

RESULTS

As regards age, gender, weight, and ASA score the results showed no significant difference among the three groups with p-value >0.05 as shown in table.. and figures....

Table (): Comparison between the three groups as regards age, gender, weight and ASA score.

		Group P	Group D	Group N	Test value	P- value	Sig.
		No.= 20	No.= 20	No.= 20			
Age	Mean±SD	37.15 ± 6.48	37.00 ± 5.11	37.30 ± 7.87	0.010•	0.990	NS
	Range	22 – 47	25 – 45	21 – 49			
Gender	Female	10 (50.0%)	9 (45.0%)	11 (55.0%)	0.400*	0.819	NS
	Male	10 (50.0%)	11 (55.0%)	9 (45.0%)			
Weight (kg)	Mean ± SD	72.40 ± 8.92	73.95 ± 9.30	74.75 ± 8.08	0.370•	0.692	NS
	Range	60 – 88	60 – 89	60 – 89			
ASA	I	11 (55.0%)	8 (40.0%)	11 (55.0%)	1.200*	0.549	NS
	II	9 (45.0%)	12 (60.0%)	9 (45.0%)			

P-value > 0.05: Non significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant

*: Chi-square test; •: One Way ANOVA test

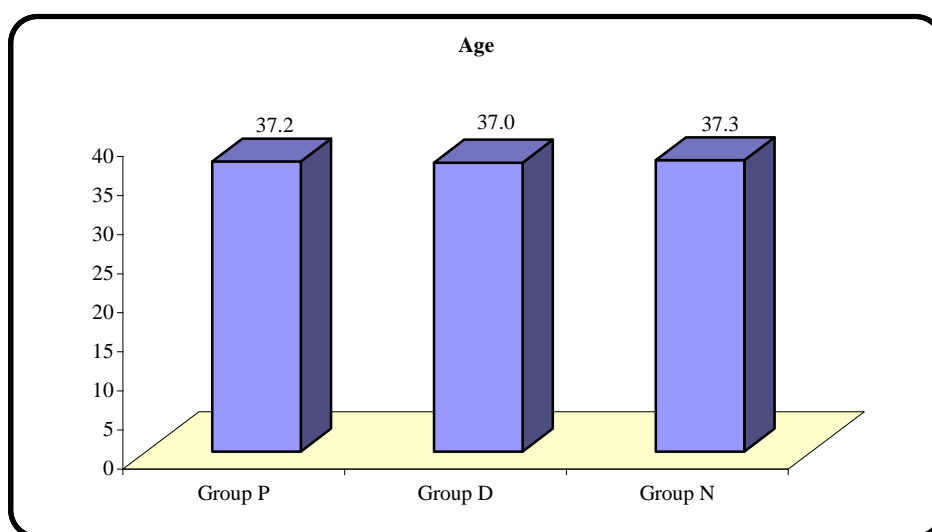


Figure (>): Comparison between the three groups as regards age.

