Results

This study was carried on 45 patients with disc herniaton presented by low back pain and sciatica. They were 18 females (40%) and 27 males (60%). Their age ranged between 20-40 years with a mean of (32±5.12) years.

Patients were classified into 2 groups each group undergone different treatment programme for 6 months. Group (I), included 15 patients 5 females (33.3%), and 10 males (66.7%). Their ages ranged between 25-37 years with a mean of (31.47±4.34) years, low back pain duration ranged between 3 and 5 week with a mean of (3.26±0.80).This group was treated by Non steroidal anti-inflammatory drugs, muscle relaxant, lumbar support, superficial heat plus exercise. Group (II), This group included 30 patients, Their ages ranged between 20 and 40 years with a mean of (32.80±5.48),duration of low back pain ranged between 3 and 72 week with a mean of(27.8±18.2). This group subclassified into two groups: lumbar injection group(group IIL) and caudal injection group(group IIC). By comparing two groups as regarding age, disease duration, There was no statistically significant difference as regarding age ($p > 0,05$) but there was significant difference as regarding disease duration ($p < 0.05$) value.

All of our 45 patients completed the trial without any lost. In both groups: age, sex, weight, body mass index, muscle spasm, hyposethia were

compared. SLR test, VAS and Oswestry low back pain disability questionnaire scores at 1st, 3rd week, 1st, 3rd and 6th month were compared

Weight of patients in both groups was measured; both groups were compared according to weight. Body mass index was calculated and compared.

- In group (I) patients weight ranging between 65 and 105 kg with a mean of (84.53±12.28), Body mass index ranging between 22.0 and 35.0 with a mean of (28.70±3.42).

- In group (II) patients weight ranging between 60 and 102 kg with a mean of (82.10±11.54), Body mass index ranging between 18.0 and 33.0 with a mean of (26.50±3.15). **(Table 3)**

- No statistically significant difference between the two groups ($p > 0.05$) in weight and body mass index. **(Table 5)**

- As regarding laboratory investigations of patients of patients in **(Table 8)**, no abnormalities were found, And No statistically significant difference between the two groups was found ($p > 0.05$).

- As regarding muscle spasm, In group (I) there were 7 patients suffering from muscle spasm became 4 after treatment, 15 patients in group(II) suffering from muscle spasm became 3 after injection **(Table 16).**

- As regarding hyposethia, There were 4 patients suffering from hyposethia in group (I) became one patient after treatment,8 patients in group (II) became one after injection **(Table 17).**

As regarding VAS and SLR test at 1st, 3rd week, 1st, 3rd and 6th month,

- **In group (I)** visual analogue scale before treatment ranged between 5 and 9 with a mean (7.20±1.08),after first week it ranged from 4 to 8 with a mean (6.40±1.18), In 3rd week descended from 4 to 7 with a mean (5.73±0.96), After 1st month it was from 4 to 7 with a mean (5.67±0.79), 3rd month it was from 4 to 7 with a mean (5.80±0.8) and at 6th month it ranged from 5 to 8 with a mean (6.27±0.96).

- **In group (II)** visual analogue scale before treatment ranged between 5 and 10 with a mean (7.73±1.23),after first week it ranged from 1 to 5 with a mean (3.13±1.20), In 3rd week ranged from 1 to 6 with a mean (3.40±1.38), After 1st month it was from 2 to 6 with a mean (3.83±1.32), 3rd month it was from 2 to 6 with a mean (4.27±1.14) and at 6th month it ranged from 3 to 6 with a mean (4.63±0.96).

There is no significant difference between VAS of two groups before treatment ($P < 0.05$).

There is significant difference between VAS of two groups after treatment ($P < 0.05$) **(Table 10).**

- **In group (I)** straight leg raising test before treatment ranged between 45 and 70 with a mean (59.67±8.76),after first week it ranged from 50 to 75 with a mean (64.67±,7.19), In 3rd week descended from 60 to 80 with a mean (68.33±6.46), After 1st month

it was from 50 to 80 with a mean (66.00±8.90), 3rd month it was from 50 to 75 with a mean (64.67±9.16) and at 6th month it ranged from 50 to 75 with a mean (64.00±8.90).

- **In group (II)** straight leg raising test before treatment ranged between 45 and 70 with a mean (57.17±9.53), after first week it ranged from 45 to 85 with a mean (73.33±9.13), In 3rd week descended from 60 to 85 with a mean (74.83±6.88), After 1st month it was from 60 to 85 with a mean (73.00±7.24), 3rd month it was from 60 to 85 with a mean (70.67±7.10) and at 6th month it ranged from 60 to 85 with a mean (69.50±6.99).

There is no significant difference between straight leg raising test of two groups before treatment ($P < 0.05$).

There is significant difference between straight leg raising test of two groups after treatment ($P < 0.05$) **(Table 11).**

As regarding Oswestry low back disability questionnaire score, we find:-

- **In group (I)** before treatment Oswestry low back disability questionnaire score ranged between 30 and 80 with a mean (56.13±15.67), after first week it ranged from 30 to 75 with a mean (50.33±15.75), In 3rd week from 30 to 75 with a mean(49.33 +16.13), After 1st month it was from 30 to 75 with a mean (50.33±16.42), 3rd month it was from 30 to 75 with a mean (51.33±15.41) and at 6th month it ranged from 30 to 75 with a mean (52.00±14.61).

- **In group (II)** before treatment Oswestry low back disability questionnaire score ranged between 40 and 80 with a mean (60.00±13.20), after first week it ranged from 15 to 60 with a mean (30.67±11.80), In 3rd week from 15 to 60 with a mean (31.33± 10.82), After 1st month it was from 20 to 60 with a mean (32,93 ± 10.11), 3rd month it was from 20 to 60 with a mean(35.33±10.98) and at 6th month it ranged from 20 to 60 with a mean (38.00±10.64).

P value was not significant (>0.05) before injection became highly significant (<0.05) after injection. **(Table 12)**

Then we compared between group II (L) and group II (C) according to age, sex, weight, and body mass index, and muscle spasm, hyposethia before and after injection. SLR test, VAS and Oswestry low back pain disability questionnaire scores at 1st, 3rd week, 1st, 3rd and 6th month were also compared.

***Group II (L):-**

This group included 15 patients 6 females (40%) , and 9 males (60%). Their ages ranged between 30-40 years with a mean of (35.60±3.46) years, duration of their low back pain ranged between 3 and 72 week with a mean of (30.33±17.92). Lumbar epidural steroid injection was applied to this group.

***Group II (C):-**

Include 15 patients 7 females (46.7) and 8 males (53.3) aged between 20 and 37 years with a mean of (30.0±5.78) years, Duration of their low

back pain ranged between4 and 72 week with a mean of (25.33±18.80). Caudal epidural injection was applied to this group.

No significant difference between 2 groups as regarding age or disease duration ($p > 0.05$)

- **In group II (L)** patients weight ranging between 60 and 100 kg with a mean of (81.73±12.05), Body mass index ranging between 22.0 and 30.0 with a mean of (26.80±2.70).
- **In group II(C)** patients weight ranging between 62 and 102 kg with a mean of (82.47±11.42), Body mass index ranging between 18.0 and 33.0 with a mean of (26.20±3.61).

No statistically significant difference between the two groups ($p >0.05$) in weight and body mass index **(Table 6).**

As regarding laboratory investigations of patients of patients in **(Table 7)**, no abnormalities were found, and No statistically significant difference between the two groups was found ($p >0.05$).

As regarding muscle spasm, In group II(L) there were 8 suffering from muscle spasm became one patient (6.7%) after lumbar injection and 7 patients became 2 patients after caudal injection **(Table 16).**

As regarding hyposethia, There were 4 patients suffering from hyposethia in group II(L) became one patient (6.7%) after lumbar injection ,In group II(C) there were 4 patients after caudal injection they all were relieved from their hyposethia **(Table 17).**

In group II (L) visual analogue scale before treatment ranged between 6 and 10 with a mean (8.07±1.10),after first week it ranged from 1 to 5 with a mean (2.80±,1.21), In 3rd week ranged from 1 to 6 with a mean (2.93±1.49), After 1st month it was from 2 to 6 with a mean (3.20 ± 1.32), 3rd month it was from 2 to 6 with a mean (3.93 ± 1.28) and at 6th month it ranged from 3 to 6 with a mean (4.33 ± 0.98).

- **In group II (C)** visual analogue scale before treatment ranged between 5 and 9 with a mean (7.40±1.30),after first week it ranged from 2 to 5 with a mean (3.47±,1.13), In 3rd week ranged from 2 to 6 with a mean (3.87±1.13), After 1st month it was from 3 to 6 with a mean (4.47±0.99), 3rd month it was from 3 to 6 with a mean (4.60 ± 0.91) and at 6th month it ranged from 3 to 6 with a mean (4.93 ± 0.88).There were no statistically difference between both groups except at 1st month **(Table 13).**

- **In group II (L)** straight leg raising test before treatment ranged between 45 and 70 with a mean (56.00±9.10),after first week it ranged from 70 to 85 with a mean (76.67±,5.56), In 3rd week ranged from 70 to 85 with a mean (76.67±5.56), After 1st month it was from 65 to 85 with a mean (74.67±6.67), 3rd month it was from 60 to 85 with a mean (70.67±7.29) and at 6th month it ranged from 60 to 80 with a mean (69.00±7.61).

- **In group II (C)** straight leg raising test before treatment ranged between 45 and 70 with a mean (58.33±10.12),after first week it ranged from 45 to 80 with a mean (70.00±,10.86), In 3rd week ranged from 60 to 80 with a mean (73.00±7.75), After 1st month it was from

60 to 85 with a mean (71.33±7.67), 3rd month it was from 60 to 85 with a mean (70.67±7.04) and at 6th month it ranged from 60 to 85 with a mean (70.00±6.55). There were no statistically difference between both groups except at 1st week. **(Table 14)**

- **In group II (L)** Oswestry low back disability questionnaire score before treatment ranged between 40 and 80 with a mean (61.00±13.12),after first week it ranged from 15 to 40 with a mean (24.67±,6.67), In 3rd week ranged from 15 to 40 with a mean (26.67±6.46), After 1st month it was from 20 to 40 with a mean (29.87±6.12), 3rd month it was from 20 to 60 with a mean (34.67±9.72) and at 6th month it ranged from 25 to 60 with a mean (36.00±9.10).

- **In group II (C)** Oswestry low back disability questionnaire score before treatment ranged between 40 and 80 with a mean (59.00±13.65),after first week it ranged from 20 to 60 with a mean (36.67±,12.91), In 3rd week ranged from 20 to 60 with a mean (36.00±12.42), After 1st month it was from 20 to 60 with a mean (36.00±12.42), 3rd month it was from 20 to 60 with a mean (36.00±12.42) and at 6th month it ranged from 20 to 60 with a mean (40.00±11.95). There were no statistically difference between both groups except at 1st and 3rd week. **(Table 15)**

No serious complications were occurred after injection.

Table (4): Clinical characteristics of group (I) and group (II).

Characteristics	Group (I)	Group (II)
Age	25:37(31.47)	20:40(32.80)
Sex (F:M)	5:10	13:17
Duration	3:5(3.26)week	3:72(27.8)week
Weight	65:105(84.53)	50:102 (82.10)
BMI	22:35(28.70)	18:33(26.50)
VAS	5:9(7.20)	5:10(7.73)
SLR	45 :70 (59.67)	45 :70 (57.17)

*BMI=body mass index *F:M=female: male
* VAS=viscual analogue scale *SLR=straight leg raising test

Table (5): Clinical characteristics of group II (L) and group II(C).

Characteristics	Group II(L)	Group II(C)
Age	30:40(35.60)	20:37(30.00)
Sex(F:M)	6:9	7:8
Duration	3:72(30.33)week	4:72(25.33)week
Weight	60:100(81.73)	62:102 (82.47)
BMI	22:30(26.80)	18:33(26.20)
VAS before treatment	6:10 (8.07)	5 :9 (7.40)
SLR before treatment	45:70 (56.00),	45 :70 (58.33)

*BMI=body mass index *F:M=female: male
*VAS=viscual analogue scale *SLR=straight leg raising test

Table (6): Statistical comparison of baseline characteristics between group (I) and group (II) showing P value

	g1	N	Mean	Std. Deviation	T	P
Age	**group (I)**	15	31.47	4.340	0.8	>0.05
	group (II)	30	32.80	5.480		
Weight	**group (I)**	15	84.53	12.276	0.6	>0.05
	group (II)	30	82.10	11.541		
BMI	**group (I)**	15	28.700	3.4163	2.1	<0.05
	group (II)	30	26.500	3.1486		

Table (7): Statistical comparison of baseline characteristics between group II (L): lumbar and group II(C): caudal showing p value.

