OPEN

PRS GLOBAL OPEN

VIEWPOINT

Correction of Polymastia Vera Class I with Skin-sparing Mastectomy and Immediate Rib-sparing DIEP-Flap Reconstruction

Dominik Duscher*†; David Kiesl*; Matthias Aitzetmüller*; Manfred Schmidt*†; and Georg M. Huemer*†

The incidence of accessory breast tissue, or polymastia vera, is reported to be 2–4% of the general population and, thus, it is a relatively common congenital malformation, which may not be detectable until puberty.[1] According to the Kajava classification, supernumerary breast tissue is categorized based on whether it consists of nipple, areola, and/or glandular tissue and is accordingly graded from I to VIII.[2] It usually appears in the axilla along the embryonic milk line (more than 60%), can lead to severe deformities of breast and thorax, and can be challenging to correct even for experienced surgeons.[1]

To treat polymastia, it is generally recommended to completely remove the accessory breast tissue, also because of the risk for cancer development.[3] It was reported that excision, liposuction, or both resulted in satisfactory outcomes.[4] However, it was demonstrated in a large case series that the correction of polymastia applying reduction mammaplasty techniques required the least number of operations per patient.[5] Nevertheless, regardless of the chosen technique, correction of polymastia vera often results in complications and poor esthetic outcomes such as contour deformities and asymmetry.

Here, we present a 21-year-old patient with an accessory breast class I by Kajava (consisting of a complete breast with nipple, areola, and glandular tissue; Fig. 1A). She suffered from contour deformity and significant asymmetry due to the accessory breast on the right and hypertrophy of the left breast. After thorough discussion with the patient about various options, we made a decision in favor of complete removal of both hypoplastic and malformed right breasts. During mastectomy, the nipple/areola complex (NAC) of the caudal breast was harvested as a free nipple graft. The resulting defect, consisting not only of the missing breast tissue but also of a lack of skin preventing expansion of the breast mound, was reconstructed with a deep inferior epigastric artery perforator flap. The flap was inset, partially deepithelialized, trimmed, and connected to the internal mammary vessels in a rib-sparing fashion. To achieve the best esthetic outcome with regards to symmetry, a simultaneous reduction mammaplasty of the hypertrophic and ptotic left breast was carried out with a resection weight of 485 g. Finally, the location of the NAC of the reconstructed right breast was estimated and the harvested NAC was reattached as a skin graft. The postoperative course was uneventful and the patient was discharged on the fifth postoperative day. At 3-month follow-up, good symmetry was achieved resulting in great patient satisfaction. However, scar hypertrophy was present and adequate scar management with repeated cortisone injections was initiated. An improvement of scar appearance could be achieved after five treatment sessions over 6 months. At 1-year follow-up, the patient presented with an esthetically satisfying result (Fig. 1B).

In conclusion, although somewhat radical, correction of polymastia vera class I with skin-sparing mastectomy and

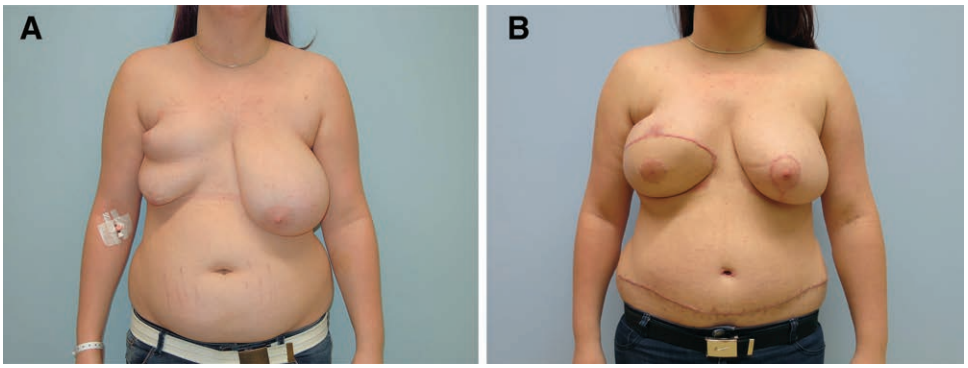

Fig. 1. A, Twenty-one-year-old patient with an accessory breast class I by Kajava (consisting of a complete breast with nipple, areola, and glandular tissue). B, One-year follow-up after skin-sparing mastectomy and immediate rib-sparing deep inferior epigastric artery perforator flap reconstruction and scar management with repeated cortisone injections.

*From the *Section of Plastic and Reconstructive Surgery, Department of General Surgery, Kepler University Hospital – Med Campus III, Krankenhausstrasse 9, 4020 Linz, Austria; and †maz – Microsurgical Training and Research Center, Industriezeile 36/7, 4020 Linz, Austria.*
Received for publication November 2, 2016; accepted November 8, 2016.

Plast Reconstr Surg Glob Open 2017;5:e1192; doi:10.1097/GOX.0000000000001192; Published online 18 January 2017.

immediate deep inferior epigastric artery perforator flap reconstruction can be a successful approach in certain particularly pronounced cases of this malformation.

Georg M. Huemer, MD, MBA, MSc
Section of Plastic and Reconstructive Surgery
Department of General Surgery
Kepler University Hospital – Med Campus III
Krankenhausstrasse 9
4020 Linz, Austria
Email: ghuemer@drhuemer.com

DISCLOSURE

None of the authors has a financial interest in any of the products, devices, or drugs mentioned in this manuscript. No funding was received for this work. The Article Processing Charge was paid for by the authors.

REFERENCES

1. Loukas M, Clarke P, Tubbs RS. Accessory breasts: a historical and current perspective. *Am Surg.* 2007;73:525–528.
2. Kajava Y. The proportion of supernumerary nipples in Finnish population. *Duodecim.* 1915;1:143–170.
3. Madej B, Balak B, Winkler I, et al. Cancer of the accessory breast—a case report. *Adv Med Sci.* 2009;54:308–310.
4. Aydogan F, Baghaki S, Celik V, et al. Surgical treatment of axillary accessory breasts. *Am Surg.* 2010;76:270–272.
5. Sadove AM, van Aalst JA. Congenital and acquired pediatric breast anomalies: a review of 20 years' experience. *Plast Reconstr Surg.* 2005;115:1039–1050.