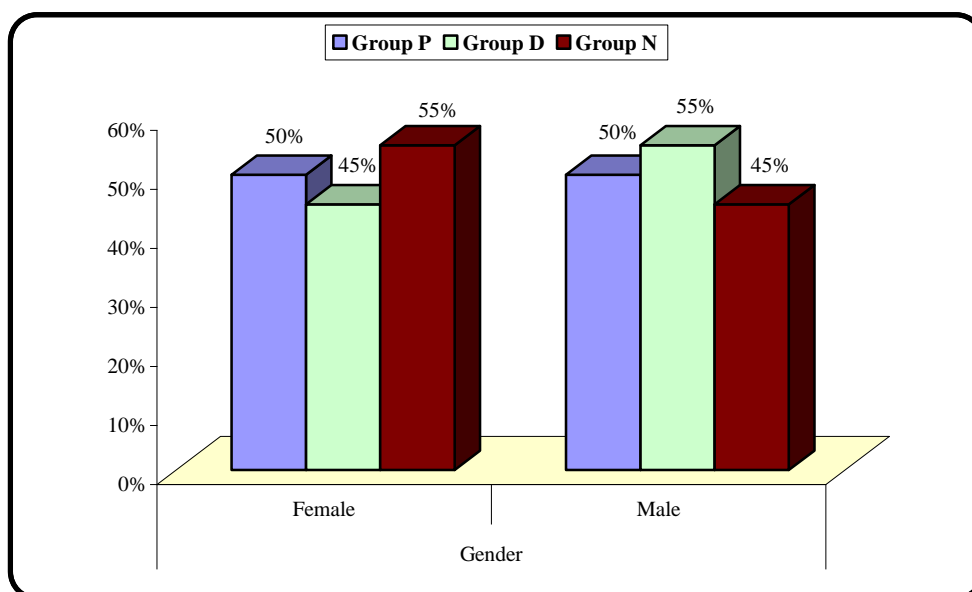


Figure (>) : Comparison between the three groups as regards gender.

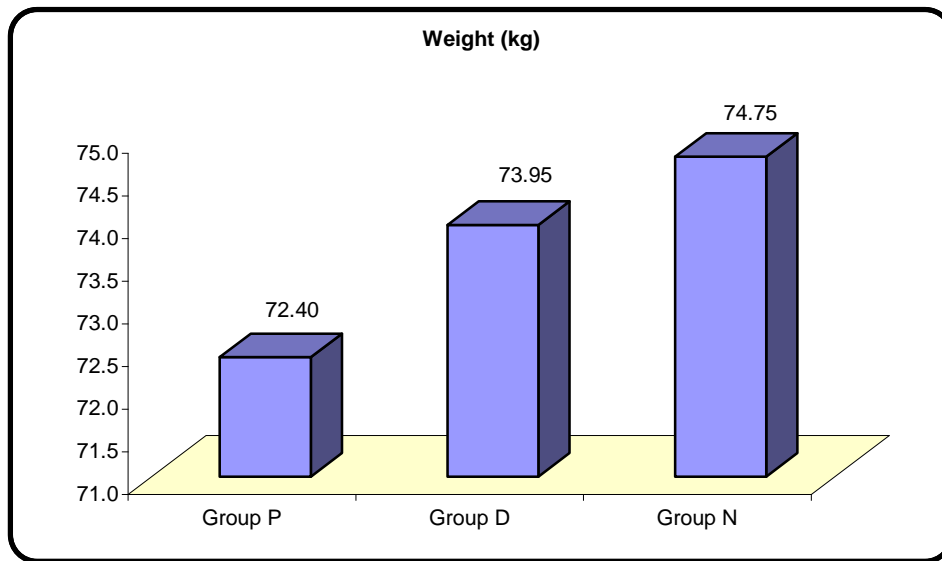


Figure (>): Comparison between the three groups as regards weight.

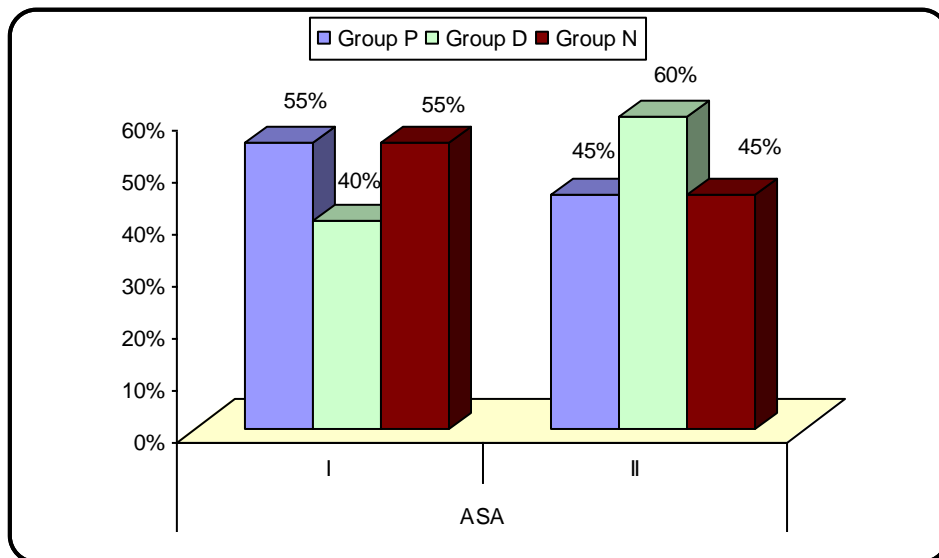


Figure (>): Comparison between the three groups as regards ASA score.