	Group	N	Mean	Std. Deviation	T	P
Age	**group II(L)**	15	35.60	3.460	3.2	<0.05
	group II(C)	15	30.00	5.782		
Weight	**group II(L)**	15	81.73	12.050	0.2	>0.05
	group II(C)	15	82.47	11.420		
BMI	**group II(L)**	15	26.800	2.7045	0.5	>0.05
	group II(C)	15	26.200	3.6095		

Table (8): Comparison between groups as regarding sex .

	Male		Female		Total	X2	P
	No.	%	No.	%			
group (I)	10	66.7	5	33.3	15	0.7	0.8
group II(L)	9	60	6	40	15		
group II(C)	8	53.3	7	46.7	15		
Total	27	60	18	40	45		

Table (9): Comparison between laboratory investigations of group (I): medical group and group (II): injection group

	g1	N	Mean	Std. Deviation	T	P
HB	**group (I)**	15	14.93	1.944	0.1	>0.05
	group (II)	30	14.90	1.583		
WBCs	**group (I)**	15	7.820	1.9109	1.7	>0.05
	group (II)	30	6.910	1.5390		
RBCs	**group (I)**	15	5.49	.746	0.8	>0.05
	group (II)	30	5.30	.665		
Platlets	**group (I)**	15	289.73	105.121	0.7	>0.05
	group (II)	30	311.23	81.897		
Glucose	**group (I)**	15	91.40	11.752	0.5	>0.05
	group (II)	30	89.40	11.935		
ALT	**group (I)**	15	10.200	5.4011	1.1	>0.05
	group (II)	29	12.034	5.5964		
AST	**group (I)**	15	15.20	6.527	0.6	>0.05
	group (II)	29	16.34	5.595		
ALBUMIN	**group (I)**	15	4.07333	.451136	0.1	>0.05
	group (II)	29	4.08966	.339479		
PTT	**group (I)**	15	32.80	6.678	0.1	>0.05
	group (II)	29	32.97	4.679		
Urea	**group (I)**	15	11.93	3.615	0.3	>0.05
	group (II)	29	12.34	4.402		
Creatinin	**group (I)**	15	1.01333	.164172	0.1	>0.05
	group (II)	29	1.01034	.137178		
Uricacid	**group (I)**	15	5.67	1.261	0.5	>0.05
	group (II)	29	5.85	1.176		

Table (10): Comparison between laboratory investigations of group group II(L):lumbar and group II(C): caudal group

		N	Mean	Std. Deviation	T	P
HB	**group II(L)**	15	15.00	1.512	0.3	>0.05
	group II(C)	15	14.80	1.699		
WBCs	**group II(L)**	15	7.520	1.7534	2.3	<0.05
	group II(C)	15	6.300	1.0170		
RBCs	**group II(L)**	15	5.41	.608	0.8	>0.05
	group II(C)	15	5.20	.724		
Platlets	**group II(L)**	15	311.67	91.551	0.02	>0.05
	group II(C)	15	310.80	74.237		
Glucose	**group II(L)**	15	91.53	13.410	0.9	>0.05
	group II(C)	15	87.27	10.271		
ALT	**group II(L)**	15	11.467	5.7677	0.6	>0.05
	group II(C)	14	12.643	5.5554		
AST	**group II(L)**	15	17.33	5.900	0.9	>0.05
	group II(C)	14	15.29	5.254		
ALBUMIN	**group II(L)**	15	4.12667	.305817	0.6	>0.05
	group II(C)	14	4.05000	.379777		
PTT	**group II(L)**	15	33.47	4.998	0.6	>0.05
	group II(C)	14	32.43	4.433		
Urea	**group II(L)**	15	12.60	4.997	0.3	>0.05
	group II(C)	14	12.07	3.832		
Creatinin	**group II(L)**	15	.99333	.143759	0.7	>0.05
	group II(C)	14	1.02857	.132599		
Uricacid	**group II(L)**	15	5.87	1.386	0.1	>0.05
	group II(C)	14	5.83	.952		

Table (11): Comparison between VAS of group (I):medical group and group (II):injection group

g1	N	Mean	Std. Deviation	T	P
VAS before					
group (I)	15	7.20	1.082		
group(II)	30	7.73	1.230	1.4	>0.05
VAS 1 w					
group (I)	15	6.40	1.183		
group(II)	30	3.13	1.196	8.7	<0.05
VAS 3 w					
group (I)	15	5.73	.961		
group(II)	30	3.40	1.380	5.8	<0.05
VAS1m					
group (I)	15	5.67	.976		
group(II)	30	3.83	1.315	4.8	<0.05
VAS3m					
group (I)	15	5.80	.862		
group(II)	30	4.27	1.143	4.6	<0.05
VAS6m					
group (I)	15	6.27	.961		
group(II)	30	4.63	.964	5.4	<0.05

*n=number

*VAS bef= viscual analogue scale before treatment

*VAS 1w = viscual analogue scale after 1st week of treatment

*VAS 3w = viscual analogue scale after 3rd week of treatment

*VAS 1 m= viscual analogue scale after 1st month of treatment

*VAS 3m= viscual analogue scale after 3rd month of treatment

*VAS 6m= viscual analogue scale after 6th month of treatment

Table (12): Comparison between SLR of group (I): medical group and group (II): injection group

Group		N	Mean	St.deviation.	T	P
SLRbef	group (I)	15	59.67	8.756	0.9	>0.05
	group(II)	30	57.17	9.531		
SlR1	group (I)	15	64.67	7.188	3.2	<0.05
	group(II)	30	73.33	9.129		
SLR3	group (I)	15	68.33	6.455	3.1	<0.05
	group(II)	30	74.83	6.884		
SLR1m	group (I)	15	66.00	8.904	2.8	<0.05
	group(II)	30	73.00	7.264		
SLR3m	group (I)	15	64.67	9.155	2.4	<0.05
	group(II)	30	70.67	7.038		
SLR6m	group (I)	15	64.00	8.904	2.3	<0.05
	group(II)	30	69.50	6.991		

*n=number

*SLR bef= straight leg raising before treatment

*SLR 1 = straight leg raising after 1st week of treatment

*SLR 3 = straight leg raising after 3rd week of treatment

*SLR 1 m= straight leg raising after 1st month of treatment

*SLR 3m= straight leg raising after 3rd month of treatment

*SLR 6m= straight leg raising after 6th month of treatment

Table (13): Comparison between Oswestry low back disability questionnaire score of group (I): medical group and group (II): injection group

Group		N	Mean	St.deviation	T	P
OsSQbef	group (I)	15	56.133	15.6747	0.9	>0.05
	group(II)	30	60.000	13.1961		
OsSQ1	group (I)	15	50.33	15.751	4.3	<0.05
	group(II)	30	30.67	11.798		
OsSQ3	group (I)	15	49.33	16.132	3.9	<0.05
	group(II)	30	31.33	10.822		
OsSQ1m	group (I)	15	50.33	16.417	3.7	<0.05
	group(II)	30	32.93	10.113		
OsSQ3m	group (I)	15	51.33	15.407	4.1	<0.05
	group(II)	30	35.33	10.981		
OsSQ6m	group (I)	15	52.00	14.614	3.3	<0.05
	group(II)	30	38.00	10.635		

*n=number

*OsSQ bef= Oswestry low back disability questionnaire score before treatment

* OsSQ 1 = Oswestry low back disability questionnaire score after 1st week of treatment

* OsSQ 3 = Oswestry low back disability questionnaire score after 3rd week of treatment

*OsSQ 1 m= Oswestry low back disability questionnaire score after 1st month of treatment

*OsSQ 3m= Oswestry low back disability questionnaire score after 3rd month of treatment

*OsSQ 6m= Oswestry low back disability questionnaire score after 6th month of treatment

Table (14): Comparison between VAS of group II(L):lumbar and group II(C): caudal group

Group		n	Mean	St.deviation	T	P
VASbefore	group II(L)	15	8.07	1.100	1.5	>0.05
	group II(C)	15	7.40	1.298		
VAS1 W	group II(L)	15	2.80	1.207	1.6	>0.05
	group II(C)	15	3.47	1.125		
VAS3 W	group II(L)	15	2.93	1.486	1.9	>0.05
	group II(C)	15	3.87	1.125		
VAS1m	group II(L)	15	3.20	1.320	2.9	<0.05
	group II(C)	15	4.47	.990		
VAS3m	group II(L)	15	3.93	1.280	1.6	>0.05
	group II(C)	15	4.60	.910		
VAS6m	group II(L)	15	4.33	.976	1.7	>0.05
	group II(C)	15	4.93	.884		

*n=number

*VAS bef= viscual analogue scale before treatment

*VAS 1w = viscual analogue scale after 1st week of treatment

*VAS 3w = viscual analogue scale after 3rd week of treatment

*VAS 1 m= viscual analogue scale after 1st month of treatment

*VAS 3m= viscual analogue scale after 3rd month of treatment

*VAS 6m= viscual analogue scale after 6th month of treatment

Table (15): Comparison between SLR of group II (L): lumbar and group II(C): caudal group

Group		n	Nean	St.deviation	T	P
SLRbef	group II(L)	15	56.00	9.103	0.7	>0.05
	group II(C)	15	58.33	10.118		
SlR1	group II(L)	15	76.67	5.563	2.1	<0.05
	group II(C)	15	70.00	10.856		
SLR3	group II(L)	15	76.67	5.563	1.5	>0.05
	group II(C)	15	73.00	7.746		
SLR1m	group II(L)	15	74.67	6.673	1.3	>0.05
	group II(C)	15	71.33	7.669		
SLR3m	group II(L)	15	70.67	7.287		>0.05
	group II(C)	15	70.67	7.037		
SLR6m	group II(L)	15	69.00	7.606	0.4	>0.05
	group II(C)	15	70.00	6.547		

*n=number

*SLR bef= straight leg raising before treatment

*SLR 1 = straight leg raising after 1st week of treatment

*SLR 3 = straight leg raising after 3rd week of treatment

*SLR 1 m= straight leg raising after 1st month of treatment

*SLR 3m= straight leg raising after 3rd month of treatment

*SLR 6m= straight leg raising after 6th month of treatment

Table (16): Comparison between Oswestry low back disability questionnaire score of group II (L): lumbar and group II(C): caudal group

Group		n	Mean	St.deviation.	T	P
OsSQbef	group II(L)	15	61.000	13.1203	0.4	>0.05
	group II(C)	15	59.000	13.6539		
OsSQ1	group II(L)	15	24.67	6.673	3.2	<0.05
	group II(C)	15	36.67	12.910		
OsSQ3	group II(L)	15	26.67	6.455	2.6	<0.05
	group II(C)	15	36.00	12.421		
OsSQ1m	group II(L)	15	29.87	6.116	1.7	>0.05
	group II(C)	15	36.00	12.421		
OsSQ3m	group II(L)	15	34.67	9.722	0.3	>0.05
	group II(C)	15	36.00	12.421		
OsSQ6m	group II(L)	15	36.00	9.103	1.1	>0.05
	group II(C)	15	40.00	11.952		

*n=number

*n=number

*OsSQ bef= Oswestry low back disability questionnaire score before treatment

* OsSQ 1 = Oswestry low back disability questionnaire score after 1st week of treatment

* OsSQ 3 = Oswestry low back disability questionnaire score after 3rd week of treatment

*OsSQ 1 m= Oswestry low back disability questionnaire score after 1st month of treatment

*OsSQ 3m= Oswestry low back disability questionnaire score after 3rd month of treatment

*OsSQ 6m= Oswestry low back disability questionnaire score after 6th month of treatmet

