

# Recovery After Transverse Rectus Abdominis Myocutaneous Flap Breast Reconstruction Surgery

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**Purpose/Objectives:** To assess pain and activity limitations and to determine realistic goals for recovery after a transverse rectus abdominis myocutaneous (TRAM) flap breast reconstruction in a standard rehabilitation and recovery program. Assessing patient satisfaction with educational information is a secondary objective.

**Design:** Before and after comparison.

**Setting:** A National Cancer Institute–designated comprehensive cancer center in the mid-Atlantic United States.

**Sample:** 16 women who had TRAM flap breast reconstruction.

**Methods:** Data were collected before surgery and four and eight weeks after surgery using an adapted Brief Pain Inventory, a recovery and rehabilitation assessment, and an evaluation of patient satisfaction.

**Main Research Variables:** Presence of pain; disruption of activities, relationships, and mood because of pain; pain relief measures; active range of motion; muscle strength; and satisfaction with educational information.

**Findings:** Pain and activity limitation scores were elevated four weeks after surgery and returned almost to baseline at eight weeks. Abdominal pain was significantly higher for women with free versus pedicled TRAM flap surgery, and women with previous back pain reported more lower back pain after surgery. Opioids, followed by nonsteroidal anti-inflammatory drugs, were the most common pain relief method. Active range of motion and muscle strength showed no significant limitations at eight weeks. Patients were very satisfied with the educational information provided by nurses and physical therapists.

**Conclusions:** Women can expect to have some pain and activity limitations four weeks after surgery but will be almost fully recovered at eight weeks. Educational information on pain management and resuming an active lifestyle were useful.

**Implications for Nursing:** Nurses and physical therapists can positively influence recovery from TRAM flap breast reconstruction by educating patients.

## Key Points . . .

- Breast reconstruction following mastectomy can improve a woman's quality of life.
- Comparisons between patients with free versus pedicled transverse rectus abdominis myocutaneous (TRAM) flaps revealed no differences in pain or activity limitation scores at baseline or eight weeks. However, the abdominal pain score was higher for women with free TRAM flaps at four weeks.
- Interdisciplinary collaboration between nurses and physical therapists improves patient expectations for recovery after surgery.

resume normal activities or return to work (it stated 6–8 weeks in 2002). Others required 6–12 months to achieve full recovery (Petit et al., 1997; Zenn, 2001). Because of continuously changing information, the current study examined patients' experiences after surgery to determine realistic goals for recovery. In addition, patient satisfaction with standard nursing and physical therapy preparation and follow-up was evaluated.

## Literature Review

Improvements in breast cancer detection are helping healthcare providers find the disease earlier, which leads to increased survival rates (Smigal et al., 2006). However, women undergoing a mastectomy will live longer with a physical defect that can lead to psychological issues related to poor self-esteem and low self-confidence. Breast reconstruction can help improve a woman's body image and feelings of sexuality and femininity, as well as eliminate the inconvenience of an external prosthesis. Morrow et al. (2005) reported that 38% of women they surveyed, who had mastectomies from December 2001 to January 2003, chose to have reconstruction.

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High-quality, effective patient care should provide patients with a realistic expectation of recovery time based on evidence. A literature review of transverse rectus abdominis myocutaneous (TRAM) flap breast reconstruction surgery revealed a lack of research on the location and duration of pain after surgery and a time frame for when women can expect to resume their previous lifestyle. Patients usually are told that recovery will take six to eight weeks and that they can return to work and previous activities at that time. However, patients in the current study have reported that substantial pain, as well as decreased energy levels, persists for six weeks to three months. Serletti and Moran (1997) stated that their patients did not return to work for 9–10 weeks, and Vancouver Coastal Health (2007) noted that patients take 6–12 weeks to