

Conclusions This study indicates that a robotic approach in colorectal cancer surgery significantly reduces post-operative pain as measured by PCA usage, enhancing the ERAS programme and justifying its consideration in economic calculations for the introduction of a robotic service.

B303 EFFICACY OF ERECTOR SPINAE BLOCK ON POST-OPERATIVE MORPHINE CONSUMPTION AND EXPRESSION OF IMMUNE CELLS IN PATIENTS UNDERGOING BREAST CANCER SURGERY: A PROSPECTIVE RCT

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Background and Aims Opioid use has been associated with unwanted side effects and cancer recurrence. Regional anaesthesia may provide better analgesia, reduce opioid usage, and may reduce cancer progression. We conducted this trial to study the efficacy of erector spinae block (ESP) based anaesthesia on postoperative opioid consumption and immune cell expression in patients undergoing breast cancer surgery.

Methods After ethics committee approval, 100 female patients undergoing breast cancer surgery were randomly allocated into two groups: group N (received ESP intraoperative opioids) and group O (received intraoperative opioid). Standard anaesthesia technique followed and post extubation morphine given using patient -controlled-analgesia pump. 24-hours postoperative morphine consumption was calculated (Primary outcome). The secondary outcomes were NRS (numerical rating scale) for pain and any side effect of opioid at 0, 30 min, 1 hour, 2-hour, 6-hour, 24-hour post operatively and Neutrophil-lymphocyte ratio (NLR), number of Natural Killer Cells (NKC), T-helper cells and cytotoxic T cells at baseline, immediate post-operative period and after 24 hours.

Results Total post-operative morphine consumption ($2.0 \pm 2.12\text{mg}$ vs. $3.08 \pm 3.69\text{mg}$; $p\text{-value}=0.132$) and change in NLR from baseline at 24 hours was less with ESP. NRS scores at rest and movement at various time points were similar. NKC, T-helper cells and cytotoxic T cells were found to be higher in the ESP group.

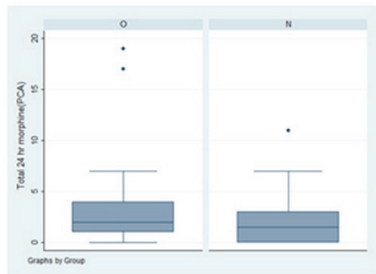


Figure 1: Box and whisker plot showing total 24-hour post operative morphine consumption.

Abstract B303 Figure 1

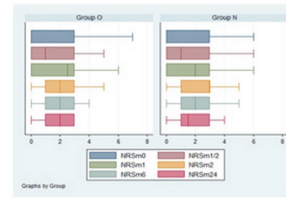


Figure 2: Box plot showing Numerical Rating Scale (NRS) for pain on movement for various time points (NRSm at time 0, NRSm1/2 at 30 minutes, NRSm1 at 1 hour, NRSm2 at 2 hour, NRSm6 at 6 hour, NRSm24 at 24 hour) in postoperative period.

Abstract B303 Figure 2

Conclusions ESP block provided similar postoperative morphine consumption and lesser immunosuppression in breast cancer surgeries as compared to standard opioid based technique. Further studies are needed to see the feasibility of ESP based opioid technique and develop standard protocol with minimal side effects.

B304 EFFICACY OF REGIONAL NERVE BLOCKS IN ELECTIVE SHOULDER SURGERIES IN POST-OPERATIVE PAIN AND OPIOID REQUIREMENTS

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Background and Aims Shoulder surgery causes significant post-operative pain needing large doses of opioids associated with adverse effects (1). Regional blocks reduce opioid requirements allowing early functional recovery and discharge (2). A study has shown that a Shoulder Arthroplasty enhanced Recovery Protocol(ShARP) has significantly reduced the length of stay (3). We plan to introduce a protocol in our hospital and, therefore, conducted this audit following approval from institutional ethics committee (see Figure 1).

Methods We analysed charts of patients who had elective arthroscopic shoulder surgery over 1-year period(Jan'20 – Jan'21). Comparison were then made between the patients who received a regional block and the patients who received systemic analgesic only. Primary outcome was the 24 hour cumulative oral opioid consumption. Secondary outcomes included pain scores at the PACU and 24 hours post-operatively, opioid related side-effects and regional anaesthesia related complications.

Results Charts of 87 patients were analysed (74 received regional block, 13 received systemic analgesics only). Demography and the preoperative opioid use was comparable between the groups (Table 1). 15 patients (13 with a block, 2 without) were discharged before 24 hours. Of the remaining 72, the mean morphine equivalent opioid consumption was significantly low in regional block group (Table 2). The mean pain score at recovery was significantly lower in block group but this difference was not statistically significant at 24 hours (Table 3).