Table (17): Comparison between muscle spasm before and after treatment

		Before		After		X2	P
		No.	%	No.	%		
group (I)	ms spasm present	7	46.7	4	26.7	0.6	0.4
	ms spasm absent	8	53.3	11	73.3		
group II(L)	ms spasm present	8	53.3	1	6.7	5.7	0.01
	ms spasm absent	7	46.7	14	93.3		
group II(C)	ms spasm present	7	46.7	2	13.3	2.5	0.1
	ms spasm absent	8	53.3	13	86.7		

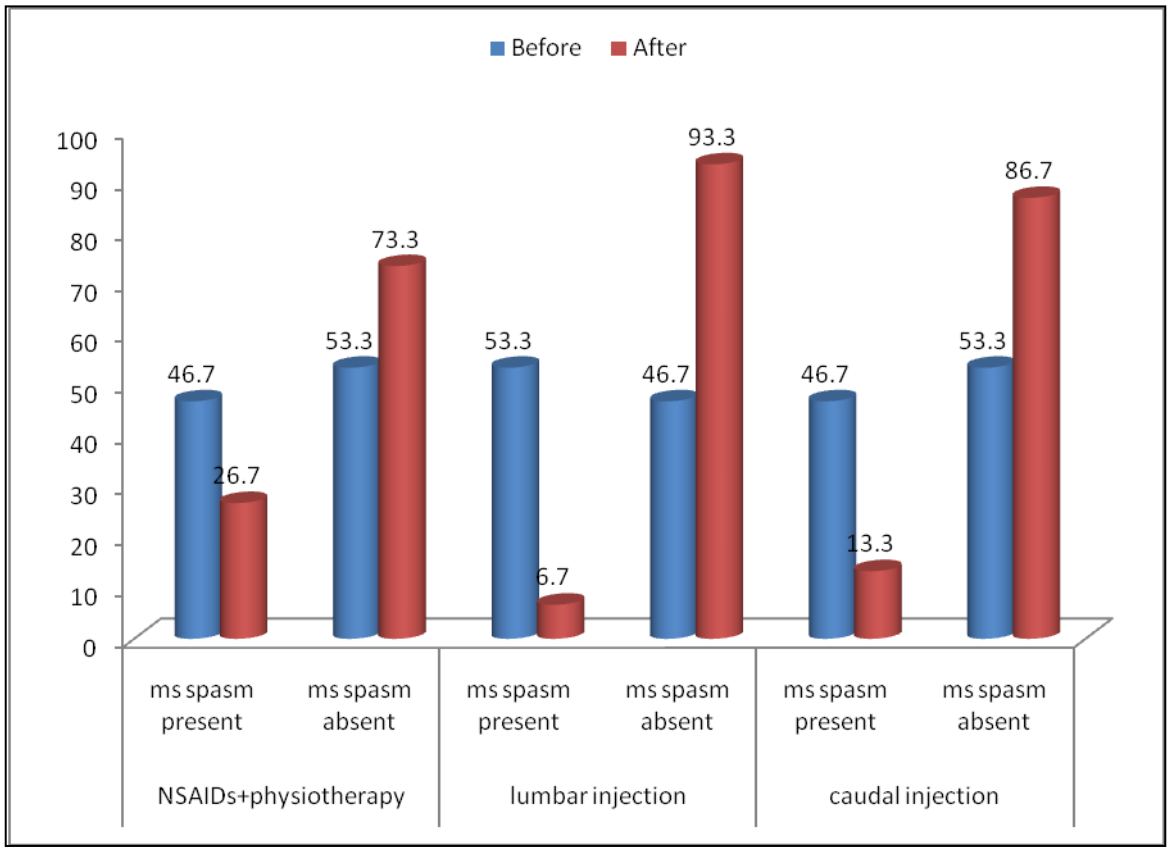

Fig (34): Comparison between group (I), II (L), II(C) as regarding muscle spasm before and after treatment

Table (18): Comparison of hyposethia before and after treatment

		Before		After		X2	P
		No.	%	No.	%		
group (I)	HYPOSETHIA present	4	26.7	1	6.7	0.9	0.3
	HYPOSETHIA absent	11	73.3	14	93.3		
group II(L)	HYPOSETHIA present	4	26.7	1	6.7	0.9	0.3
	HYPOSETHIA absent	11	73.3	14	93.3		
group II(C)	HYPOSETHIA present	4	26.7	0	0	2.6	0.1
	HYPOSETHIA absent	11	73.3	15	100		

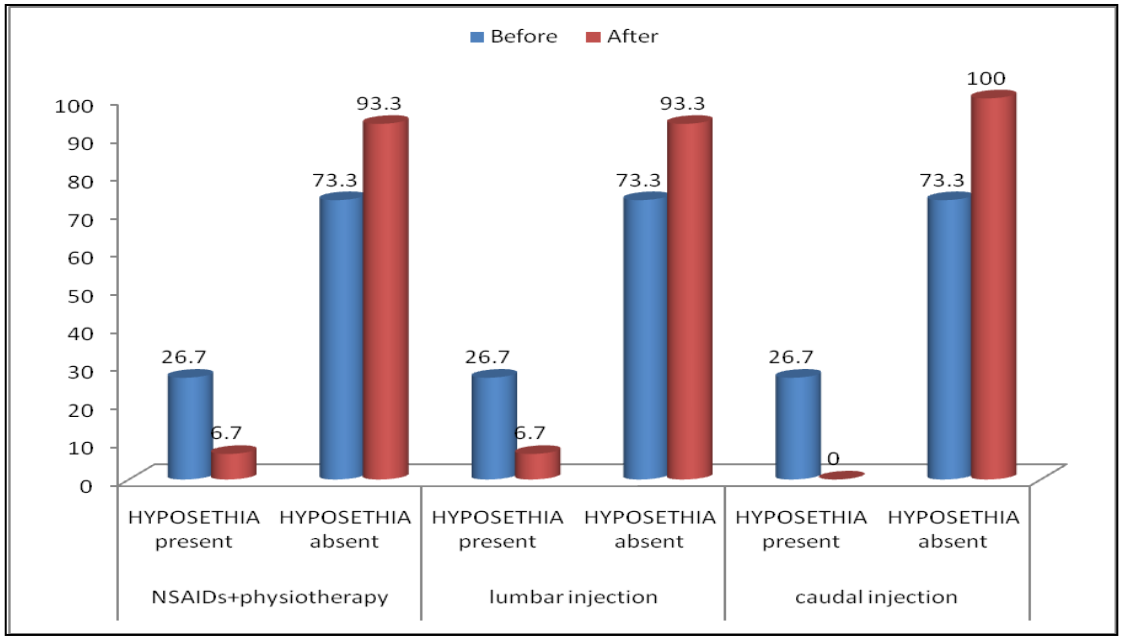

Fig (35): Comparison between group (I), II(C) as regarding hyposethia before and after treatment.

Table (19): Comparison between group (I), II(L), II(C) as regarding VAS before, 1st and 3rd week

		N	Mean	Std. Deviation	Minimum	Maximum	f	P
VASbefore	group (I)	15	7.20	1.082	5	9	2.279	.115
	group II(L)	15	8.07	1.100	6	10		
	group II(C)	15	7.40	1.298	5	9		
	Total	45	7.56	1.198	5	10		
VAS1 W	group (I)	15	6.40	1.183	4	8	40.028	.000
	group II(L)	15	2.80	1.207	1	5		
	group II(C)	15	3.47	1.125	2	5		
	Total	45	4.22	1.953	1	8		
VAS3 W	group (I)	15	5.73	.961	4	7	20.788	.000
	group II(L)	15	2.93	1.486	1	6		
	group II(C)	15	3.87	1.125	2	6		
	Total	45	4.18	1.669	1	7		

