

The Lateral Intercostal Artery Perforator (LICAP) Flap for Outpatient Total Breast Reconstruction

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Objective

The lateral intercostal artery perforator (LICAP) flap is a reliable, axial skin flap described in previous reports for post-bariatric breast augmentation and chest wall reconstruction. The LICAP flap can produce a large skin paddle without dissection of muscle or fascia and, importantly, it can be performed in an outpatient setting. These features make the LICAP flap useful as an adjunct for total breast reconstruction in patients who are not post-bariatric surgery. We report our experience using this procedure for total breast reconstruction following mastectomy in the outpatient setting.

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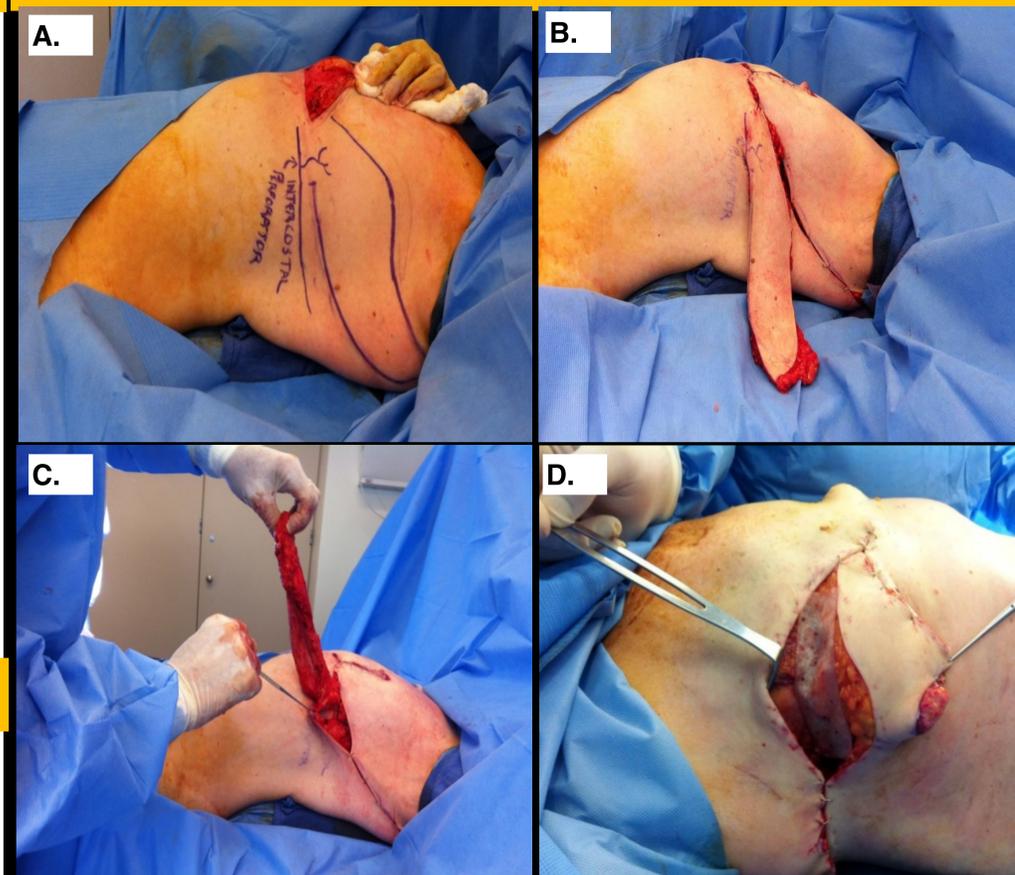
- A single center retrospective chart review of all consecutive patients who received LICAP flaps after mastectomy was performed.
- A total of 30 flaps were performed in 22 patients between 2005-2013 by two senior surgeons (D.A.K. and J.A.A.) at Cedars Sinai Medical Center.
- All patients received LICAP flaps in an outpatient setting for delayed total breast reconstruction after prior mastectomy.
- Data regarding patient demographics, comorbidities, neoadjuvant and adjuvant breast therapies, intraoperative additional procedures, operative time, short term outcomes, and perioperative complications were collected

