

# Epigastric Perforator Flap Breast Reconstruction Following Deep Inferior Epigastric Source Vessel Ligation



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# Financial Disclosure



∞ Nothing to disclose

# Introduction



∞ Deep inferior epigastric perforator flaps represent an excellent method for autologous breast reconstruction

∞ Success is predicated upon careful dissection of dominant perforators

# Objective



- ∞ The ligation of the source vessel should negatively impact flap harvest
- ∞ If collateral vessels maintain patency of the DIE source artery and vein, DIEP flap harvest may be possible

# Methods



- ∞ A retrospective review of two cases of bilateral DIEP breast reconstruction was performed following prior ligation of the DIE source vessels
- ∞ The findings were analyzed and recorded

# Results



- ∞ The first patient had multiple failed attempts at bilateral breast reconstruction in a previously irradiated field
- ∞ She also had a previous bilateral salpingo-oophorectomy via a Pfannenstiel incision, which ligated both of the DIE source vessels

# Results



- ∞ Intercostal collaterals near the old hemoclips maintained source vessel patency and bilateral DIEP reconstruction was successful

# Results



- ∞ The second patient had prior bilateral breast reconstruction with submuscular implants complicated by late unilateral infection
- ∞ She underwent a prior delay procedure for possible pedicled TRAM flap reconstruction at an outside institution

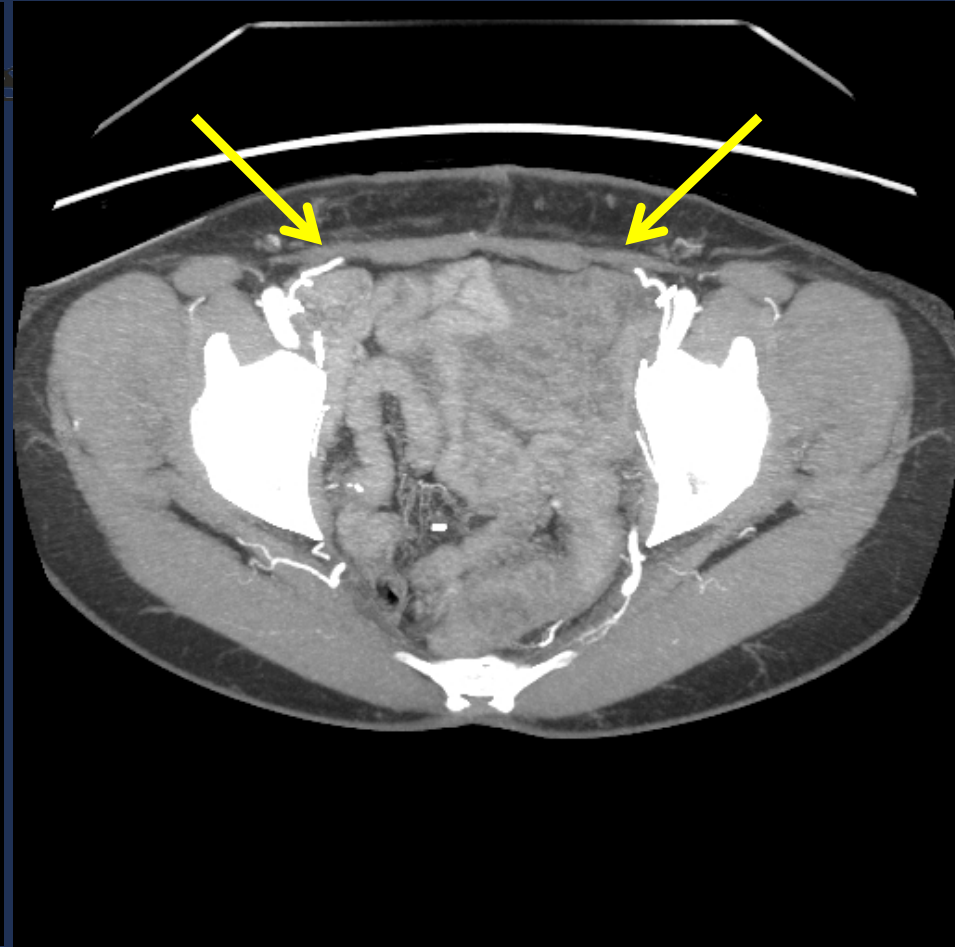
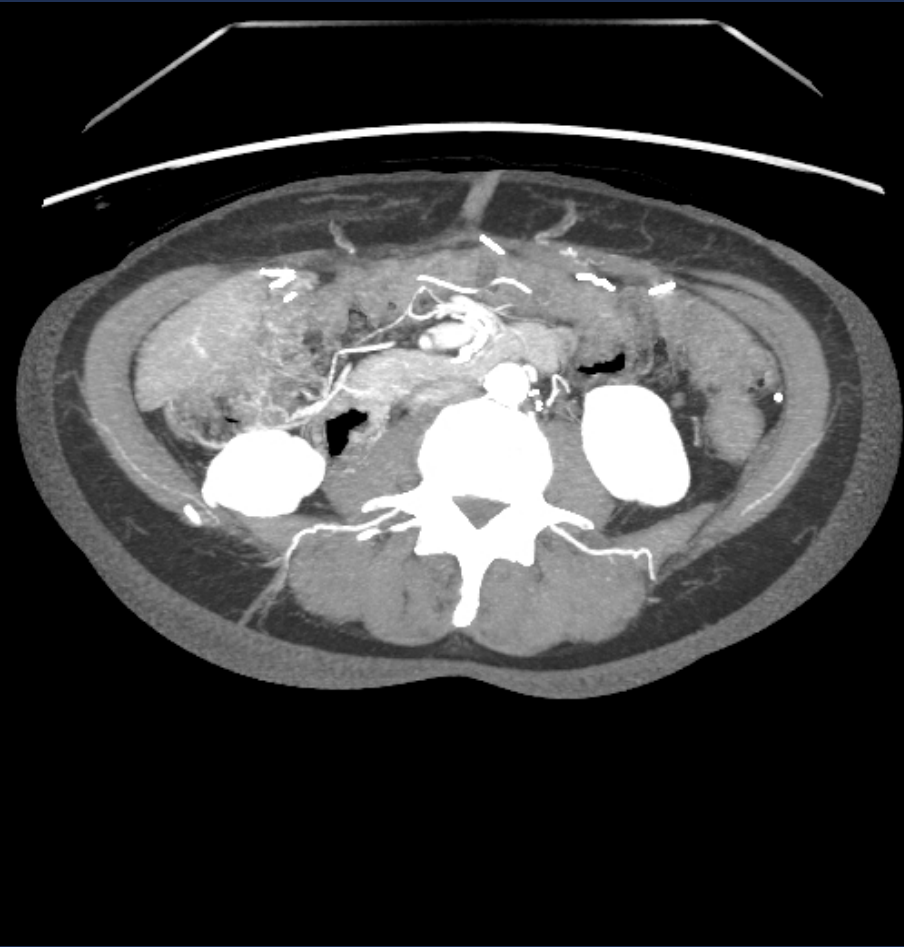