Table (20): Mean VAS of group (I), II(L), II(C) before treatment

	VAS before
Group(I)	7.2
Group II(L)	8.07
GroupII(C)	7.4

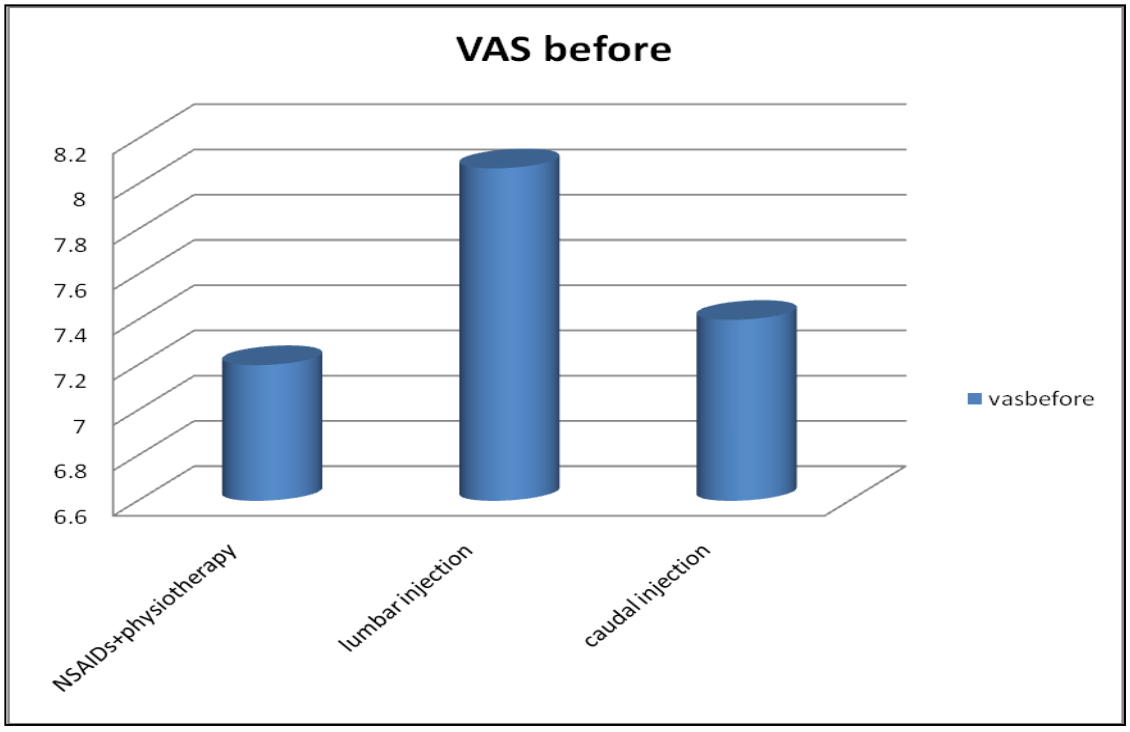

Fig (36): Comparison between VAS of group (I), II(L), II(C) before treatment

Table (21): Mean VAS of group (I), II(L), II(C) at 1st week of treatment

	VAS1w
Group(I)	6.4
Group II(L)	2.8
GroupII(C)	3.47

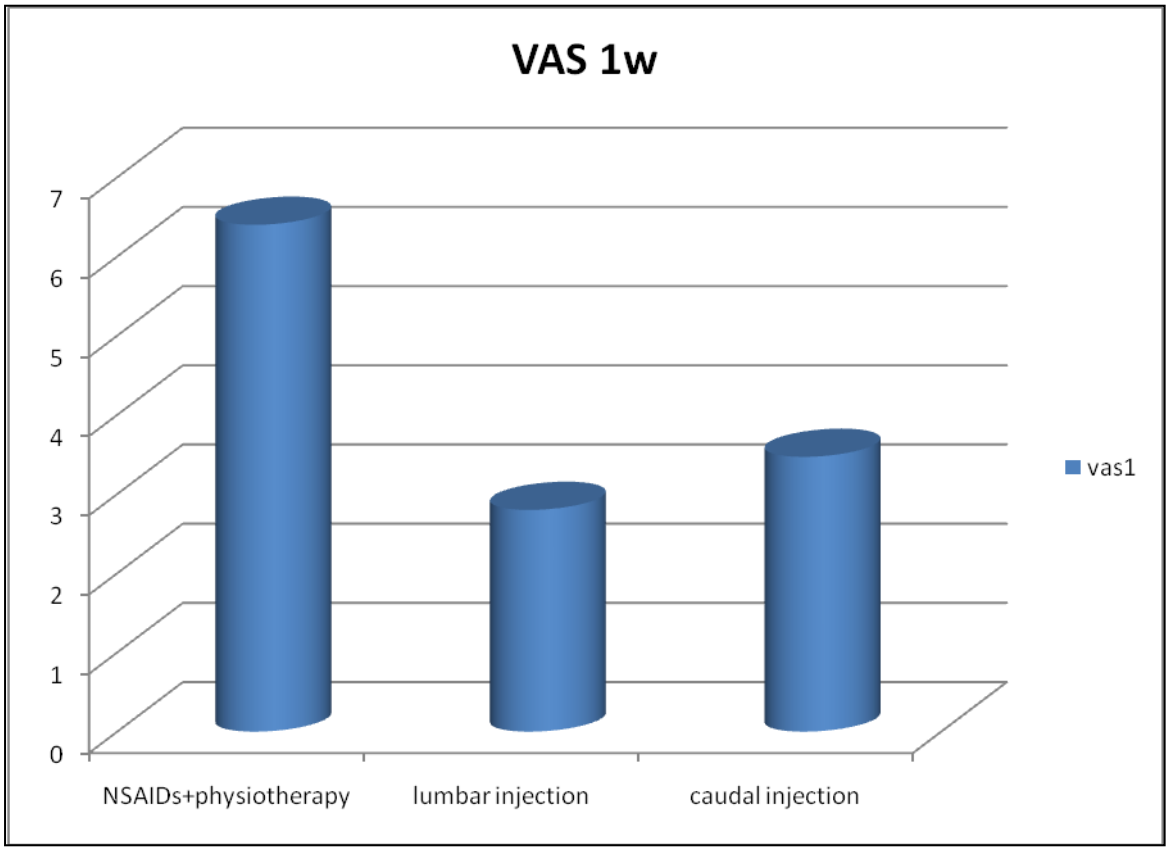

Fig (37): Comparison between VAS of group (I), II(L), II(C) at 1st week of treatment

Table (22): Mean VAS of group (I), II (L), II(C) at 3rd week of treatment

	VAS3w
Group(I)	5.73
Group II(L)	2.93
GroupII(C)	3.87

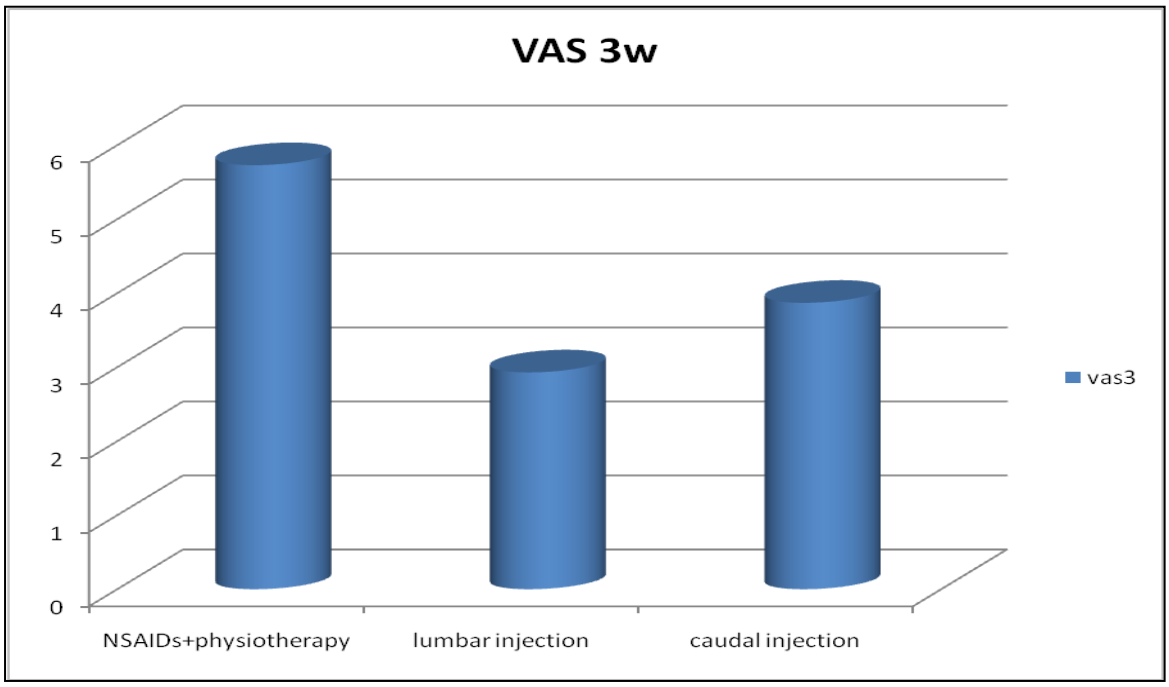

Fig (38): Comparison between VAS of group (I), II(L), II(C) at 3rd week of treatment

Table (23): Comparison between VAS of group (I), II(L), II(C) at 1st ,3rd ,6th month of treatment

		N	Mean	Std. Deviation	Minimum	Maximum	f	P
VAS1m	group (I)	15	5.67	.976	4	7	18.624	.000
	group II(L)	15	3.20	1.320	2	6		
	group II(C)	15	4.47	.990	3	6		
	Total	45	4.44	1.486	2	7		
VAS3m	group (I)	15	5.80	.862	4	7	12.546	.000
	group II(L)	15	3.93	1.280	2	6		
	group II(C)	15	4.60	.910	3	6		
	Total	45	4.78	1.277	2	7		
VAS6m	group (I)	15	6.27	.961	5	8	16.584	.000
	group II(L)	15	4.33	.976	3	6		
	group II(C)	15	4.93	.884	3	6		
	Total	45	5.18	1.230	3	8		

Table (24): Mean VAS of group (I), II(L), II(C) at 1st month of treatment

	VAS1m
Group(I)	5.67
Group II(L)	3.2
Group II(C)	4.47

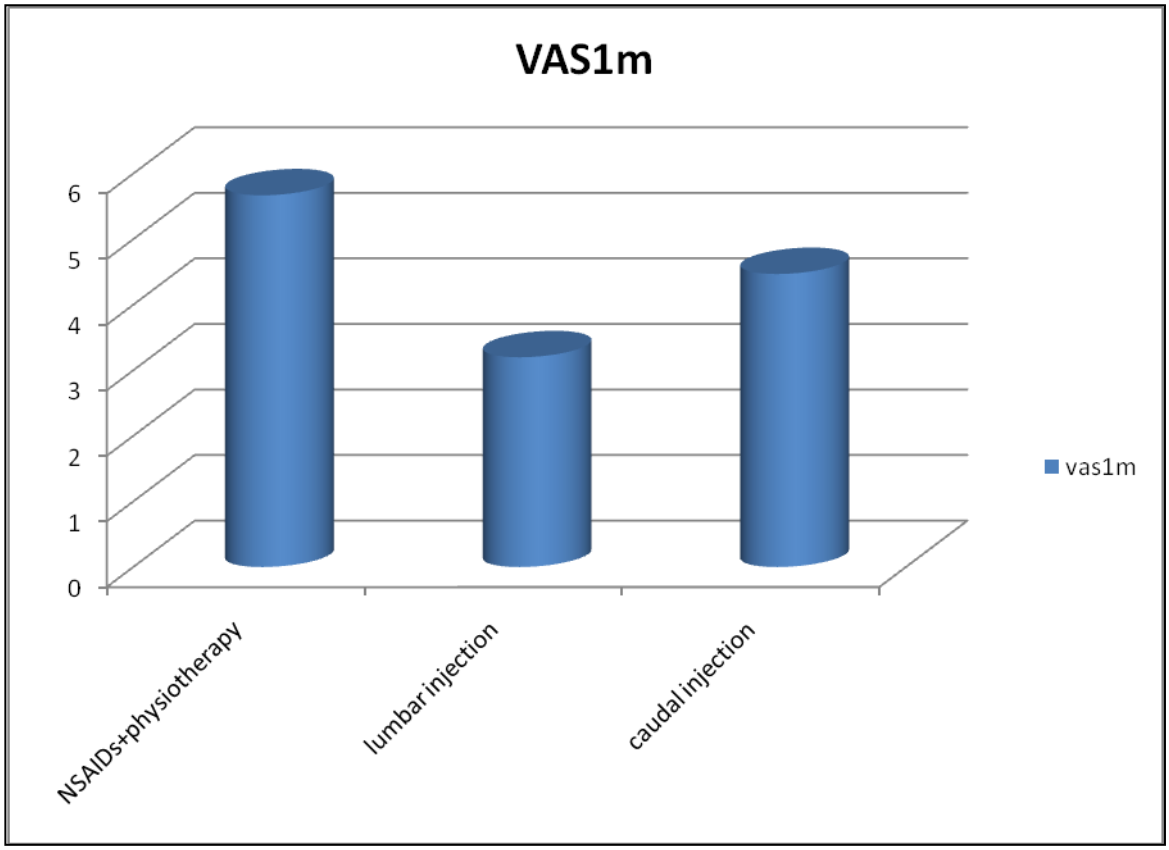

Fig (39): Comparison between VAS of group (I), II(L), II(C) at 1st month of treatment

Table (25): Mean VAS of group (I), II (L), II(C) at 3rd month of treatment

	VAS3m
Group(I)	5.8
Group II(L)	3.93
GroupII(C)	4.6

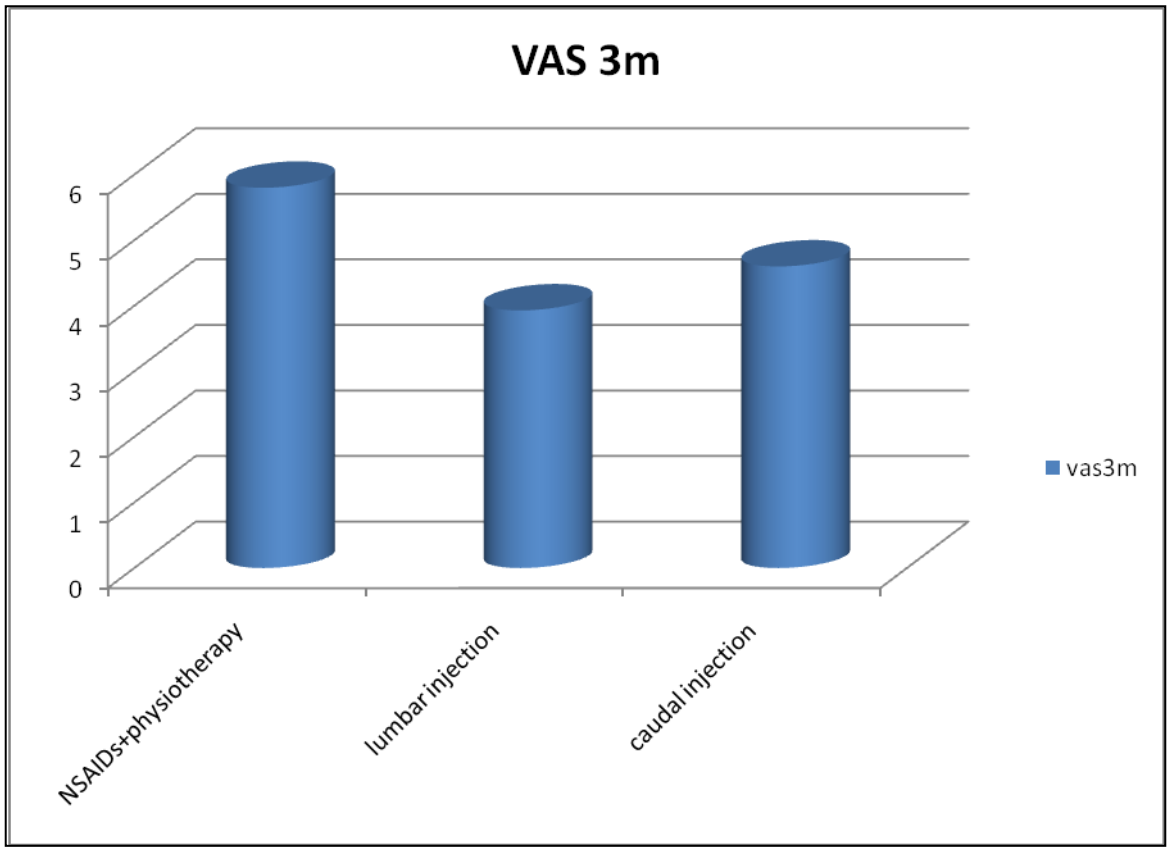

Fig (40): Comparison between VAS of group (I), II (L), II(C) at 3rd month of treatment

