Conclusions In the current study, adding an ESP-block to a standard multimodal analgesia regimen did not result in reduced morphine consumption after RAMIDCAB surgery.

Background and Aims Rectus sheath blocks (RSB) have been used for abdominal analgesia for many years. Local anaesthetic administered to the posterior rectus sheath plane blocks terminal branches of T7–11 intercostal nerves. Therefore the RSB provides somatic analgesia for midline abdominal incisions. Whilst a single shot technique is common, rectus sheath catheters may be placed to deliver either a continuous infusion or intermittent boluses of local anaesthetic for prolonged analgesia. We tested the rectus sheath catheter set (Pajunk, Germany) to observe whether equal volumes of local anaesthetic are delivered to the left and right catheters.

Methods We have created a bench top collecting apparatus connected to 0.9% sodium chloride in place of local anaesthetic. The pump was programmed to deliver our local protocol of 40 ml boluses 4 hourly. After 24 hours the volume in each collecting bottle was measured by digital weighing scales. This process was repeated 10 times, with a new catheter set each time.

Results We found that after 24 hours the intended 6 boluses delivered equal volumes to both right and left catheters. The overall volume delivered compared to the volume registered by the pump showed a small discrepancy of 2 mls over 24 hours.

Conclusions In conclusion under test conditions the rectus sheath catheter set delivers equal volumes to each side. This may improve confidence that local anaesthetic delivery to rectus sheath or erector spinae plane blocks via this catheter is equal. However, differences in resistance may exist under clinical conditions. This was not tested, but may be an opportunity for further investigation.

Background and Aims Effective postoperative analgesia is crucial for ensuring early mobilisation after revision hip arthroplasty and reduce complications. In our hospital, from 2014–17, pain scores were moderate to severe, and the mean length of stay (LoS) was 23 days. PQLBI was introduced in 2017 to improve analgesia and reduce LoS.

Methods Audit data for 2018–21 were reviewed retrospectively comparing patients having PQLBI with those who did not, for quality of analgesia, time to weight bearing, LoS and general complications. Data were collected using Lorenzo (DXC, Virginia) and e-Obs software (Alcidion, Australia). There were 49 patients. All received spinal anaesthesia (0.5% heavy bupivacaine, no opioid) and general anaesthesia. After surgery, 35/49 patients had PQLBI using 20 ml of 0.125% levobupivacaine injected in the fascial plane between quadratus lumborum and psoas muscles using a SonoSite C11E probe with in-plane approach, followed by an infusion via a Pajunk Echogenic catheter over-needle system, and delivered with a Baxter Echogenic pump with 300 mls 0.125% levobupivacaine for 72 hrs at 5–8 mls/hr.

Results Between 2018–2021, comparing PQLBI vs non-PQLBI, Verbal Rating Pain Scores (mean) were 1.03 vs 2.24, time to weight-bearing 1.15 days vs 4.55 days, and LoS 5.15 days vs 10.33 days respectively. There were no complications in the PQLBI group, but delirium and pneumonia in 6/14 patients in the non-PQLBI group.
Conclusions PQLBI should be considered in revision hip surgery. There is reduced morphine consumption with low pain scores, facilitated early weight bearing and reduced LoS from 23 days to 5.15 (mean) days.

**B327** CONTINUOUS SERRATUS PLANE CATHETERS FOR POST-OPERATIVE PAIN MANAGEMENT IN MAJOR BREAST SURGERY

F Wou*, H Harb, M Narayanan, H Osman, I Karat. Frimley Park Hospital, Frimley, UK

Background and Aims Pain associated with major breast surgery can be severe. Recent PROSPECT guidelines recommend regional anaesthesia (RA) for postoperative pain management but single shot blocks are limited in duration (<24 hours). We have introduced a continuous ambulatory local anaesthetic (LA) infusion through serratus plane catheters (SPC) as part of our enhanced recovery pathway for mastectomies to extend the benefits of RA.

Methods We conducted a prospective case review of 29 mastectomies (October 2021 - March 2022) who received the ambulatory infusion. All patients had a surgically inserted SPC and discharged on a continuous infusion of 0.125% levobupivacaine (4–6 ml/hr) for 48 hours.

Results All patients received preoperative RA blocks (pectoral nerve group ± paravertebral), SPC (loaded with 10 mls 0.25% bupivacaine) and surgical LA infiltration. Intraoperatively they all received multimodal analgesia and IV dexamethasone.

Median pain scores in recovery, post-op day 1 and day 2 were low (0 (IQR 0–2), 1 (IQR 1–3) and 2 (IQR 0–3) respectively - figure 1). Sleep quality was excellent with 90% having no pain overnight on day 1 and 83% on day 2 (figure 2). 12 patients were discharged on PRN weak opioids (11 Codeine, 1 Tramadol), and no patients required strong opioids on discharge. There were no readmissions due to inadequate analgesia.

Conclusions Our case series demonstrates the potential benefit of continuous SPC in extending the duration of RA, which may mitigate against rebound pain once the primary RA wears off. We recommend this technique as part of a balanced, multimodal post-operative analgesic plan for major oncological breast surgery.

**B328** IS KETAMINE MORE EFFECTIVE IN PATIENTS ON CHRONIC OPIOIDS THEN OPIOID NAIVE PATIENTS IN REDUCING CHRONIC POST-SURGICAL PAIN – A SYSTEMATIC REVIEW AND META-ANALYSIS

V Manhas*, B Doleman. 1Queens Medical Centre, Nottingham, UK; 2University of Nottingham, Nottingham, UK

Background and Aims Ketamine is an effective treatment for both acute and chronic postoperative pain. Some evidence suggests analgesics may be effective in patients with a higher baseline risk of pain. Therefore, we aimed to identify whether ketamine is more effective at reducing the incidence of chronic postsurgical pain (3 to 6 months) in patients on chronic opioid treatment.

Methods We conducted a systematic review of online databases (MEDLINE, Embase and CENTRAL) and unpublished studies. We included 23 studies of which 3 included patients on chronic opioid treatment. Only one study noted that majority of patients were on opioids (Hayes 2004).

Results Ketamine reduced the incidence of chronic pain in patients not on opioids (OR 0.55; 95% CI 0.38 to 0.80; I²=40%) but not in studies that included patients on chronic opioids (OR 1.04; 95% CI 0.52 to 2.09; I²=40%). However, this difference was not significant on subgroup analysis (p=0.12). There was no evidence of publication bias (p=0.49). The certainty of evidence was low due to problems with risk of bias and imprecision.