1) Mean arterial blood pressure (MAP):

As regards mean arterial blood pressure (MAP) the results showed no significant difference among the three groups in baseline measurement and after induction of anesthesia.

In comparison between group P and group D there was no significant difference between both groups in all times of measurement.

In comparison between group P and group N the results showed a highly significant difference after 15, 30, 45 minutes while there was a significant difference after 60, 75, 90 minutes with lower MAP in group P in all these points of measurement.

In comparison between group D and group N the results showed a highly significant difference after 15, 30, 45, 60, 75, 90 minutes with lower MAP in group D in all these points of measurement as shown in table () and figure ().

Results

Table (>): Comparison between the three studied groups as regards MAP

MAP		Group P	Group D	Group N	Test value•	P- value	Sig .
		No.= 20	No.= 20	No.= 20			
Baseline	Mean±SD	78.05 ± 3.97	77.80 ± 3.85	77.85 ± 3.36	0.025	0.975	NS
	Range	70 – 84	71 – 86	72 – 84			
After induction	Mean±SD	70.05 ± 3.47	70.85 ± 2.48	70.50 ± 3.87	0.291	0.749	NS
	Range	64 – 76	67 – 77	66 – 79			
After 15 minutes	Mean±SD	64.05 ± 1.73	63.40 ± 1.57	66.45 ± 3.61	8.389	0.001	HS
	Range	61 – 67	61 – 67	61 – 73			
After 30 minutes	Mean±SD	62.75 ± 1.37	62.40 ± 1.39	65.00 ± 2.58	11.431	0.000	HS
	Range	60 – 65	60 – 65	61 – 71			
After 45 minutes	Mean±SD	61.75 ± 1.12	61.40 ± 0.94	63.40 ± 0.99	21.913	0.000	HS
	Range	60 – 63	60 – 63	62 – 65			
After 60 minutes	Mean±SD	61.60 ± 1.47	61.40 ± 1.47	62.70 ± 1.53	4.440	0.016	S
	Range	60 – 65	60 – 65	60 – 66			
After 75 minutes	Mean±SD	61.40 ± 1.14	61.00 ± 0.86	62.55 ± 2.35	5.135	0.009	HS
	Range	60 – 64	60 – 63	60 – 67			
After 90 minutes	Mean±SD	61.20 ± 1.11	60.95 ± 0.76	62.25 ± 1.97	5.027	0.010	S
	Range	60 – 64	60 – 62	60 – 66			
Post hoc analysis by LSD							
		Group P Vs group D	Group P Vs group N	Group D Vs group N			
After 15 minutes		0.411	0.003	0.000			
After 30 minutes		0.556	0.000	0.000			
After 45 minutes		0.283	0.000	0.000			
After 60 minutes		0.672	0.023	0.008			
After 75 minutes		0.429	0.026	0.003			
After 90 minutes		0.568	0.019	0.004			

P-value > 0.05: Non significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant

•: One Way ANOVA test

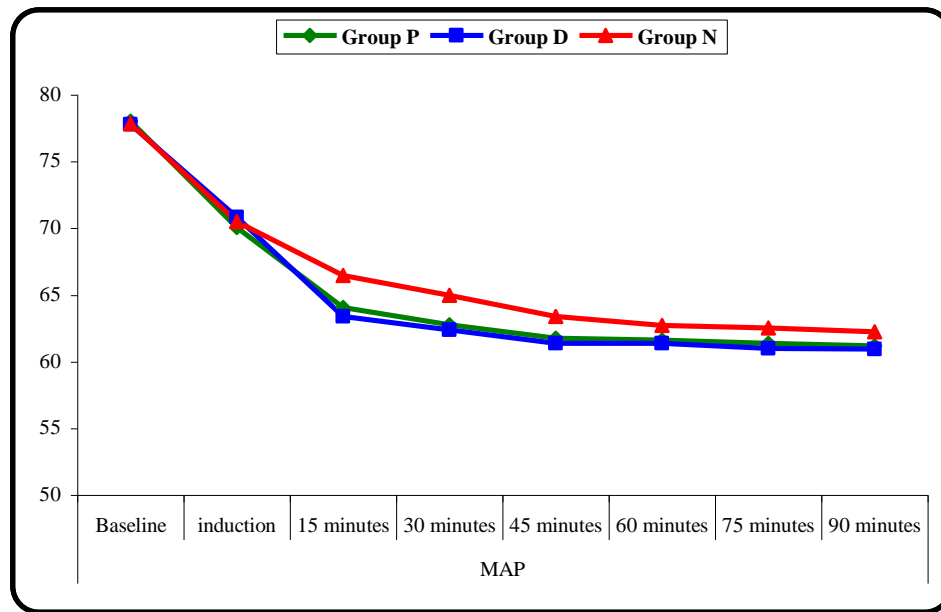


Figure (): Comparison between the three groups as regards MAP.

2) Heart rate (HR):

As regards heart rate (HR) the results showed no significant difference among the three groups in baseline measurement and after induction of anesthesia while there was a highly significant difference after 15, 30, 45, 60, 75, 90 minutes.

In comparison between group P and group D the results showed a highly significant difference after 15, 30, 45, 60, 75, 90 minutes with lower HR in group D in all these points of measurement.

In comparison between group P and group N the results showed a highly significant difference after 15, 30, 45, 60, 75, 90 minutes with lower HR in group P in all these points of measurement.

In comparison between group D and group N the results showed a highly significant difference after 15, 30, 45, 60, 75, 90 minutes with lower HR in group D in all these points of measurement.

In comparison between group D and group N the results showed a highly significant difference after 15, 30, 45, 60, 75, 90 minutes with lower HR in group D in all these points of measurement as shown in table () and figure ().

Results

Table (): Comparison between the three groups as regards heart rate.

HR		Group P	Group D	Group N	Test value•	P- value	Sig.
		No.= 20	No.= 20	No.= 20			
Baseline	Mean±SD Range	77.20 ± 7.34 65 – 88	75.65 ± 8.26 62 – 89	77.60 ± 8.01 64 – 96	0.342•	0.712	NS
After induction	Mean±SD Range	77.40 ± 4.92 69 – 90	77.35 ± 7.60 65 – 88	78.10 ± 5.97 71 – 96	0.090•	0.914	NS
After 15 minutes	Mean±SD Range	69.15 ± 3.79 62 – 75	60.25 ± 3.43 55 – 67	102.55 ± 5.07 93 – 110	575.459•	0.000	HS
After 30 minutes	Mean±SD Range	71.60 ± 2.35 67 – 76	60.45 ± 3.28 56 – 65	102.30 ± 4.27 95 – 110	816.319•	0.000	HS
After 45 minutes	Mean±SD Range	69.05 ± 3.99 64 – 82	60.10 ± 2.51 55 – 65	99.40 ± 7.54 71 – 109	322.124•	0.000	HS
After 60 minutes	Mean±SD Range	68.90 ± 4.01 62 – 76	60.55 ± 5.16 54 – 72	101.40 ± 3.76 94 – 108	491.864•	0.000	HS
After 75 minutes	Mean±SD Range	68.35 ± 4.49 62 – 77	59.20 ± 3.09 53 – 64	101.10 ± 3.82 95 – 109	657.430•	0.000	HS
After 90 minutes	Mean±SD Range	68.70 ± 3.85 62 – 77	59.55 ± 3.50 54 – 68	101.65 ± 4.00 95 – 109	681.894•	0.000	HS
Post hoc analysis by LSD							
		Group P Vs group D	Group P Vs group N	Group D Vs group N			
After 15 minutes		< 0.001	< 0.001	< 0.001			
After 30 minutes		< 0.001	< 0.001	< 0.001			
After 45 minutes		< 0.001	< 0.001	< 0.001			
After 60 minutes		< 0.001	< 0.001	< 0.001			
After 75 minutes		< 0.001	< 0.001	< 0.001			
After 90 minutes		< 0.001	< 0.001	< 0.001			