Table (26): Mean VAS of group (I), II(L), II(C) at 6th month of treatment

	VAS6m
Group(I)	6.27
Group II(L)	4.33
GroupII(C)	4.93

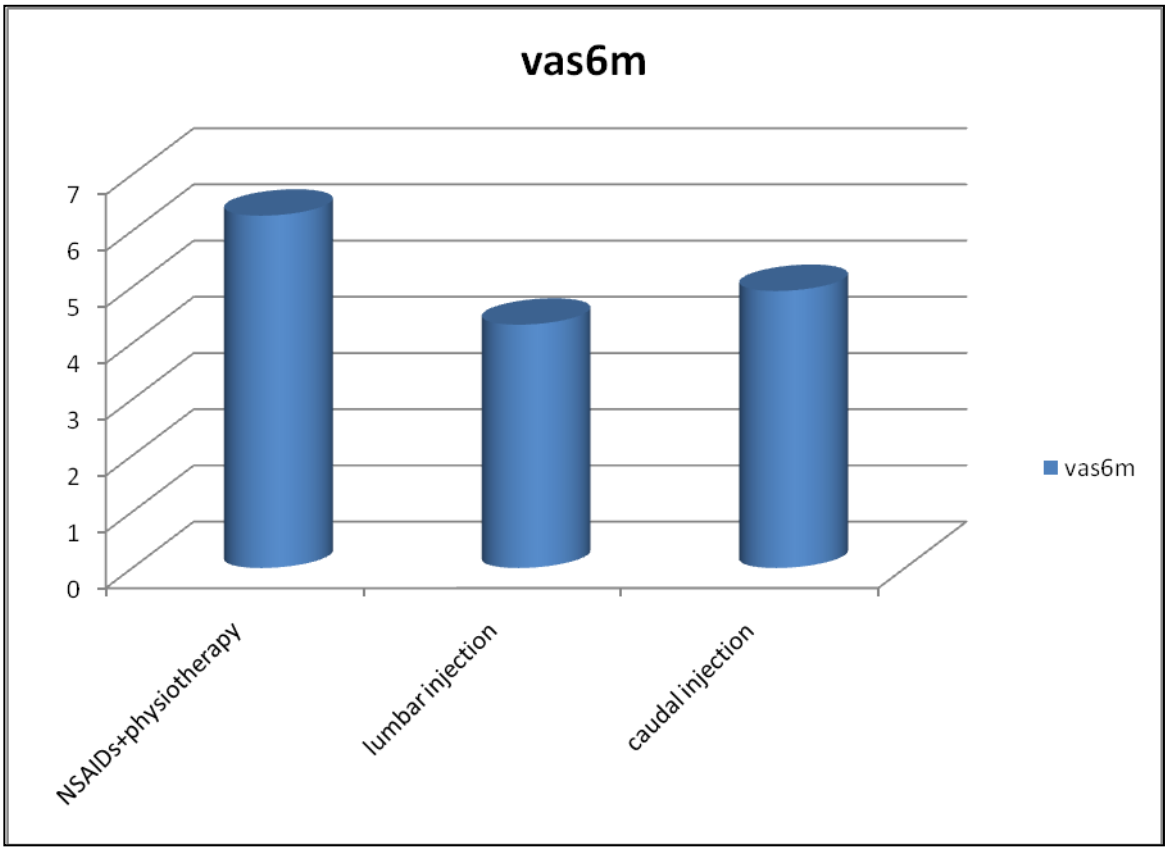

Fig (41): Comparison between VAS of group (I), II(L), II(C) at 6TH month of treatment.

Table (27): Comparison between group (I), II(L), II(C) as regarding SLR before, 1st and 3rd week

		N	Mean	Std. Deviation	Minimum	Maximum	f	P
SLRbef	group (I)	15	59.67	8.756	45	70		
	group II(L)	15	56.00	9.103	45	70		
	group II(C)	15	58.33	10.118	45	70	.592	.558
	Total	45	58.00	9.256	45	70		
SlR1	group (I)	15	64.67	7.188	50	75		
	group II(L)	15	76.67	5.563	70	85	8.114	.001
	group II(C)	15	70.00	10.856	45	80		
	Total	45	70.44	9.404	45	85		
SLR3	group (I)	15	68.33	6.455	60	80	5.919	.005
	group II(L)	15	76.67	5.563	70	85		
	group II(C)	15	73.00	7.746	60	80		
	Total	45	72.67	7.355	60	85		

Table (28): Mean SLR of group (I), II (L), II(C) before treatment

	SLRbefore
Group(I)	59.67
Group II(L)	56
GroupII(C)	58.33

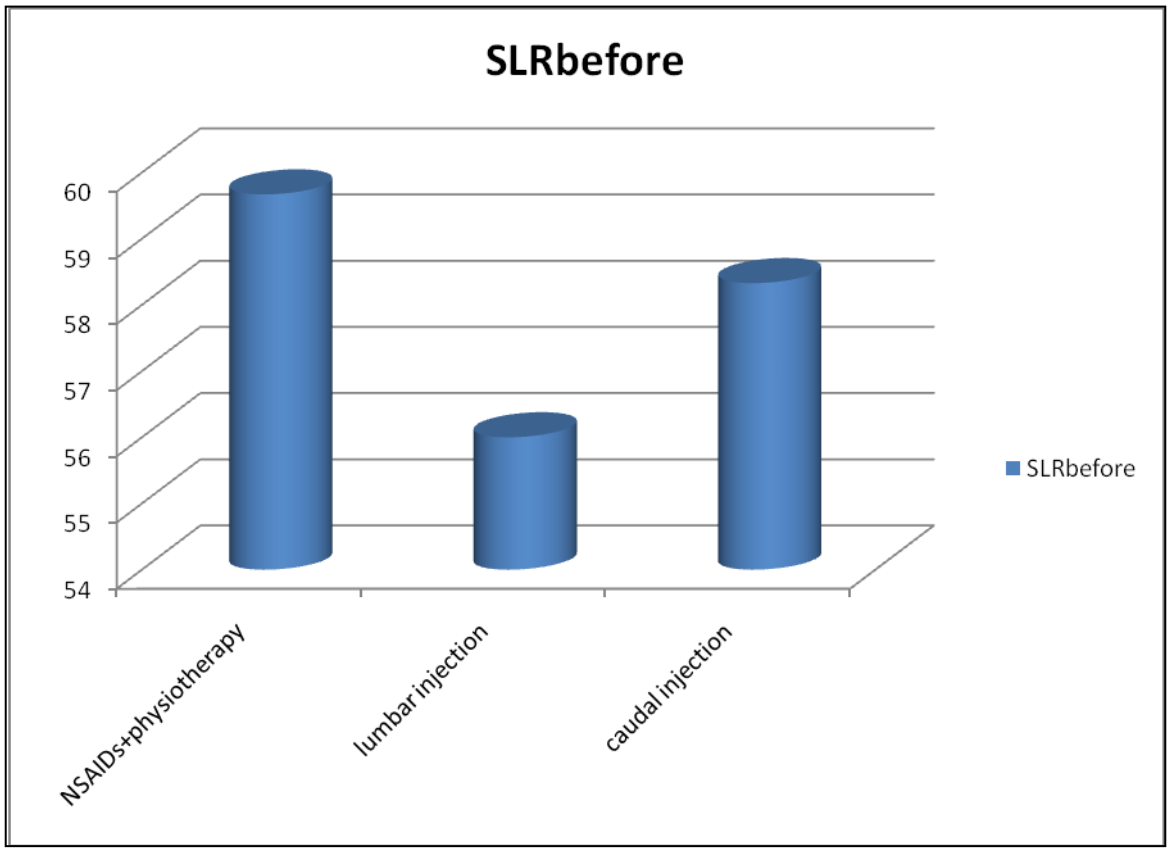

Fig (42): Comparison between SLR of group (I), II(L), II(C) before treatment.

Table (29): Mean SLR of group (I), II (L), II(C) at 1st week of treatment

	SLR1w
Group(I)	64.67
Group II(L)	76.67
GroupII(C)	70

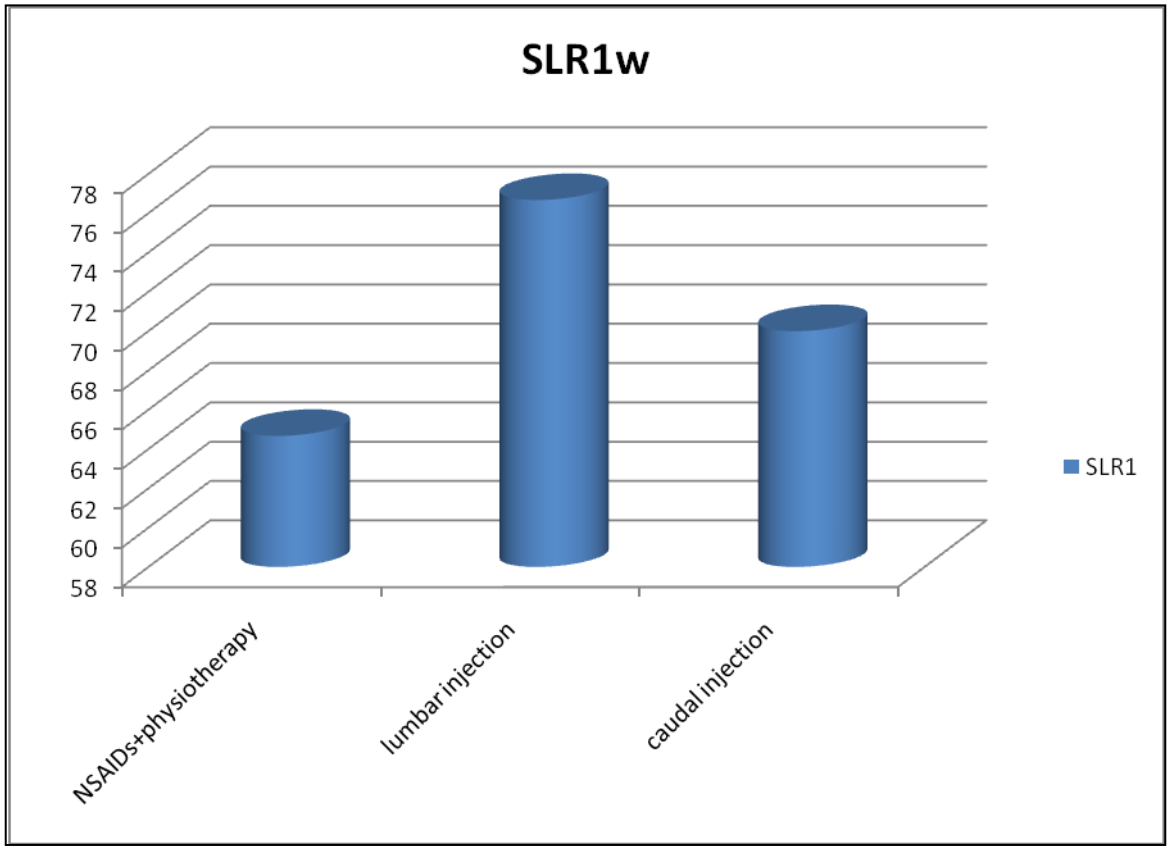

Fig (43): Comparison between SLR of group (I), II (L), II(C) at 1st week of treatment

