

Tab. 1. Socio-demographic and surgical data of the studied groups

Studied variables	ISB group (N = 34)	STB group (N = 34)	Test of sig	P value
Age / years			U	
Mean ± SD	41.1 ± 14.2	41.2 ± 13.9	0.147	0.883
Median (IQR)	43.0 (27.7–56.2)	39.5 (28.0–57.2)		
Sex N (%)			χ ²	
Male	21 (61.8)	22 (64.7)	0.063	0.801
Female	13 (38.2)	12 (35.3)		
BMI			t-test	
Mean ± SD	25.8 ± 0.95	25.7 ± 0.96	0.621	0.537
Median (IQR)	25.9 (25.0–26.6)	25.7 (24.8–26.4)		
ASA N (%)			χ ²	
I	16 (47.1)	17 (50.0)	0.059	0.808
II	18 (52.9)	17 (50.0)		
Duration of surgery			U	
Mean ± SD	72.9 ± 10.1	73.9±11.3		
Median (IQR)	75.0 (65.0–80.0)	72.5 (65.0–85.0)	0.298	0.766

ISB – interscalene group; STB – selective superior trunk group; U – Mann-Whitney test; χ² – chi square test; IQR – Interquartile range

Tab. 2. Diaphragmatic movement involvement between the study groups

Studied variables	ISB group (N = 34)		STB group (N = 34)		χ ²	P value
	No.	%	No.	%		
Diaphragmatic paralysis						
Present	26	76.5	13	38.2	10.1	0.001*
Absent	8	23.5	21	61.8		
Diaphragmatic movement affection						
Absent (0–25 %)	8	23.5	21	61.8	12.3	0.002*
Partial (> 25 %–75 %)	11	32.4	9	26.4		
Complete (> 75 %)	15	44.1	4	11.8		

ISB – interscalene group; STB – selective superior trunk group; χ² – chi square test; *significant

Tab. 3. Block characteristics and quality between the study groups

Studied variables	ISB group (N = 34)	STB group (N = 34)	Test of sig.	P value
Performance duration (min)				
Mean ± SD	6.48 ± 0.69	6.97 ± 0.67	U	0.008*
Median (IQR)	6.50 (6.00–7.00)	7.00 (6.50–7.50)	2.46	
Onset (min)				
Mean ± SD	24.7 ± 3.54	23.7 ± 3.31	U	0.244
Median (IQR)	25.0 (21.5–27.0)	23.0 (20.0–27.0)	1.16	
Motor block duration (hr)				
Mean ± SD	12.5 ± 1.92	11.9 ± 1.62	U	
Median (IQR)	12.5 (11.0–14.0)	12.0 (10.0–13.2)	1.48	0.138
Intraoperative Fentanyl dose (µg/kg)				
Mean ± SD	0.41 ± 0.74	0.58 ± 0.82	U	
Median (IQR)	0.00(0.00–1.00)	0.00(0.00–1.00)	0.995	0.320
First call of analgesia (hr)				
Mean ± SD	9.47 ± 2.13	8.97 ± 1.29	U	
Median (IQR)	9.50 (8.00–11.2)	9.00 (8.00–10.0)	0.661	0.509

ISB – interscalene group; STBf – selective superior trunk group; U – Mann-Whitney test; IQR – Interquartile range; *significant

Selective superior trunk block

Using the same technique to identify the spotlight sign of the cervical roots and the scalenus muscles, the probe was moved distally to observe the convergence of the C5 and C6 which form the superior trunk. A 22-gauge echogenic needle was advanced from the lateral to the medial region using the in-plain technique until it reached the lateral border of the superior trunk. Half of the anesthetic solution was administered anteriorly, above the trunk, and the other half was admin-

istered posteriorly, below the trunk (a total volume of 15 ml of 0.25% bupivacaine) just prior to the branching of the suprascapular nerve.

The procedure time (the time from transducer positioning to the end of local anesthetic injection) and the onset of sensory block were recorded.

Every 5 minutes for the first 30 minutes after completing the block, the sensory block intensity was assessed using an 11-point scale (10 representing normal sensation, 0 representing no sensation to cold). A score of 0 was considered to indicate a complete sensory block. Additionally, the motor