Results

Table 1. Patient Demographics

Parameter

Figure 1. Operative Dissection of the LICAP Flap



- X of the 30 flaps had undergone a prior reconstruction, X of which were a failed muscle flap
- X of the 22 patients had an existing prosthesis
- Patients were followed for a mean follow-up time of 12.5 months.
- Six flaps (20%) experienced postoperative complications including partial flap necrosis (3), painful donor site keloid (1), and implant infection (2).

Table 2. Operative Details

Parameter

Figure 2. Before and After Photos for a Patient with a Radiation Failed Implant



- The LICAP flap is a practical alternative for total breast reconstruction. It can reliably provide a significant skin paddle even in patients who are not post bariatric surgery without the morbidity, hospitalization, and cost associated with muscle based flaps.
- These features may result in greater patient acceptance and substantial cost reduction.

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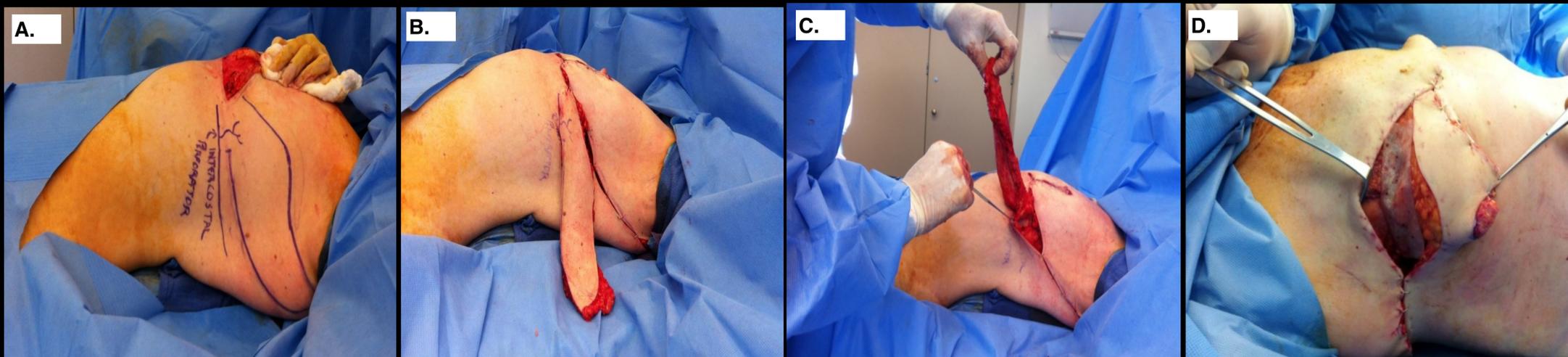