P-value > 0.05: Non significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant

•: One Way ANOVA test

Results

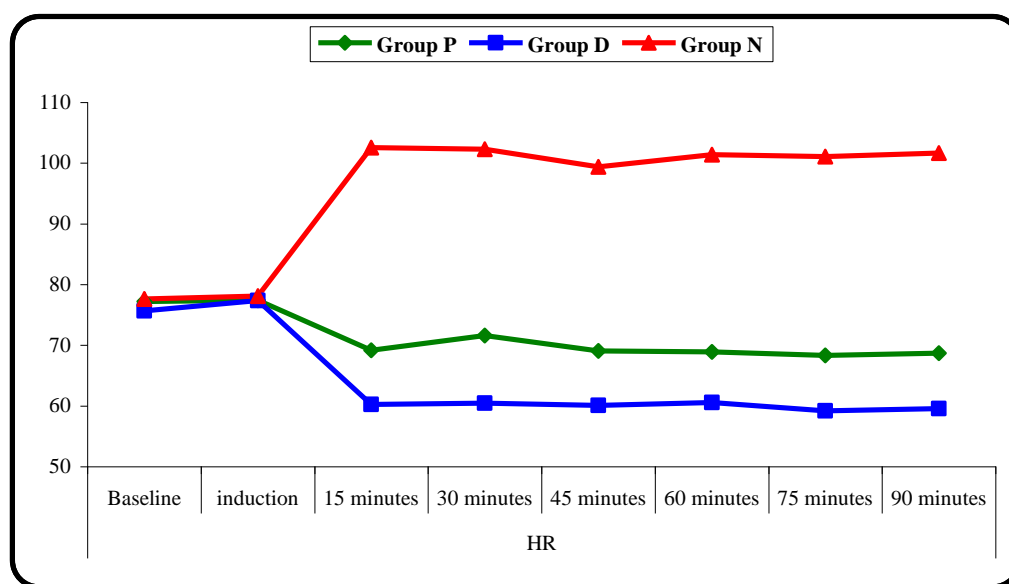


Figure (): Comparison between the three groups as regards HR.

3) Bleeding score:

As regards bleeding score the results showed significantly higher values for median (IQR) and range for group N compared to the other two studied groups with p-value < 0.001.

And there was no significant difference between group P and group D with P value 0.094 as shown in table () and figure ().

Table (): Comparison between the three groups as regards bleeding score.

Bleeding score	Group P	Group D	Group N	Test value	P-value	Sig.
	No. = 20	No. = 20	No. = 20			
Median (IQR)	2 (2 – 2)	2 (1 – 2)	3 (3 – 3)	26.277≠	< 0.001	HS
Range	1 – 3	1 – 3	2 – 4			
Post hoc analysis by LSD						
Group P Vs group D		Group P Vs group N		Group D Vs group N		
0.094		< 0.001		< 0.001		

P-value > 0.05: Non significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant
≠: Kruakal-Wallis test

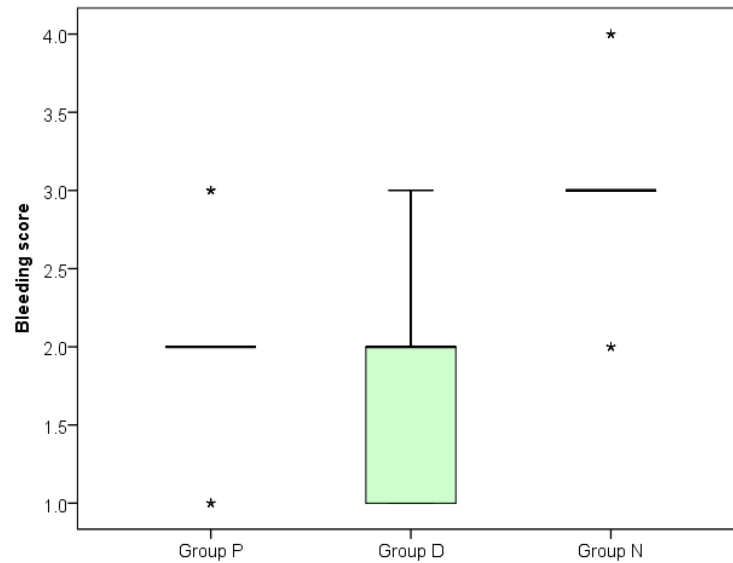


Figure (): Comparison between the three groups as regards bleeding score.