Table (30): Mean SLR of group (I), II (L), II(C) at 3rd week of treatment

	SLR3w
Group(I)	68.33
Group II(L)	76.67
GroupII(C)	73

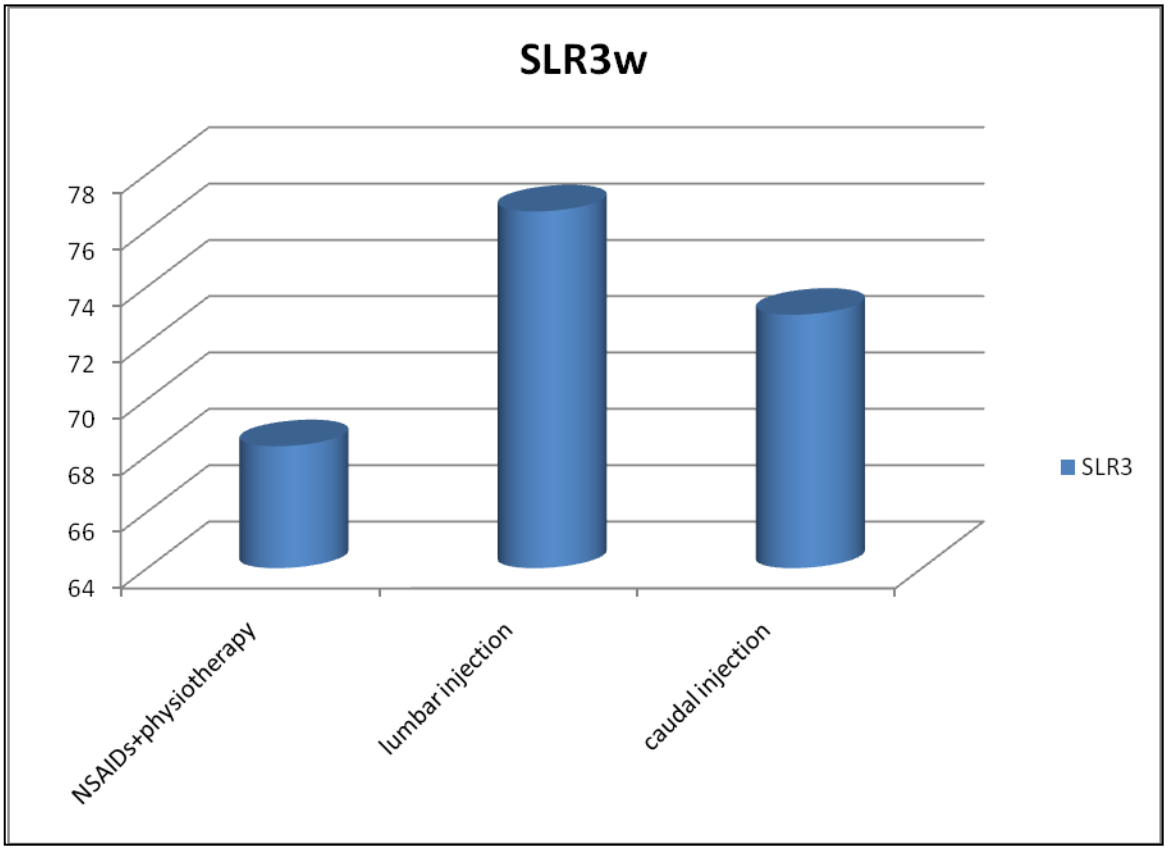

Fig (44): Comparison between SLR of group (I), II(L), II(C) at 1st week of treatment

Table (31): Comparison between group (I), II(L), II(C) as regarding SLR 1st, 3rd and 6th month.

		N	Mean	Std. Deviation	Minimum	Maximum	f	P
SLR1m	group (I)	15	66.00	8.904	50	80	4.709	.014
	group II(L)	15	74.67	6.673	65	85		
	group II(C)	15	71.33	7.669	60	85		
	Total	45	70.67	8.434	50	85		
SLR3m	group (I)	15	64.67	9.155	50	75	2.897	.066
	group II(L)	15	70.67	7.287	60	85		
	group II(C)	15	70.67	7.037	60	85		
	Total	45	68.67	8.216	50	85		
SLR6m	group (I)	15	64.00	8.904	50	75	2.583	.087
	group II(L)	15	69.00	7.606	60	80		
	group II(C)	15	70.00	6.547	60	85		
	Total	45	67.67	8.020	50	85		

Table (32): Mean SLR of group (I), II (L), II(C) at 1ST month of treatment

SLR1m	
Group(I)	66
Group II(L)	74.67
GroupII(C)	71.33

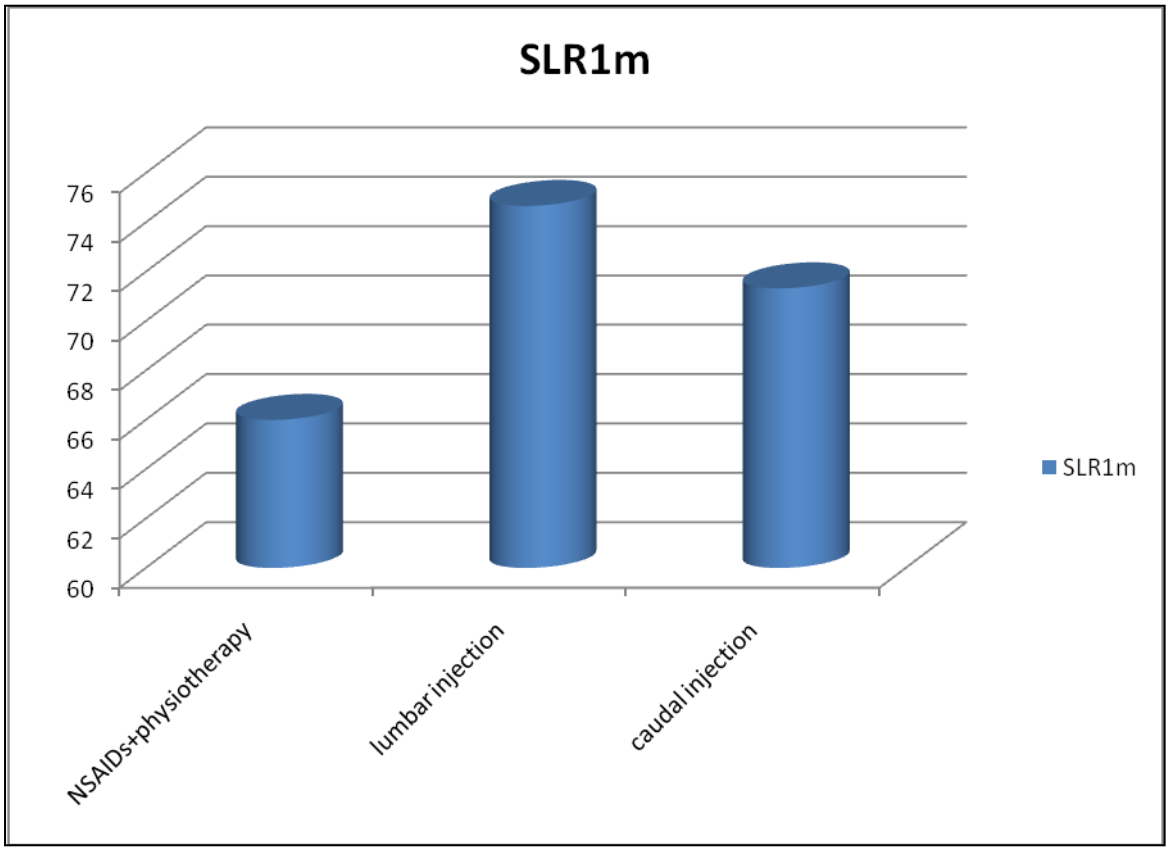

Fig (45): Comparison between SLR of group (I), II(L), II(C) at 1st month of treatment.

Table (33): Mean SLR of group (I), II(L), II(C) at 3rd month of treatment

	SLR3m
Group(I)	64.67
Group II(L)	70.67
GroupII(C)	70.67

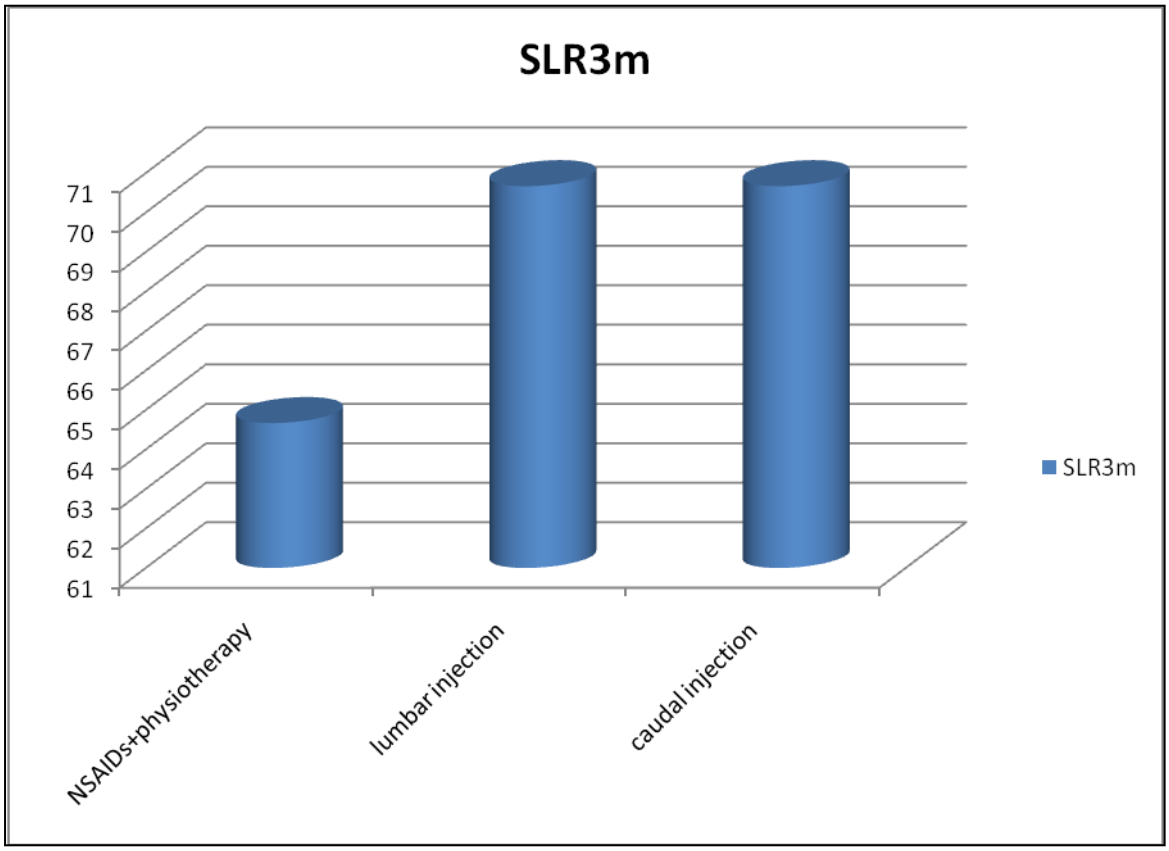

Fig (46): Comparison between SLR of group (I), II(L), II(C) at 3rd month of treatment

