917.16	112200.15		
4	11.1	11.1	4.0	4.0	134.200	134.000	90.53	10.08	9900.32	10100.15		
5	6.8	6.5	2.2	2.1	138.100	138.000	95.30	108.37	10250.70	10050.41		
6		11.1	2.6	2.7	128.300	128.100	107.74	127.94	1200.75	11500.37		
7	9.8	9.6	3.6		129.100	129.000	112.06	137.33	10300.82	10600.08		
8	11.1	4.5	1.9	1.9	133.400	133.200	103.51	121.64	9200.63	8900.88		
9	3.9	3.6	1.6	1.5	136.100	136.000	102.25	130.65	10500.60	10700.66		
				3.3				120.73	1164.23	11300.60		

Total WBCs, and different count before dialysis at(0 time)

No	WBC /mm%	poly%	lymph %	mono%	esino%	baseo%	wbcs/cmm%	poly %	lymph%	mono%	esino%	baseo %
1	1000		210	0	0	0	6200	59	41	0	0	0
	4700	59	41	0	0	0	4500	51		0	0	0
	4200	50	48	2	0	0	4000	50	218	0	0	0
	6100	61	37	0		0		60	18	0		0
	21900	56	19		0		21500	55	241		0	0
6	6000	70	28	0	0	0	5200	68	11	0	0	0
	5000	68	30		0	0	4800	68	32	0	0	0
8	4300	72	27	0	0	0	1900	69	30	0	0	0
9	4000		29		2	0	3800	61	34		0	0
10		70	28			0	5800	61	31		0	0

Total WBCs, and different count at 10 minutes within dialysis

Total WBCs, and different count at 20 minutes within dialysis

NO	WBCs/cmm%	poly%	lymph %	mono%	esino %		wbcs/cmm %	poly %	lymph%	mono %	esino %	baseo%
1	52100	58	212	0	0	0	21100	57	243	0	0	0
	4000	56	4	0	0	0	4200	56	2121	0	0	0
	3200	50	219	1	0	0	1100	50	48	0		0
	21800	58			0	0	21000	58	41		0	0
	1900	55		3	0	0	3500	53	44		0	0
6	4400	53		0		0	1900	64	3	0	0	0
	21100	63	16	1	0	0	4200	59	210		0	0
	3500	7		0	0	0	1000	64	35	0		
9	1100	8				0	2900	56	40	0		0
10	5000			2	0	0	4200	61	18	1	0	0

Total WBCs, and different count at 30 minutes within dialysis

No	WBCs/cmm%	poly %	lymph %	Mono%	esino %	Baseo %	WBCs/cmm%	poly %	lymph %	Mono%	esino%	Baseo %
1	5800	58	42	0	0	0	6000	60	40	0	0	0
	3500	51	49	0	0	0	1900	58	42	0	0	0
3	3100	50	49	1	0	0	1600	50			0	0
	4500	58	41	1	1	0	5100	60	38	0		0
	1900	54	42	0	0	0	4000	55	41		0	
6	4300	63	36	1	1	0	4600	66	34			0
	3100	60	39	0	0	0	1800	63	35		0	0
	3200	65	34	0	0	0	3500	61	32	0	0	
9	3100	58	38			0	3300	61	34	1		0
10	4500	63		0	0	0	4900	61	31	2	0	0

No	WBCs/cmm%	poly %	lymph %	Mono%	esino%	Baseo%	Cs/cmm%	poly %	lymph %	Mono%	esino%	Baseo
1	6500	61	39	0	0	0	6900	60	40	0	0	0
	4000	58	42	0	0	0	4600	59		0	0	0
	3800	50	48	0	0	0	4000	50	15		0	0
4	6000	55	45	0	0	1	6200	60	38	0		0
	4400	55	45	0	0	0	4700	56	19		0	1
6	5200	69	29	0		0	5900	71	27	0	2	0
7	4200	61	31	0	0	0	4900	61	31		0	0
	1900	70	29	0	0	1	4100	71	28	0	0	1
9	3600	63	33		1	0	3800	65	29	4		0
	6000	69			0	0	6700	71	21	2	0	0