

Ectopic breast tissue in a morbidly obese patient. A case report

Yuri Jiménez Caprielova M.D.
Caroll Toledo Nader M.D.
José Maria Zepeda Torres M.D.
Carlos Enrique Luna Guerrero M.D.

Jalisco, Mexico

Case report

Plastic Surgery



Background: Accessory breast tissue may appear as a mass at anywhere along the embryologic ‘mammary streak’. We present a case of axillary breast tissue in a morbidly obese patient. Although axillary breast is congenital in origin, enlargement is often associated with hormonal surges such as menarche or pregnancy. In this case it is possible to establish a causal relationship between the morbid obesity of our patient and the marked development of the axillary glands. Traditional liposuction is not very effective at treating symptoms of axillary breast, because it is difficult to remove the tough breast tissue, the need to protect nerve and blood vessels, and the difficulty in applying pressure dressings. Open surgery is the best option for most patients, with relatively limited liposuction used only for contouring.

Keywords: Axillary breast tissue, ectopic breast tissue.

Accessory breast tissue may appear as a mass at anywhere along the embryologic ‘mammary streak’. The face, neck, ear, lateral thigh, buttock, or the knee may rarely be the sites of aberrant or ectopic tissue. Aberrant or ectopic tissue can occasionally be found on the face, neck, ear, lateral thigh, buttock, or knee. There are an estimated 2-6% of women and 1-3% of men who have this congenital condition, and 20% of these are found in the axilla.(1) Accessory axillary breast tissue is present in a small percentage of women, typically between 2 and 6 percent. (2)

In 1915, Kajava published a classification that is still used (1,3,4):

1. Complete glandular breast tissue with areola and nipple
2. Nipple and glandular tissue, no areola
3. Areola and glandular tissue without a nipple
4. Glandular tissue only
5. Nipple and areola but no gland (pseudomamma)
6. Nipple only (polythelia)
7. Areola only (polythelia areolaris)
8. Patch of hair only (polythelia pilosa)

The right treatment technique is essential for obtaining good results. Although accessory breasts may not be noticeable, they can cause anxiety, cosmetic problems, pain, or restriction of arm movement. It is generally recommended that all accessory breasts be removed surgically.(5) Liposuction and surgical excision are the two main

modalities, both with their own advantages, limitations and complications (1).

Case report

This is a 47-year-old woman, who presents herself to the consultation for presenting excessive growth of axillary breast tissue, referred to by her as "balls" that have been growing and that currently bother her to dress, and that prevent her from free movement of arms. Background: diabetic, morbidly obese, BMI 50. Allergies denied. Medications: Metformin and Losartan. History Qx. previous cholecystectomy. On physical examination: An axillary tissue, pendulum, is observed on both sides that resemble second breasts due to the degree of growth (Figure 1A). Axillary Breast Tissue is diagnosed. Surgical Plan: Resection under general anesthesia. Once the preoperative and evaluation by internal medicine have been carried out. It is scheduled for surgery. Under general anesthesia with orotracheal intubation, mechanical washing and field placement are performed. An ellipse is drawn which covers the base of the axillary tissue and then proceeds to infiltrate the base with tumescent solution, which consists of sun. saline 1000 + xylocaine 2% (20 mls) 1 ampoule of adrenaline. Once the infiltration is done and the vasoconstriction is checked, the base of the axillary tissue is resected. The dissection is done by planes including skin, cellular tissue, up to the fascia of the pectoralis major muscle and the pectoralis minor. Once the dissection is done, hemostasis is performed, although the bleeding was minimal due to vasoconstriction, a drainage is left with Penrose. The



Figure 1. A. Bilateral axillary accessory breast. B. Post-surgical results

same procedure is then performed on the contralateral axillary tissue, following the steps already described. It concludes without incident. There were no postoperative complications. Penrose drain is removed on the 4th day and the sutures are removed on the 10th or day. The aesthetic result was satisfactory for the patient (Figure 1B).

