ABS ANNALS OF BREAST SURGERY
AN OPEN ACCESS JOURNAL TO BRIDGE BREAST SURGEONS ACROSS THE WORLD

Peer Review File

Article information: http://dx.doi.org/10.21037/abs-20-135

Reviewer A

Comment 1: This case has a complicated history. Therefore, multiple possible causes of chronic seroma should be considered. Why could you say that subsequent metastatic carcinoma or unsuccessful DIEP transfer is not the cause of chronic seroma?
Reply 1: Indeed, seroma formation is a multifactorial process with repeat surgery and resulting scarring being the contributing factors. The patient did not display any tumor metastasis at the right breast reconstructive site. However, nodal metastasis along with surgical axillary clearance likely contributed to the impeded lymphatic transport and occurrence of lymphedema.
Changes in the text: We have modified the case presentation so the timeline of her surgical history is more clear (see page 4). We have also included more detail in how we arrived at a possible contributing lymphatic vessel (see page 7, line 95-110).

Comment 2: The detail of the tissue expander reconstruction should be written.
Reply 2: The patient underwent right breast reconstruction using repositioning of the tissue expander combined with latissimus dorsi reconstruction. In this approach, the tissue expander was placed under the pectoralis major muscle, with the transferred latissimus dorsi muscle superior to this. At the time of seroma excision, the latissimus dorsi muscle was redissected and spanned from the apex of former seroma cavity onto the anterior surface of the new tissue expander. The inferior portion of the tissue expander was covered with a Vicryl mesh and attached to the infra-mammary fold inferiorly and to the inferior edge of the repositioned muscle flap superiorly to prevent lamp shading effect.
Changes in the text: We expanded on the operative details (see page 5, line 73-86).

Comment 3: The injection site of lymphazurin should be elaborated on. The picture or the scheme should be added.
Reply 3: The technique of lymphazurin injection employed in our patient follows the standard approach for reverse lymphatic mapping including intra-dermal and deep dye injection approximately 10 cm distal to the axillary crease. A photograph of an exemplary lymphazurin injection sites was attached.
Changes in the text: We expanded on the injection technique and timeline within the procedure (see figure 2; see page 5, 75-80)

Comment 4: Preoperative images should be added.
Reply 4: A pre-operative photograph was added to the manuscript.
Changes in the text: See figure 1.

Reviewer B

Comment 1: However, comprehensive literature review on surgical management of intractable seroma/lymphorrhea/lymphocyst should be done before considering publication. The followings should be cited and discussed; PMID: 32964444, PMID: 21093398, PMID: 31688769, PMID: 25023202, PMID: 18548375
Reply 1: We modified our text as advised by adding the following to the discussion section: PMID: 32964444, PMID: 21093398, PMID: 31688769, PMID: 25023202, PMID: 18548375.

Changes in the text: Supermicrosurgical lymphaticovenous anastomosis, a form of lymphatovenous bypass, consists of linking a lymphatic vessel to a nearby vein diverting the lymph flow into the systemic circulation past the obstruction. Lymphatic tissue transfer is an alternative option, incorporating the lymphatic vessels already present into the flap to regenerate the physiological lymph pathway in the resected part (16). Yamamoto et al. (17) reported successful surgical resection in the groin of seven patients with lymphatic tissue preservation using lymphaticovenous anastomosis without lymphedema sequalae. Lymphorrhea, a severe form of lymphedema, is often difficult to treat. Most cases can be treated conservatively, but some cases are refractory to conservative treatments, requiring further surgical interventions. Intractable lymphorrhea is an issue because it is prone to infection due to skin tissue breakdown (18). Yamamoto et al. (19) described successfully treating patients with lymphoedema and severe lymphorrhea using simultaneous multi-site lymphaticovenous anastomoses. Morihisa et al. (20) also showed supermicrosurgical lymphaticovenous anastomosis and microsurgical lymphaticovenous implantation were effective procedures to treat axillary lymphorrhea that developed after the treatments for lymph node metastases of esophageal carcinoma. (See page 9, 137-151).