# Results

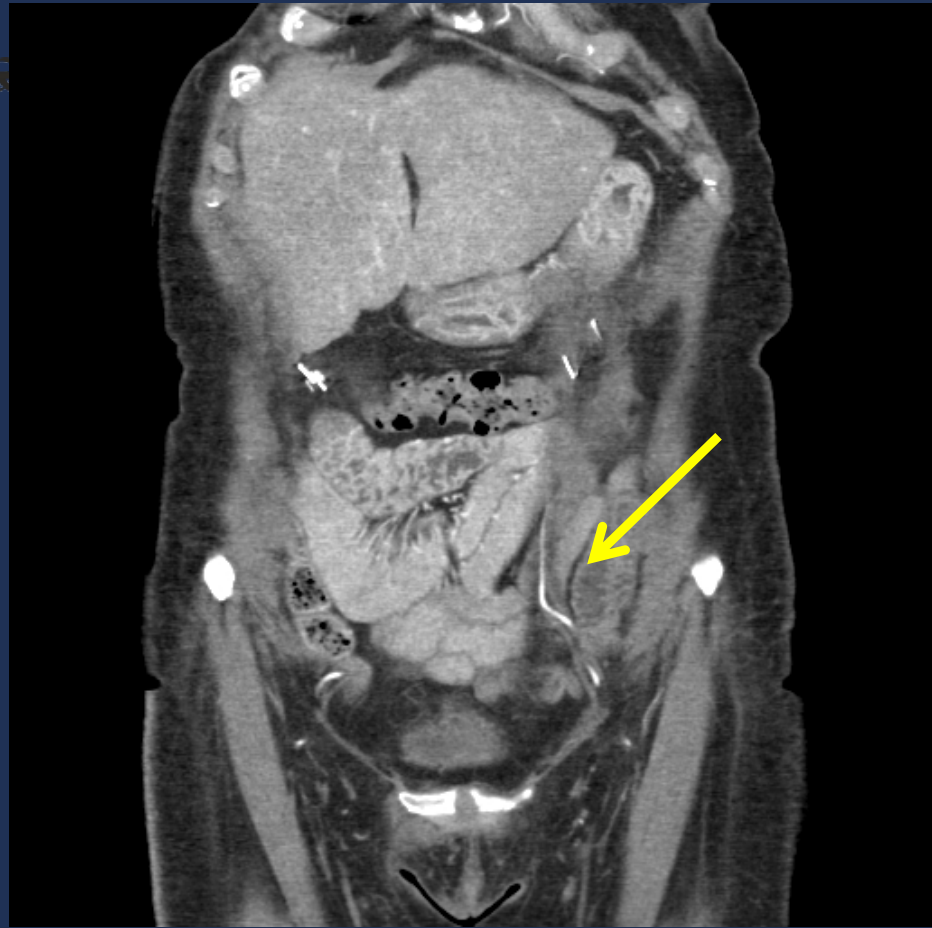
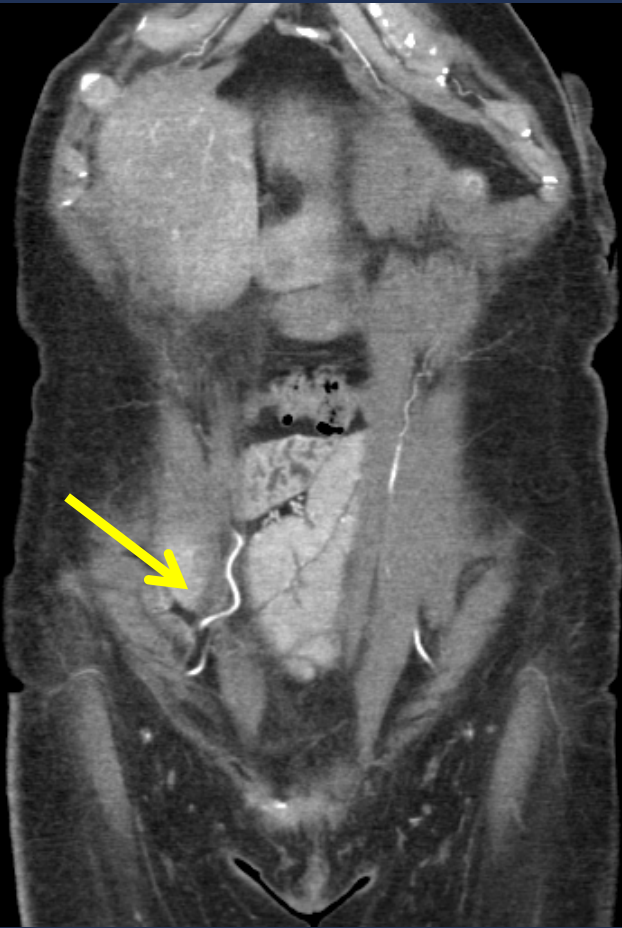


- ∞ CT angiography for a possible GAP flap revealed patent DIE vessels of suitable caliber despite clips near the origin
- ∞ Bilateral DIEP reconstruction was performed without associated complications