Discussion

Although axillary breast is congenital in origin, enlargement is often associated with hormonal surges such as menarche or pregnancy. In this case it is possible to establish a causal relationship between the morbid obesity of our patient and the marked development of the axillary glands. In multiple studies, most of the patients presented in the 30-45 years; our patient is 47 years old. This tissue can go both cyclical hormonal changes and be affected by any type of benign or malignant breast pathology.(1)

A sub-classification of Kajava type IV breast, by location as follows is suggested (1):

- a. Para-mammary
- b. Central axillary
- c. Medial arm

Liposuction and excision are two well-known options for management of axillary breast.

Liposuction, used alone, often leaves a residual mass, mostly comprising breast tissue. Attempts to avoid leaving any residual mass would require the use of a sharp cannula as used in gynaecomastia. This is not feasible in the axilla, with important neurovascular structures passing through the mass.(1,4)

In any case, the incision needs to take place in the axilla and not directly on the mass. This is aesthetically beneficial(1).

Surgical excision allows to confirm the diagnosis, alleviate the aching, and restore the normal silhouette. (3) The maintenance of adequate flap thickness prevents depressions. Most women are happy to lose the hairbearing area during excisional surgery as in our case.

Excision alone can lead to long unsightly scars and dog ears.(1) A retrospective review of all patients who presented with axillary accessory breasts between July 1999 and October in a database showed a total of 28 women (80 per cent of those diagnosed) had surgery. Eleven patients experienced postoperative complications; the majority followed operations performed by a trainee. (5)

About the optimal timing for an operation, authors suggest is before the onset of pregnancy because this timing is associated with lower reoperation rates and greater patient satisfaction. (6)

Conclusion

Traditional liposuction is not very effective at treating symptoms of axillary breast, because it is difficult to remove the tough breast tissue, the need to protect nerve and blood vessels, and the difficulty in applying pressure dressings. Open surgery is the best option for most patients, with relatively limited liposuction used only for contouring. The position of the incision should be chosen so that the shoulder joint is abducted the most. The incision for a breast reduction should be made on the hair-bearing skin on the upper arm, near the shoulder. Nerves that are involved in a surgery must be carefully dissected to avoid any postoperative neurologic symptoms.

Axillary scars heal exceptionally well even though there is hair present.(1)

Conflicts of interests

There are no conflicts of interest

References

1. Bhave MA. Axillary breast: Navigating uncharted terrain. *Indian Journal of Plastic Surgery* [Internet]. 2015 Sep 1 [cited 2022 Oct 1];48(3):283–7. Available from: <http://www.thieme-connect.de/products/ejournals/html/10.4103/0970-0358.173126>
2. Baruchin AM, Rosenberg L. Re: Axillary breast tissue: clinical presentation and surgical treatment. *Ann Plast Surg*. 1996;36(6):661–2.
3. de La Torre M, Lorca-García • C, de Tomás • E, Berenguer • B. Axillary ectopic breast tissue in the adolescent. *Pediatr Surg Int* [Internet]. 2022 [cited 2022 Oct 1];38:1445–51. Available from: <https://doi.org/10.1007/s00383-022-05184-1>
4. Mazine K, Bouassria A, Elbouhaddouti H. Bilateral supernumerary axillary breasts: a case report. *Pan Afr Med J* [Internet]. 2020 May 1 [cited 2022 Oct 1];36:1–6. Available from: [/pmc/articles/PMC7572670/](https://pubmed.ncbi.nlm.nih.gov/32757267/)
5. Down S, Barr L, Baidam AD, Bundred N. Management of accessory breast tissue in the axilla. *British Journal of Surgery* [Internet]. 2003 Sep 22 [cited 2022 Oct 1];90(10):1213–Available from: <https://academic.oup.com/bjs/article/90/10/1213/614338>
6. Lee SR, Lee SG, Byun GY, Kim MJ, Koo BH. Axillary Accessory Breast: Optimal Time for Operation. *Aesthetic Plast Surg* [Internet]. 2018 Oct 1 [cited 2022 Oct 1];42(5):1231–43. Available from: <https://link.springer.com/article/10.1007/s00266-018-1128-8>

José Maria Zepeda Torres
Facultad de Medicina
Universidad Autónoma de Guadalajara
Jalisco, México