Table (34): Mean SLR of group (I), II (L), II(C) at 6th month of treatment

	SLR6m
Group(I)	64
Group II(L)	69
GroupII(C)	70

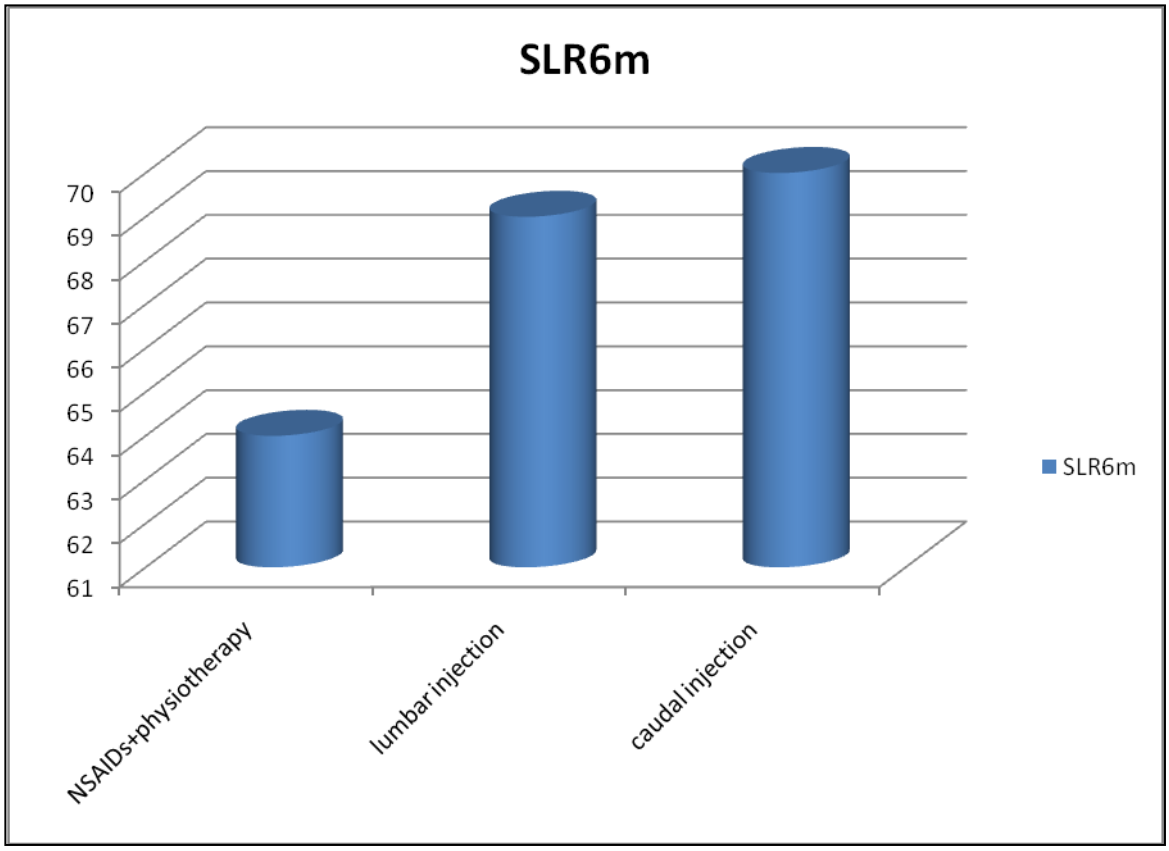

Fig (47): Comparison between SLR of group (I), II(L), II(C) at 6th month of treatment.

Table (35): Comparison between groups (I), II (L), II(C) as regarding Oswestry low back disability questionnaire score before, 1st and 3rd week

		N	Mean	Std. Deviation	Minimum	Maximum	f	P
OsSQbef	group (I)	15	56.133	15.6747	30.0	80.0		
	group II(L)	15	61.000	13.1203	40.0	80.0		
	group II(C)	15	55.040	20.3265	.6	80.0	.545	.584
	Total	45	57.391	16.4704	.6	80.0		
OsSQ1	group (I)	15	50.33	15.751	30	75		
	group II(L)	15	24.67	6.673	15	40	16.159	.000
	group II(C)	15	36.67	12.910	20	60		
	Total	45	37.22	16.081	15	75		
OsSQ3	group (I)	15	49.33	16.132	30	75	12.802	.000
	group II(L)	15	26.67	6.455	15	40		
	group II(C)	15	36.00	12.421	20	60		
	Total	45	37.33	15.285	15	75		

Table (36): Mean of group (I), II (L), II(C) Oswestry low back disability questionnaire score before treatment

	OsSQbefore
Group(I)	56.133
Group II(L)	61
GroupII(C)	59

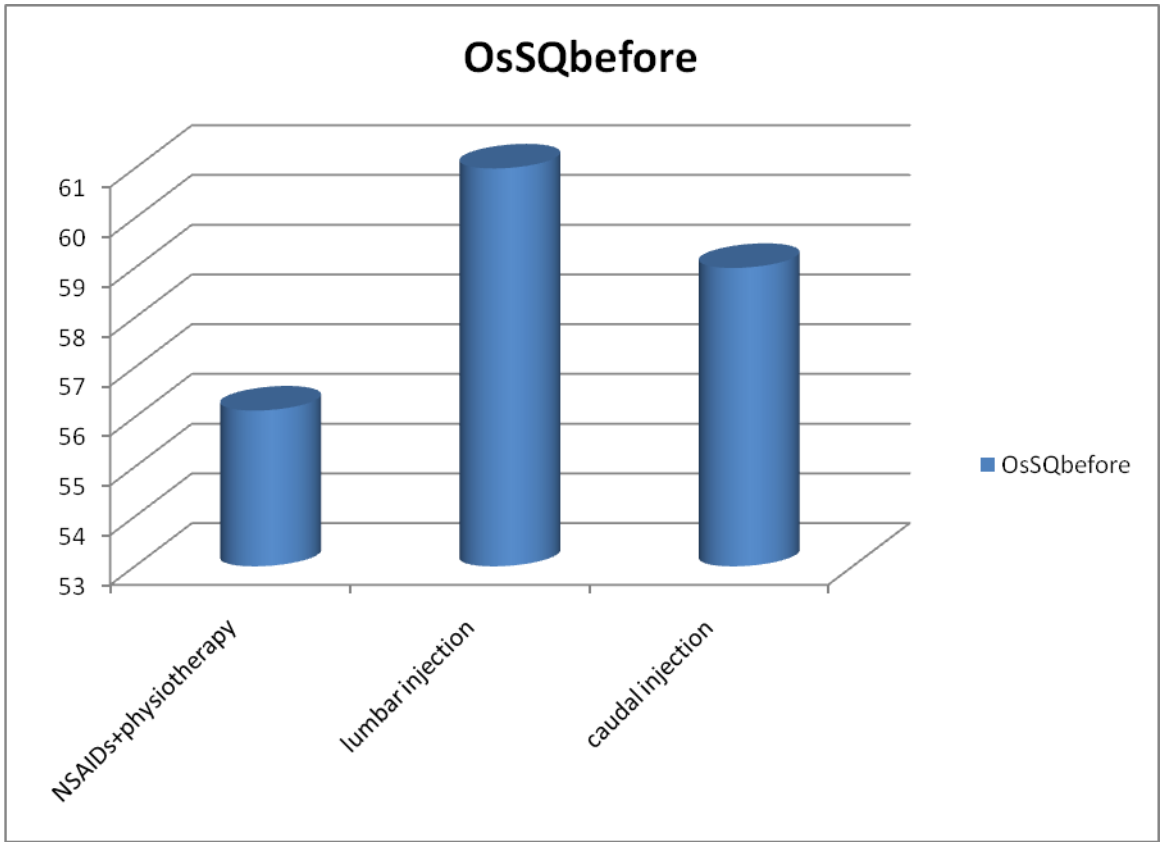

Fig (48): Comparison between of group (I), II (L), II(C) at 1st week before treatment.

Table (37): Mean of group (I), II (L), II(C) Oswestry low back disability questionnaire score at 1st week of treatment

	OsSQ1w
Group (I)	50.33
Group II(L)	24.67
Group II(C)	36.67

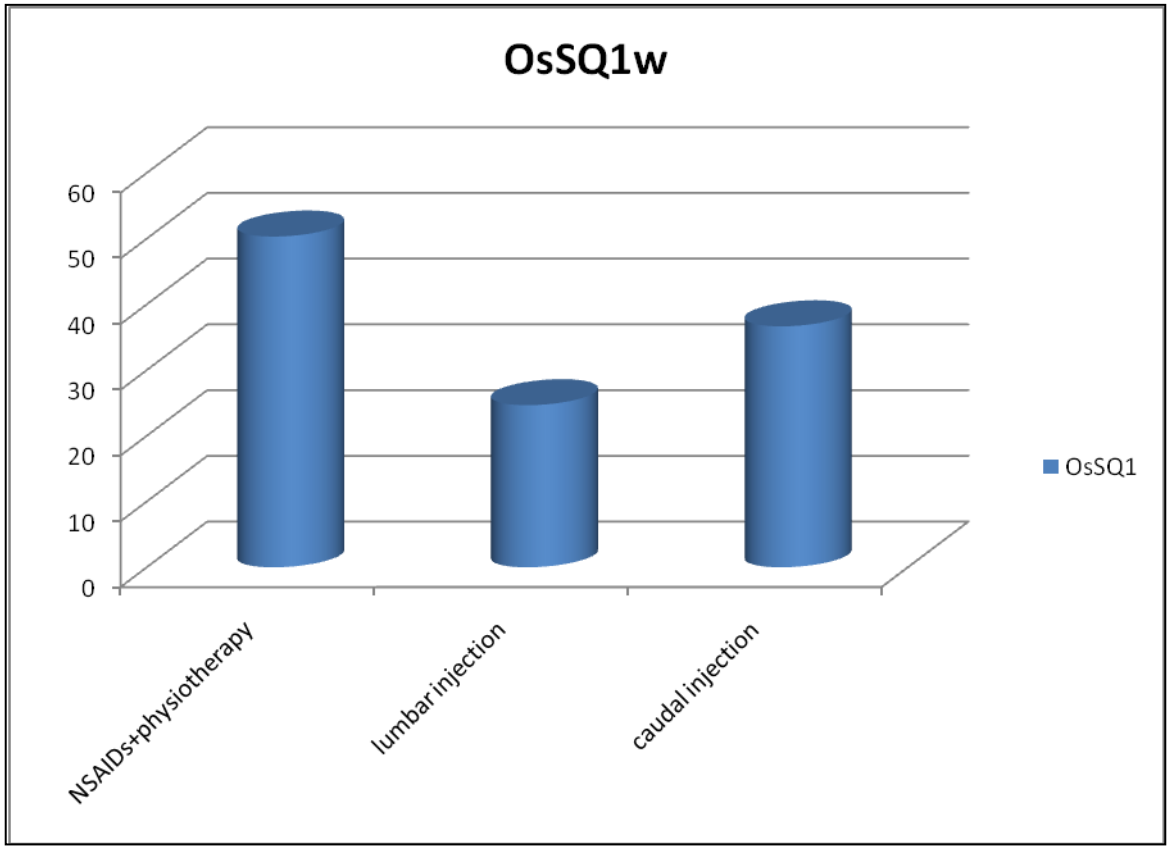

Fig (49): Comparison between of group (I), II(L), II(C) at 1st week of treatment as regarding Oswestry low back disability questionnaire score.

Table (38): Mean of group (I), II (L), II(C) Oswestry low back disability questionnaire score at 3rd week

	OsSQ3w
Group(I)	49.33
Group II(L)	26.67
Group II(C)	36

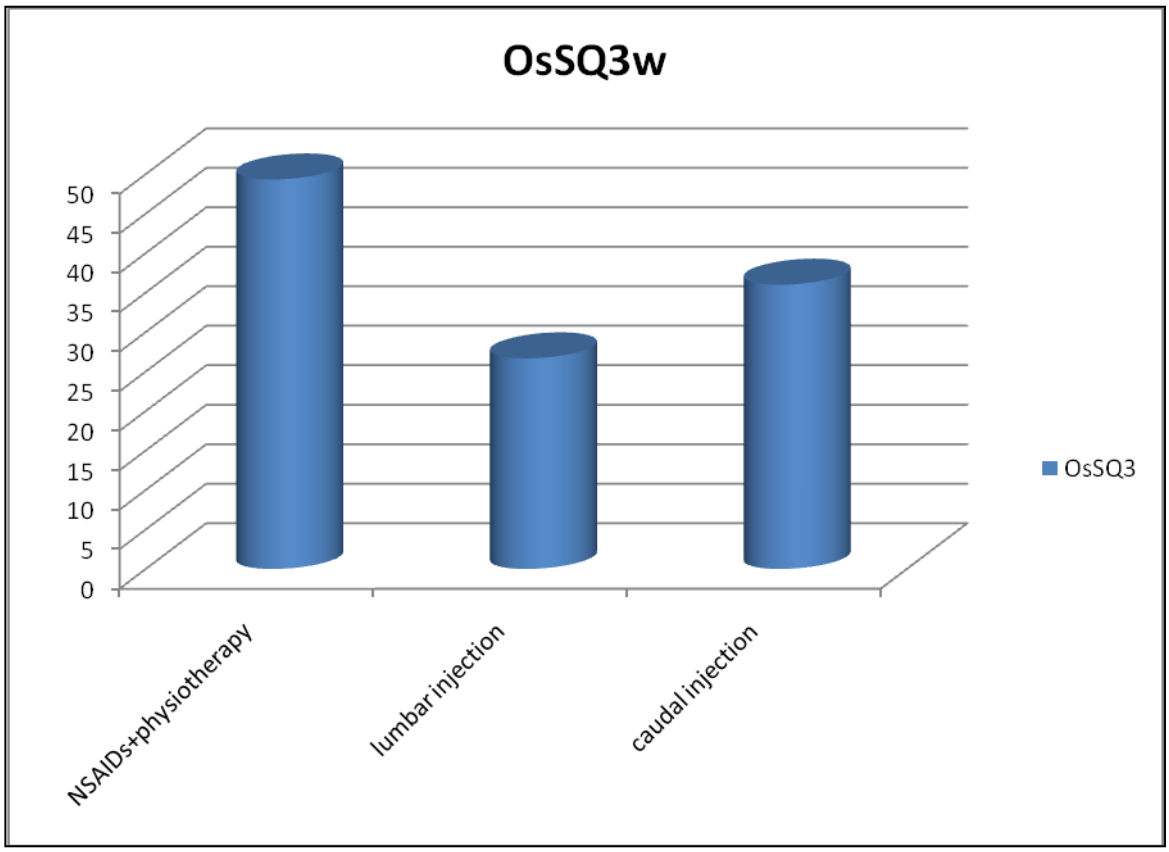

Fig (50): Comparison between of group (I), II (L), II(C) at 3rd week of treatment as regarding Oswestry low back disability questionnaire score.

