

Table 1: Compare the demographic, clinical and laboratory characteristics of the studied groups

Patients characteristics	Peritoneal ultrafiltration group(1) 48 patients	Large-volume paracentesis without albumin group(IIa) 31 patients	Large-volume paracentesis with albumin group (IIb) 17 patients	P value
Age				
Mean± S.D.	54.89 ± 7.11	58.09 ± 5.33	54.94 ± 6.99	0.09
Median (Range)	55 (39 – 70)	56 (51 – 67)	56 (43 – 66)	
Male	38 79.2%	19 61.3%	9 52.9%	
Female	10 20.8%	12 38.7%	8 47.1%	0.074
Liver cirrhosis etiology:				
Hepatitis C virus	36 75%	23 74.2%	13 76.5%	1
Hepatitis B virus	9 18.8%	6 19.4%	3 17.6%	
Others	3 6.2%	2 6.5%	1 5.9%	
Ascites duration:				<0.001
Less than 6 months	22 45.8%	19 61.3%	0	
More than 6 months	26 54.2%	12 38.7%	17 100%	
Lower limb edema:	31 64.6%	12 38.7%	17 100%	<0.001
Previous paracentesis:	21 43.8%	14 45.2%	7 41.2%	0.965
Previous hepatic encephalopathy	18 37.5%	9 29%	5 29.4%	0.687
Systemic hypertension:	15 31.2%	2 6.5%	6 35.3%	0.02
Diabetes mellitus:	8 16.7%	6 19.4%	6 35.3%	0.259
Hepatic encephalopathy:	4 8.3%	2 6.5%	1 5.9%	0.923
Systolic blood pressure				
Mean± S.D.	130.2 ± 11.8	132.5± 4.4	131.4 ± 7.2	0 .835
Diastolic blood pressure				
Mean± S.D.	81.3 ± 8.04	81.9 ± 4.4	78.5 ± 2.9	0.097
Mean arterial blood pressure				
Mean± S.D.	97.5 ± 9.05	98.75 ± 4.19	96.1 ± 3.05	0 .225
Serum albumin (g/dL)				
Mean± S.D.	2.4 ± 0.31	2.37 ± 0.28	2.42 ± 0.17	0.766
Serum creatinine (mg/dL)				
Mean± S.D.	1.09 ± 0.09	1.05 ± 0.07	1.12 ± 0.11	0.052
Child- Pugh Class				
B	9 18.8%	9 29%	2 11.8%	0.327
C	39 81.2%	22 71%	15 82.2%	
MELD score*				
Mean± S.D.	14.06 ± 2.76	12 ± 2.78	15.53 ± 2.67	<0.001
Median (Range)	14 (9 – 18)	12 (7 – 17)	15 (11 – 19)	

*MELD score (Model for End -Stage Liver Disease)

Table 2: Comparison of repeated measurements of the mean arterial blood pressure of patients in the studied groups

Parameter	MAP before the procedure	MAP immediately after the procedure	MAP pressure 24 h after the procedure	MAP 48 h after the procedure	P-value
Peritoneal ultrafiltration					
Mean± S.D.	97.59 ± 9.05	88.77 ± 6.78	92.59 ± 7.72	97.52 ± 8.24	<0.001*
large volume paracentesis without albumin					
Mean± S.D.	98.75 ± 4.19	90.6 ± 5.02	92.14 ± 4.61	95.07 ± 2.47	<0.001*
large volume paracentesis plus albumin infusion					
Mean± S.D.	96.15 ± 3.05	87.02 ± 2.62	88.42 ± 2.68	96.25 ± 3.05	<0.001*

There is a highly statistically significant difference (p-value < 0.001) between the studied groups as regards the Mean Arterial Blood pressure (MAP).

Table 3: Comparison of serum albumin (g/dL) and Creatinine (mg/dl) of patients in the groups before and after the procedure

Parameter	group I	Group IIa	Group IIb	P-value	P1	P2	P3
Serum albumin before							
Mean± S.D.	2.4 ± 0.31	2.37 ± 0.28	2.42 ± 0.17	0.766	0.506	0.618	0.991
Creatinine before							
Mean± S.D.	1.09 ± 0.09	1.05 ± 0.07	1.12 ± 0.11	0.052	0.06	0.326	0.028
Serum albumin after							
Mean± S.D.	2.59 ± 0.28	2.39 ± 0.24	2.71 ± 0.19	<0.001	0.001	0.173	<0.001
Creatinine after							
Mean± S.D.	1.01 ± 0.1	0.96 ± 0.11	1.08 ± 0.09	0.003	0.075	0.017	0.001

P-value compared the three groups **P1** compared peritoneal ultrafiltration (group **I**) and LVP without albumin (group **IIa**)

P2 compared peritoneal ultrafiltration (group **I**) and LVP plus albumin infusion groups (group **IIb**)

P3 compared LVP without albumin (group **IIa**) and LVP plus albumin infusion (group **IIb**) groups

There is a statistically significant difference (p-value < 0.05) between the studied groups as regard serum albumin and creatinine after the procedures.

Table 4: Comparison between the studied groups regarding the time of procedure, liters removed and post-procedure complications

parameter	group I		Group IIa		Group IIb		Total		P value
Liters removed									
Mean± S.D.	9.04 ± 9.04		4.45 ± 0.51		6.06 ± 0.83		7.03 ± 2.43		<0.001
Median (Range)	9 (7 – 13)		4 (4 – 5)		6 (5 – 7)		7 (4 – 13)		
Time of procedure ≤ 3hours	33	68.8%	5	16.1%	3	17.6%	41	42.7%	<0.001
Time of procedure > 3hours	15	31.2%	26	83.9%	14	82.4%	55	57.3%	
Encephalopathy within 48 h after procedure	0	0.0%	6	19.4%	0	0.0%	6	6.2%	0.001
Post-procedure fever or infection at cannula site	0		0		0		0		NA
Post procedure abdominal pain	9	18.8%	5	16.1%	3	17.6%	17	17.7%	0.957

NA (not applicable)