

35. POSTOPERATIVE ANALGESIA AFTER ARTHROSCOPIC SHOULDER SURGERY (ASS): SUPRASCAPULAR NERVE BLOCK (SSB), INTRAARTICULAR ANALGESIA (IAA) OR INTERSCALENE BRACHIAL PLEXUS BLOCK (ISB)?

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ASS has a 45% incidence of severe postoperative pain.(1) Different techniques have been proposed to treat such pain. The aim of the present study was to compare the analgesic efficacy of SSB, IAA, and ISB after ASS.

Methods: After informed consent and with institutional approval, 120 ASA class 1-2 patients scheduled for elective ASS under general anesthesia were randomly divided into 4 groups of 30. In group 1, SSB was performed following Dangoisse's technique(2); 10 ml of 0.25% bupivacaine with epinephrine 1:200000 (B) was injected into the suprascapular fossa. In group 2, 20 ml of B was injected intraarticularly at the end of the procedure by the surgeon. In group 3, ISB was performed following Winnie's landmarks(3). The plexus sheath was located with a nerve stimulator and 20 ml of B was injected. In group 4, no block was performed. VAS at rest (R) and on movement (M) (0: no pain - 100: intolerable pain) at 4 and 24 hours, supplemental analgesia (paracetamol and/or morphine), side effects, and satisfaction score (0: not satisfied - 100: completely satisfied) were recorded. Statistical analysis was done with ANOVA and Scheffé test, and chi-square when appropriate. Results are expressed as mean \pm SD.

Results: Population data were comparable in all groups. Pain and satisfaction scores, and supplemental analgesia are presented in the Table. When compared with groups 2 and 4, pain scores at 4 and 24 h were significantly lower in groups 1 and 3. When compared with group 1, pain relief on movement was significantly better at 4 h in group 3. Group 4 required significantly more morphine than group 3. A low incidence of side effects was noted in all groups. Heaviness in the arm was observed only at 4 h in groups 1 (17%) and 3 (30%). When compared with group 4, satisfaction score was significantly higher in group 3.

Conclusions: After ASS, ISB and SSB provide better pain relief than IAA or parenteral analgesia with a low incidence of side effects. As ISB is more effective on movement in the immediate postoperative period, it would be the recommended analgesic technique.

1. Moote C. *Anesthesiology* 81: A49, 1994.

2. Dangoisse M. et al. *Acta Anaesthesiologica Belgica* 45: 49-54, 1994.

3. Winnie A. *Anesth Analg* 49: 455-66, 1970.

	Group 1	Group 2	Group 3	Group 4
VAS _R 4 h	19 \pm 18	40 \pm 20	7 \pm 14	34 \pm 20
VAS _R 24 h	11 \pm 13	30 \pm 24	16 \pm 14	25 \pm 16
VAS _M 4 h	35 \pm 25	54 \pm 23	13 \pm 24	55 \pm 21
VAS _M 24 h	35 \pm 19	61 \pm 23	33 \pm 22	53 \pm 19
Paracetamol (g/24 h)	1.5 \pm 1	1.5 \pm 0.8	1.2 \pm 1.3	1.5 \pm 1.1
Morphine (mg/24 h)	6.1 \pm 7.6	7.8 \pm 8.9	3.5 \pm 8.5	12.8 \pm 13.6
Satisfaction	82 \pm 17	80 \pm 19	87 \pm 12	73 \pm 16