Figure 1. Operative Dissection of the LICAP Flap



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Conclusions

- Patients were followed for a mean follow-up time of 12.5 months.
- Six flaps (20%) experienced postoperative complications including partial flap necrosis (3), painful donor site keloid (1), and implant infection (2).
- The LICAP flap is a practical alternative for total breast reconstruction.
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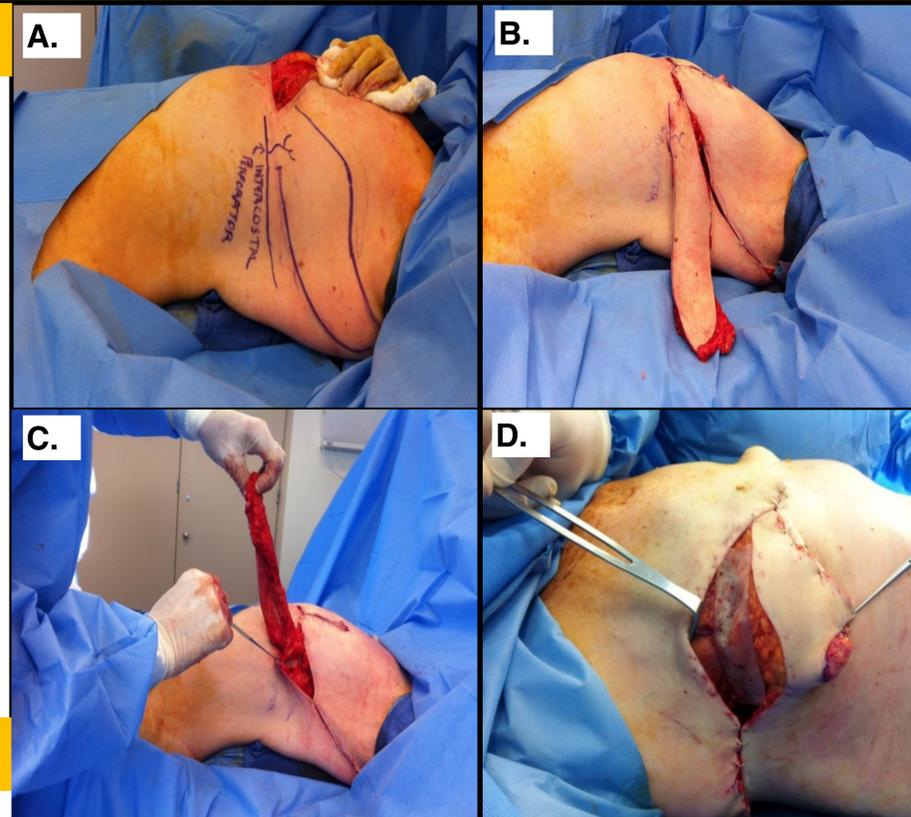


Figure 1. Operative Dissection of the LICAP Flap

1A:
1B:
1C:
1D:

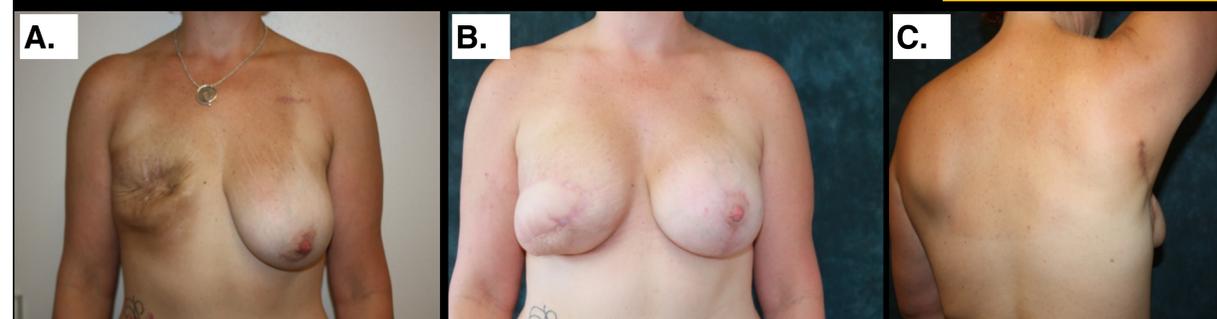


Figure 2. Before and After Photos for a Patient with a Radiation Failed Implant

2A:
2B:
2C:

Conclusions

Patients were followed for a mean follow-up time of 12.5 months. Six flaps (20%) experienced postoperative complications including partial flap necrosis (3), painful donor site keloid (1), and implant infection (2). The LICAP flap is a practical alternative for total breast reconstruction. It can reliably provide a significant skin paddle even in patients who are not post bariatric surgery without the morbidity, hospitalization, and cost associated with muscle based flaps. These features may result in greater patient acceptance and substantial cost reduction.