4) Duration of surgery:

As regards duration of surgery the results showed significantly higher values for group N compared to the other two studied groups with p-value < 0.001 .

And there was no significant difference between group P and D with P-value 0.011

as shown in table () and figure ().

Table (): Comparison between the three groups as regards duration of surgery in minutes.

		Group P	Group D	Group N	Test value•	P- value	Sig.
		No.= 20	No.= 20	No.= 20			
Duration of surgery in minutes	Mean±SD	97.40 ± 4.39	93.30 ± 3.39	110.35 ± 6.46	65.545	< 0.001	HS
	Range	91 – 110	90 – 102	100 – 122			
Post hoc analysis by LSD							

Results

Group P Vs group D	Group P Vs group N	Group D Vs group N
0.011	< 0.001	< 0.001

P-value > 0.05: Non significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant

•: One Way ANOVA test

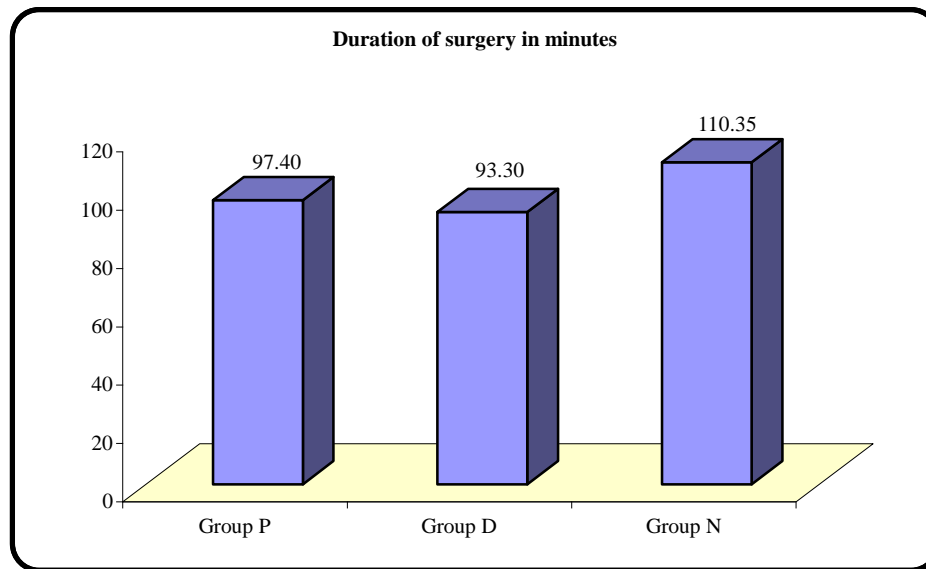


figure): Comparison between the three groups as regards duration of surgery in minutes.

Occurrence of side effects:

Three cases of hypotension (MAP <55 mmHg) were recorded among propofol group and one case among dexmedetomidine group and two cases among nitroglycerine group and treated by ephedrine increments 12.5 mg but this was statistically insignificant. Three cases of bradycardia (HR< 50 b/m) occurred with dexmedetomidine group and were treated with atropine 1 mg with and this was statistically significant.

Side effects	Group P	Group D	Group N	Test value	P-value	Sig.
	No. = 20	No. = 20	No. = 20			
Hypotension (MAP<60)	3 (15.0%)	1 (5.0%)	2 (10.0%)	1.071*	0.585	NS
Bradycardia (HR<50)	0 (0.0%)	3 (15.0%)	0 (0.0%)	6.207*	0.045	S

P-value > 0.05: Non significant; P-value < 0.05: Significant; P-value < 0.01: Highly significant

*: Chi-square test

