



Retrospective Review Of Diep Flap Donor Sites: Cost Analysis

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Background:

The Deep Inferior Epigastric Perforator (DIEP) is an advanced technique to reconstruct a breast post-mastectomy. The procedure, which transfers lower abdominal tissue to the chest, is the most common method of autologous breast reconstruction today. We aimed to investigate issues related to the abdominal donor site and associated morbidity.

Methods:

An IRB exempted, retrospective review, of 35 consecutive patients from November 2015 to May 2017 was conducted at a single institution. Demographics, surgical technique, comorbidities, mesh type, and surgical site occurrences were analyzed. 57 DIEP flap procedures were performed in the 19-month period. Patients were sorted into groups based on the mesh implanted and the position of the mesh, inlay or onlay, for a total of seven groups, no inlay Phasix.

Results:

Overall free flap survival was 97%. There was a statistically significant difference between the costs for both inlay and onlay use of Synecor when compared to an inlay of both Seri-Silk and Strattice mesh. Subset analysis of inlay of Synecor to the general use of Strattice revealed there were no significant differences in the demographics, comorbidities, or surgical site occurrences. However, there was a statistically significant difference in the cost of surgery following placement of the mesh.

Conclusions:

There were no statistical differences in surgical outcomes when using different meshes, but cost considerations are significantly different. The small sample size limits the ability to generalize scientific conclusions but the preliminary data suggests that Synecor mesh may be a cost effective alternative for DIEP flap donor site reconstruction compared to biologics.

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