# CT angiography

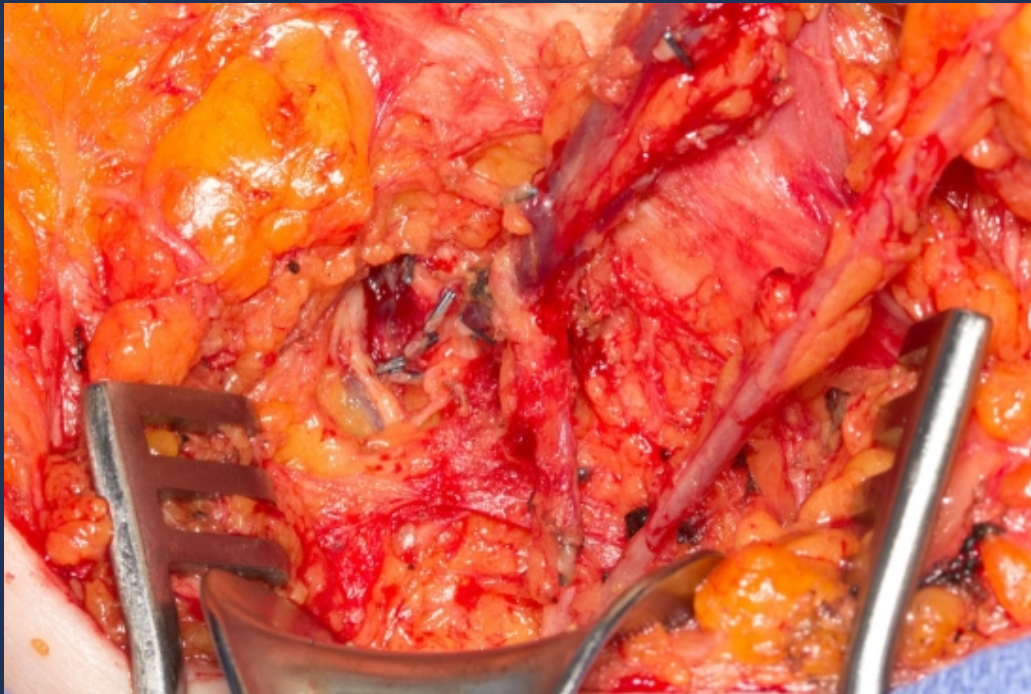


# CT angiography

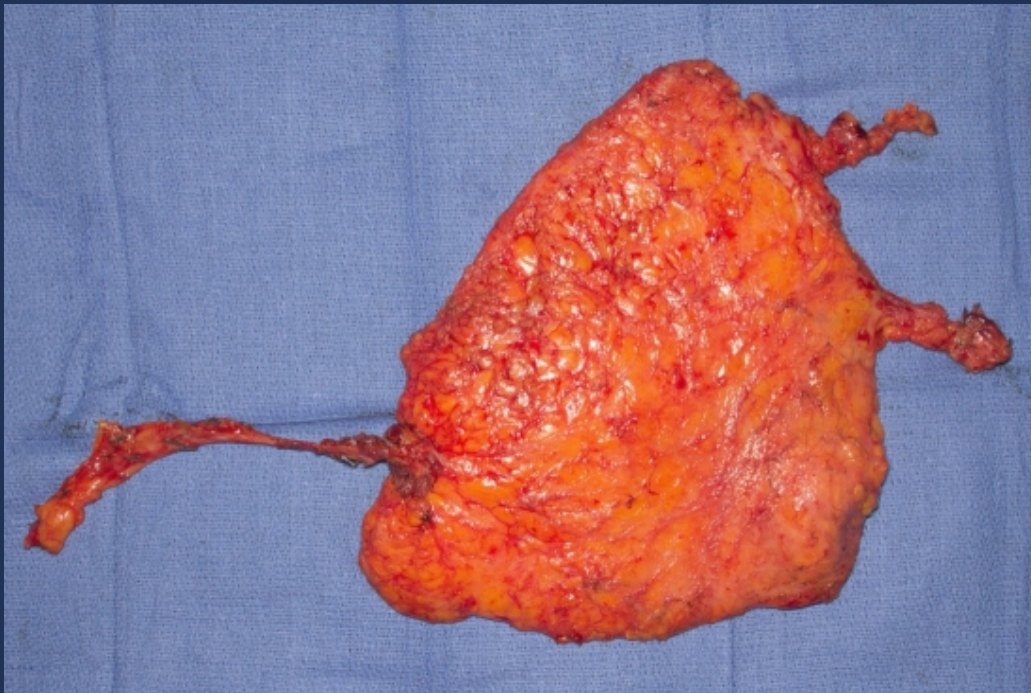


Patent deep inferior epigastric arteries and veins

Hemoclips at origin  
of DIE vessels



Flap based on  
perforator vessel







# Conclusion



- ☞ Successful DIEP flap reconstruction depends upon the patency of the DIE source vessels and sufficient perforators
- ☞ Prior ligation of the source vessel should negatively impact successful flap harvest

# Conclusion



- ∞ DIEP flap reconstruction can be carried out successfully if collateral vessels maintain patency of the source vessel
- ∞ Radiologic imaging can be helpful to identify these cases