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Breast

Acellular Dermal Matrix in Reconstructive Breast Surgery: Survey of Current Practice among Plastic Surgeons

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Background: Acellular dermal matrices (ADMs) in plastic surgery have become increasingly popular particularly for breast reconstruction. Despite their advantages, questions exist regarding their association with a possible increased incidence of complications. We describe a collective experience of plastic surgeons' use of ADMs in reconstructive breast surgery using an internet-based survey.

Methods: Members of the American Society of Plastic Surgeons were recruited through voluntary, anonymous participation in an online survey. The web-based survey garnered information about participant demographics and their experience with ADM use in breast reconstruction procedures. After responses were collected, all data were anonymously processed.

Results: Data were ascertained through 365 physician responses of which 99% ($n = 361$) completed the survey. The majority of participants were men (84.5%) between 51 and 60 years (37.4%); 84.2% used ADM in breast reconstruction, including radiated patients (79.7%). ADM use was not favored for nipple reconstruction (81.5%); 94.6% of participants used drains, and 87.8% administered antibiotics postoperatively. The most common complications were seroma (70.9%) and infection (16%), although 57.4% claimed anecdotally that overall complication rate was unchanged after incorporating ADM into their practice. High cost was a deterrent for ADM use (37.5%).

Conclusions: Plastic surgeons currently use ADM in breast reconstruction for both immediate and staged procedures. Of those responding, a majority of plastic surgeons will incorporate drains and use postoperative antibiotics for more than 48 hours. *(Plast Reconstr Surg Glob Open 2015;3:e381; doi: 10.1097/GOX.0000000000000148; Published online 24 April 2015.)*

Acellular dermal matrices (ADMs) in plastic surgery have become increasingly popular.[1] The use of ADMs together with improved techniques has helped to solve surgical problems lacking simple surgical solutions.[2] Not only do these biologic meshes provide increased structural strength but also they promote rapid vascular ingrowth potentially serving as a scaffold for formation of new tissue.[3] Since their availability in the 1990s, the list of indications for their use continues to grow.[1] Among other indications, ADMs have been incorporated into abdominal wall reconstruction, extremity surgery, eyelid reconstruction, and nasal reconstruction.[4–7]

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