

CASE REPORT

Management of the Lateral Breast

Priyatma P. Khincha, MRCS* Jurga Pikturnaite, MRCS* Ajay L. Mahajan, FRCS(Plast)*†

Summary: Breast asymmetry is a common finding in developing adolescents. In select cases, there is maldevelopment of 1 or both breasts, which persists into adulthood and causes significant negative impact on life. Various surgical techniques (eg, breast augmentation/reduction) and nonsurgical techniques (eg, bras/gel inserts) are currently in practice to achieve breast symmetry. We describe a unique case of a young lady with Poland's syndrome, who presented with a lateralized right breast. We have used a V-Y advancement flap, along with a breast implant, to medialize the breast and achieve symmetry in contour and volume, followed by medialization of the nipple areolar complex. Using this technique produced an excellent result on our patient. We, therefore, feel that using the V-Y advancement flap is a novel and good option for dealing with difficult cases of lateralized breast. (*Plast Reconstr Surg Glob Open 2018;6:e1965; doi: 10.1097/GOX.0000000000001965; Published online 16 October 2018.*)

B reast asymmetry is a finding rather than a pathology that describes normal as well as abnormal conditions. Mild to moderate degree of difference in breast size, position, and contour is often expected in the developing adolescent. However, significant breast size differences persist through puberty into adulthood in some women. This can affect the social life and psychological well being of the individual.¹ Breast asymmetry can be caused by hyperplastic or hypoplastic conditions or maldevelopment. Size discrimination between the 2 sides is quite common, but we would like to present a unique case of breast maldevelopment, which resulted in the breast base being very lateral on the chest wall, and almost centralized over the anterior axillary line.

Various management options have been used in patients with breast asymmetry or deformity. These patients benefit from specialist psychological support to help them cope with their body image. Nonsurgical options include padded bras with foams or gel inserts that are fitted into a custom-made bra, help make up for the contour abnormalities under the clothes. Surgical options usually include breast augmentation for the smaller breast, breast

From the *Department of Plastic & Reconstructive Surgery, Bradford Teaching Hospitals NHS Foundation Trust, Bradford, United Kingdom; and †Plastic Surgery and Burns Research Unit, University of Bradford, Bradford, United Kingdom.

Received for publication April 6, 2018; accepted August 7, 2018.

Copyright © 2018 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal. DOI: 10.1097/GOX.000000000001965 reduction for the larger breast, or a breast up lift for a ptotic breast. In addition to addressing the asymmetry/deformity of the breast, deformity of the chest wall may need to be addressed using custom-made prosthesis or flaps in cases with Poland's syndrome. However, our case of breast asymmetry had a unique presentation that needed a custom-made solution to mobilize and build the breast.

An 18-year-old girl was referred to us with breast asymmetry. She had Poland's syndrome with developmental deformity of her right breast and chest wall, with a normal left breast that she was happy with. There were no associated limb anomalies. On examination of her chest (Fig. 1), there were 4 main issues with her right breast that needed to be addressed. (1) The breast base was lateralized into the axilla; (2) The lower pole was underdeveloped; (3) The nipple areolar complex was centered over the anterior axillary line; (4) There was lack of volume both due to less breast tissue and absence of sternal part of pectoralis major muscle. The clavicular head of the muscle was present.

We decided to address these issue in 2 parts, first to build the breast mound in the right place on her chest and second to place the nipple areolar complex in the correct place, centralized over her newly constructed breast. To achieve this, we planned on moving the lateral part of the breast, which was in the axilla on to the chest wall. This was achieved by carrying out a V to Y advancement flap. Using the same incision, a Becker 35 expander implant was placed in a subglandular plane. The implant pocket was dissected medially and inferiorly to address the lack of volume in these areas and construct a breast on a base corresponding in location to the contralateral side. The lateral boundary of this breast base

Disclosure: The authors have no financial interest to declare in relation to the content of this article. The Article Processing Charge was paid for by Mr. Ajay L Mahajan.

