Introduction:
Breast surgeries commonly results in poorly controlled acute postoperative pain, which may be an important predictive factor in the development of chronic postsurgical pain. Thoracic epidural and paravertebral block has been popular approaches for post-operative analgesia while pectoral nerve block is a noval interfacial plane block for the same.

Objectives:
Primary:
Total amount of fentanyl requirement in the intraoperative/ post-operative period.
Secondary:
1). Time to first analgesic requirement (VAS >3) in post-operative period.
2). Limitation of shoulder movement on the operative site a 4hour, 5hour and 6hour and at 24 hour after surgery.
3). Incidence of post-operative nausea and vomiting
4). Patientâ€™s satisfaction for postoperative analgesia

Methods:
After Institutional Ethics Committee approval, 60 adult women (18yrs. -70 yrs.) (ASA I or II) who presents for elective breast surgery meeting the inclusion criteria were randomly allocated into two groups of 30 patients each: group P (pectoral nerve block group) was administered Pectoral block II with 30 ml 0.25% ropivacaine after induction of General Anaesthesia while group C (control group) received General Anaesthesia without Pectoral block. All patients received PCA fentanyl in the post-operative period. Each patient was assessed with total amount of fentanyl requirement in post-operative period, time required for first analgesia, limitation of shoulder movement on the operative site and over all patient satisfaction.

Results:
Group P showed highly significant reduction in total fentanyl requirement in 24 hours post-operatively and the difference between these two groups were 171 [138.40-203.59] (95% CI) (p value <0.001). The mean time required for first analgesia was significantly longer in group P compared to group C (44.33± 17.65 min vs 10.36± 4.97min, p value of <0.001). Limitation of shoulder movement was significantly less in group P as compared to group C at 4th hour and 5th hour post operatively ( p value <0.001). But it was comparable at 6th hourly post operatively and after 24 hour post-surgery.

CONCLUSION:

Pectoral nerve block reduced the total amount of fentanyl requirement in the intraoperative/ post-operative period. It provided larger duration for time to first analgesic requirement in post-operative period with no limitation of shoulder movement on the operative site.