CHRONIC POSTSURGICAL PAIN OUTCOMES FOLLOWING BREAST RECONSTRUCTION WITH THE PERIOPERATIVE PLACEMENT OF TRANSVERSUS ABDOMINIS PLANE (TAP) CATHETERS AT THE DONOR SITE: A PROSPECTIVE COHORT FOLLOW-UP STUDY

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INTRODUCTION / AIM

Chronic postsurgical pain (CPSP) is a debilitating and costly condition, but risk factors for CPSP after autologous breast reconstruction have not been clearly established. Previously, we demonstrated that transverses abdominis plane (TAP) catheters delivering intermittent local anesthetic reduced postoperative morphine consumption. This prospective follow-up study aims to 1) compare the incidence of CPSP after autologous breast reconstruction between patients who received post-operative intermittent TAP catheters with bupivacaine or saline boluses and 2) assess the factors that contribute to the development and maintenance of CPSP in this sample.

METHODS

Patients who underwent deep inferior epigastric artery perforator or muscle-sparing transverse rectus abdominis breast reconstruction were randomized to receive TAP catheters with bupivacaine or saline post-operatively. Subsequently, patients were followed for a year to assess persistent pain, pain severity, quality of life scores, and functional disability at 6 and 12 months after surgery.

RESULTS

23% and 21% of patients reported CPSP at 6 and 12 months, respectively. There were no significant differences between groups (bupivacaine vs. placebo) on pain-related variables, including incidence of CPSP. Patients who reported greater variability in pain scores over the first 48-hours post-operatively were more likely to have CPSP 6 months, but not 12 months, later.

DISCUSSION / CONCLUSIONS

Acute post-operative pain variability may contribute to the development of CPSP up to 6 months after autologous breast reconstruction surgery. Neither postoperative use of bupivacaine vs. saline in the TAP catheter nor acute pain severity influences the 6- or 12-month incidence of CPSP.

OTHER AUTHORS

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Zhong, Toni
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