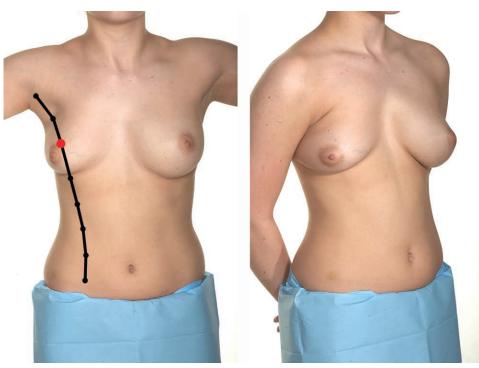


Fig. 1. Hypoplastic lateral breast centered over the anterior axillary line with the lateral half of the breast in the axilla. The nipple can be seen lateral to the milk line. The correct position of the nipple corresponding to the contralateral side is marked with the red dot on the milk line.

was the corner of the V flap. This was anchored to the chest wall, and the wound lateral to this was closed and anchored to the chest wall too, leading to the conversion of the V incision to a Y closure (Fig. 4). The combination of the use of the expander implant and the V to Y flap helped us to medialize the breast in to its correct position. The implant was then gradually expanded to address the volume deficiency in the medial and lower quadrants. When a satisfactory breast mound was constructed with the expansion, the implant was exchanged with an anatomical shaped silicone gel implant with a small implant in the contralateral side to achieve symmetry. The nipple was then moved superomedially based on a superomedial pedicle to address the final aspect of the asymmetry (Fig. 3). Generally, in a ptotic breast, the nipple is moved superiorly. In this case, the ptosis was toward the lateral aspect and the nipple has to be elevated superiorly and medially. The use of these techniques helped us to achieve a good contour, satisfactory match in symmetry, and a happy patient!

Poland syndrome manifests with features of ipsilateral breast and nipple hypoplasia and/or aplasia, deficiency of subcutaneous fat and axillary hair, the absence of the sternal head of the pectoralis major muscle, hypoplasia of the rib cage, and hypoplasia of the upper extremity.² The right side is affected twice as often as the left. In this

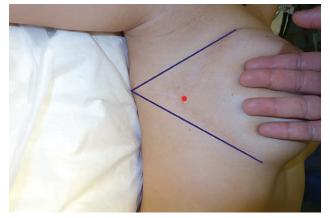


Fig. 2. Preoperative plan showing the "V" incision marking and the subsequent scar of the "Y" advancement. The red dot represents the advanced edge of the lateral border, which shows the significant mobilization of the breast toward the midline.



Fig. 3. Preoperative plan showing the intended advancement of the nipple areolar complex.



Fig. 4. The hypoplastic lateral breast has successfully been remodeled into a fuller, more natural looking breast and has been mobilized medially on the chest wall, along with its nipple areolar complex.

case, the breast was hypoplastic with the sternal head of pectoral muscle missing, but there was the additional deformity of the breast being lateralized on the chest wall. The breast can develop anywhere along the milk line that curves inward from the axilla toward the umbilicus, and it is not uncommon to find accessory nipples along this line (Fig. 1). However, the breast in our case was found lateral to this line, in the anterior axillary line.

V to Y advancement flaps have been used in varying clinical situations ranging from fingertip amputations and reconstruction of soft-tissue defects in the face and sternal area, to treatment of chronic anal fissures.³ We are not aware of their use in medializing the breast mound, and do feel that this simple technique is quite valuable in addressing this unique difficult clinical problem.

Priyatma P. Khincha, MRCS

Department of Plastic & Reconstructive Surgery Bradford Teaching Hospitals NHS Foundation Trust Bradford BD9 6RJ United Kingdom E-mail: priyatma.khincha@nhs.net

REFERENCES

- Nuzzi LC, Cerrato FE, Webb ML, et al. Psychological impact of breast asymmetry on adolescents: a prospective cohort study. *Plast Reconstr Surg.* 2014;134:1116–1123.
- Yiyit N, Işıtmangil T, Öksüz S. Clinical analysis of 113 patients with Poland syndrome. *Ann Thorac Surg.* 2015;99:999–1004.
- Sungur N, Kankaya Y, Gursoy K, et al. A local flap that never disappoints: V-Y rotation advancement flap. *Ann Plast Surg.* 2013;71:575–580.