Table (39): Comparison between group (I), II(L), II(C) as regarding Oswestry low back disability questionnaire score 1st, 3rd and 6th month

		N	Mean	Std. Deviation	Minimum	Maximum	f	P
OsSQ1m	group (I)	15	50.33	16.417	30	75	10.764	.000
	group II(L)	15	29.87	6.116	20	40		
	group II(C)	15	36.00	12.421	20	60		
	Total	45	38.73	14.899	20	75		
OsSQ3m	group (I)	15	51.33	15.407	30	75	7.939	.001
	group II(L)	15	34.67	9.722	20	60		
	group II(C)	15	36.00	12.421	20	60		
	Total	45	40.67	14.601	20	75		
OsSQ6m	group (I)	15	52.00	14.614	30	75	7.102	.002
	group II(L)	15	36.00	9.103	25	60		
	group II(C)	15	40.00	11.952	20	60		
	Total	45	42.67	13.676	20	75		

Table (40): Mean of group (I), II(L), II(C) Oswestry low back disability questionnaire score at 1st month

	OsSQ1m
Group(I)	50.33
Group II(L)	29.87
GroupII(C)	36

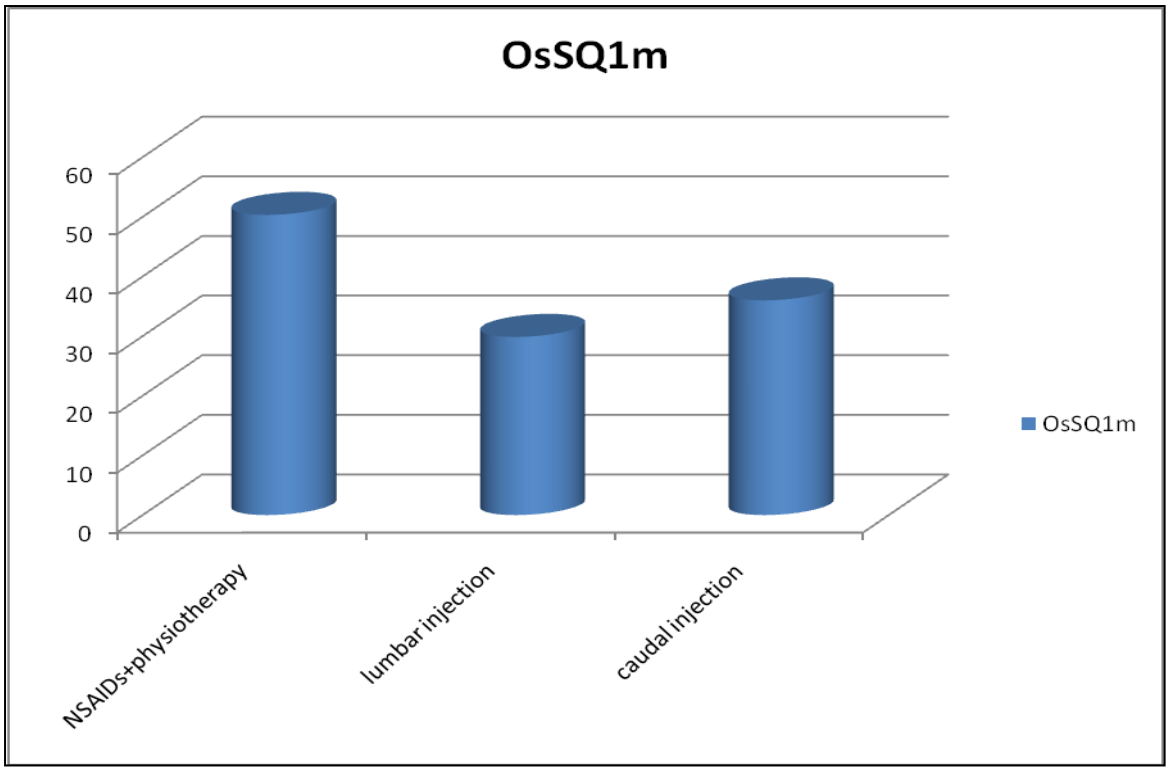

Fig (51): Comparison between of group (I), II (L), II(C) at 1st month of treatment as regarding Oswestry low back disability questionnaire score.

Table (41): Mean of group (I), II(L), II(C) Oswestry low back disability questionnaire score at 3rd month.

	OsSQ3m
Group(I)	51.33
Group II(L)	34.67
Group II(C)	36

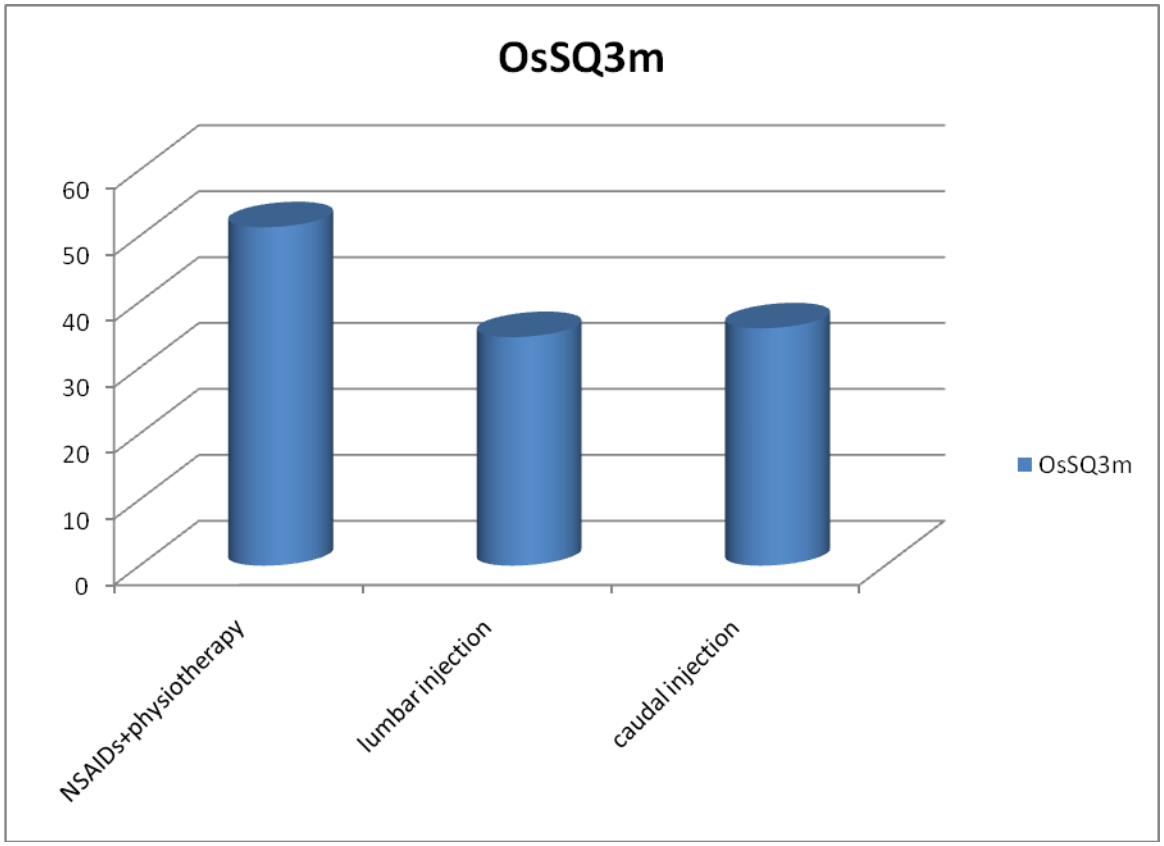

Fig (52): Comparison between of group (I), II (L), II(C) at 3rd month of treatment as regarding Oswestry low back disability questionnaire score.

Table (42): Mean of group (I), II (L), II(C) Oswestry low back disability questionnaire score at 6th month.

	OsSQ6m
Group(I)	52
Group II(L)	36
GroupII(C)	40

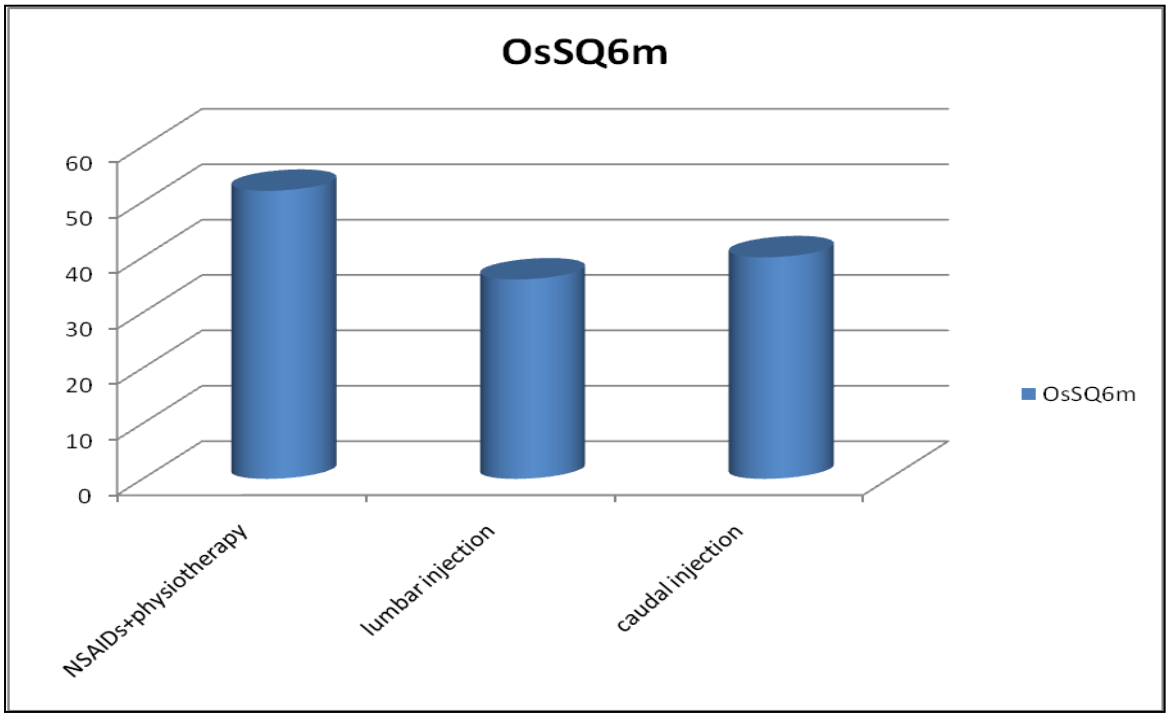

Fig (53): Comparison between of group (I), II(L), II(C) at 6th month of treatment as regarding Oswestry low back disability questionnaire score.