

HIDRADENITIS SUPPURATIVA: SURGICAL TREATMENT WITH LATISSIMUS DORSI MUSCLE FLAP

Hidradenite supurativa: tratamento cirúrgico com retalho do músculo grande dorsal

Jessica Ponte Portella¹ , Igor Araújo da Silva¹ , Laurinda Castellani¹ , Gustavo Zucca Matthes¹ 

ABSTRACT

The authors present a case report of a 53-year-old female patient who was admitted to the mastology and breast reconstruction sector, at Barretos Cancer Hospital, in 2018, to treat an invasive ductal carcinoma in the right breast. At admission, the patient complained of hidradenitis in the armpits and groin area, with no previous success with clinical or surgical treatment. Hidradenitis is a disease in which there is chronic inflammation of the apocrine glands. With this in mind, an extensive resection of the armpit lesion was performed, and the same right armpit incision was utilized for the sectionectomy and radiopharmaceutical-guided sentinel lymph node biopsy. As for the armpit reconstruction, a bilateral latissimus dorsi flap was used, resulting in an improvement of the patient's quality of life. With this case report, the authors demonstrate that a breast reconstruction technique could be used to treat a disease that so far had no surgical solution that would not result in confining anatomic consequences for the patient.

KEYWORDS: breast reconstruction; breast cancer; armpit; hidradenitis.

RESUMO

Os autores apresentam relato de caso de um paciente do sexo feminino e com 53 anos que foi admitido no serviço de mastologia e reconstrução mamária do Hospital de Amor, de Barretos, em 2018, para tratamento de carcinoma ductal invasivo de mama direita. Durante sua admissão, o paciente queixou-se de hidradenite de axilas e virilha, sem sucesso prévio com tratamento clínico ou cirúrgico. A hidradenite é uma patologia em que ocorre inflamação crônica nas glândulas apócrinas. Diante desse quadro, foi feita a ressecção extensa das lesões axilares, e utilizou-se a mesma incisão axilar direita para a realização da setorectomia e da biópsia de linfonodo sentinela guiados por radiofármaco. Para a reconstrução axilar, optou-se pelo retalho do músculo grande dorsal bilateralmente, que resultou em ganho de qualidade de vida para a paciente. Por meio do relato do caso, os autores demonstram que, com a utilização da técnica de reconstrução mamária, tratou-se uma doença que, até o momento, não apresentava nenhuma proposta cirúrgica que não resultasse em consequências anatômicas limitantes.

PALAVRAS-CHAVE: reconstrução da mama; câncer de mama; axila; hidradenite.

¹Hospital de Amor – Barretos (SP), Brazil.

*Corresponding author: l.castellani@hotmail.com

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INTRODUCTION

Hidradenitis suppurativa is a disease characterized by chronic inflammatory conditions in the apocrine glands, such as in the axillary and anogenital region. The prevalence ranges from 1 to 4%. Infundibular hyperkeratosis, hyperplasia of the follicular epithelium and periphericululitis are the main histological features of hidradenitis suppurativa. Known risk factors are smoking and obesity, which are present in more severe cases¹. It usually begins after age 40 and is more common in females (3.6/1 ratio)².

Treatment focuses on reducing the progression and extension of lesions and preventing new lesions, while minimizing scarring². The type of therapy used depends on the stage of the disease based on the Hurley classification (Table 1)².

In more advanced cases, the treatment of this disease is a challenge and has a substantial impact on patients' quality of life. We report a case of bilateral axillary hidradenitis suppurativa in which surgical treatment was with the latissimus dorsi muscle flap.

CASE REPORT

A female patient, 53 years old, was admitted to the Department of Mastology and Breast Reconstruction at Hospital de Amor in

Table 1. Hurley classification of hidradenitis.

Hurley classification	
Stage I	Abscess, without fistulization or scars
Stage II	Recurrent abscess with bridging and scars
Stage III	Diffuse abscesses or interconnected bridges and multiple abscesses

Barretos, Brazil in 2018, due to a diagnosis of invasive stage IIA ductal breast carcinoma on the right side. During evaluation, the patient reported an earlier diagnosis of underarm and groin hidradenitis and was already undergoing clinical and surgical treatment in another service, without success. She reported that due to severe hidradenitis suppurativa, no new surgical treatment was chosen because of the risk of loss of mobility in the region and lack of skin for closure. On physical examination, it was found the presence of extensive hidradenitis in the armpits with purulent discharge (Figure 1).

In the surgical treatment, extensive resection of the axillary lesions was chosen using the same right axillary incision for the radiopharmaceutical-guided sentinel lymph node and occult lesion localization and sectionectomy and biopsy (SNOLL). On the basis of the experience of the service and the quality of the flap, reconstruction was planned using a bilateral latissimus dorsi flap (Figure 2). The patient evolved well postoperatively, without flap distress, and was discharged with clindamycin 300 mg every 6 h for 14 days (due to infectious hidradenitis). For adjuvant treatment, the patient underwent chemotherapy, radiotherapy and hormone therapy. At outpatient visits, the surgical wound appeared to be in good shape, with dehiscence at small points (Figure 3). A small fistula was formed in the left armpit fold, with improvement after dressing. At 12-month follow-up, the patient showed excellent results, with substantial improvement in her quality of life (Figure 4).

DISCUSSION

Hidradenitis suppurativa, being a chronic inflammatory disease, is difficult to treatment, where there are local recurrences.



Figure 1. Bilateral axillary hidradenitis: preoperative.

Treatment can be done with antibiotics, immunomodulators, antiandrogens and immunosuppressants and laser and surgery therapies³. Antibiotics are used as initial treatment for severe hidradenitis, and the main treatment regimen is clindamycin + rifampicin. Isotretinoin, derived from vitamin A, is also widely used for inhibiting sebaceous secretion, but there are controversies regarding its efficacy². Tumor necrosis factor alpha (TNF-alpha) inhibitors provide evidence of their benefit in inflammatory response, but because of the high cost, they should be used in selected cases⁴. Another drug option is finasteride, an antiandrogen that inhibits the inflammatory response in the hair follicles and should be used with caution in men and women of childbearing age (with feminization even in male fetuses)². Even with a series of medications, there can be treatment failure, and surgery is needed to control the disease.

The major issue of surgical treatment is the large resections of the lesions, making it difficult to close the surgical wounds. Thus, it is necessary to use a flap to close them. In axillary hidradenitis, the thoracodorsal fasciocutaneous flap is one of the most commonly performed procedures in this type of disease, but has some complications, such as seroma, dehiscence and infection⁵. New flaps should be evaluated to improve the effectiveness of hidradenitis treatment.

The latissimus dorsi myocutaneous flap was initially described in 1906 by Tansini, where it was modified over the years, making it a safe and widely used flap⁶. Its technique is based on the preservation of the thoracodorsal pedicle, with rotation of the donor skin island towards the anterior trunk wall⁷. In the clinical case, due to the proximity of the axillary region, the flap was easily taken to close the resection.

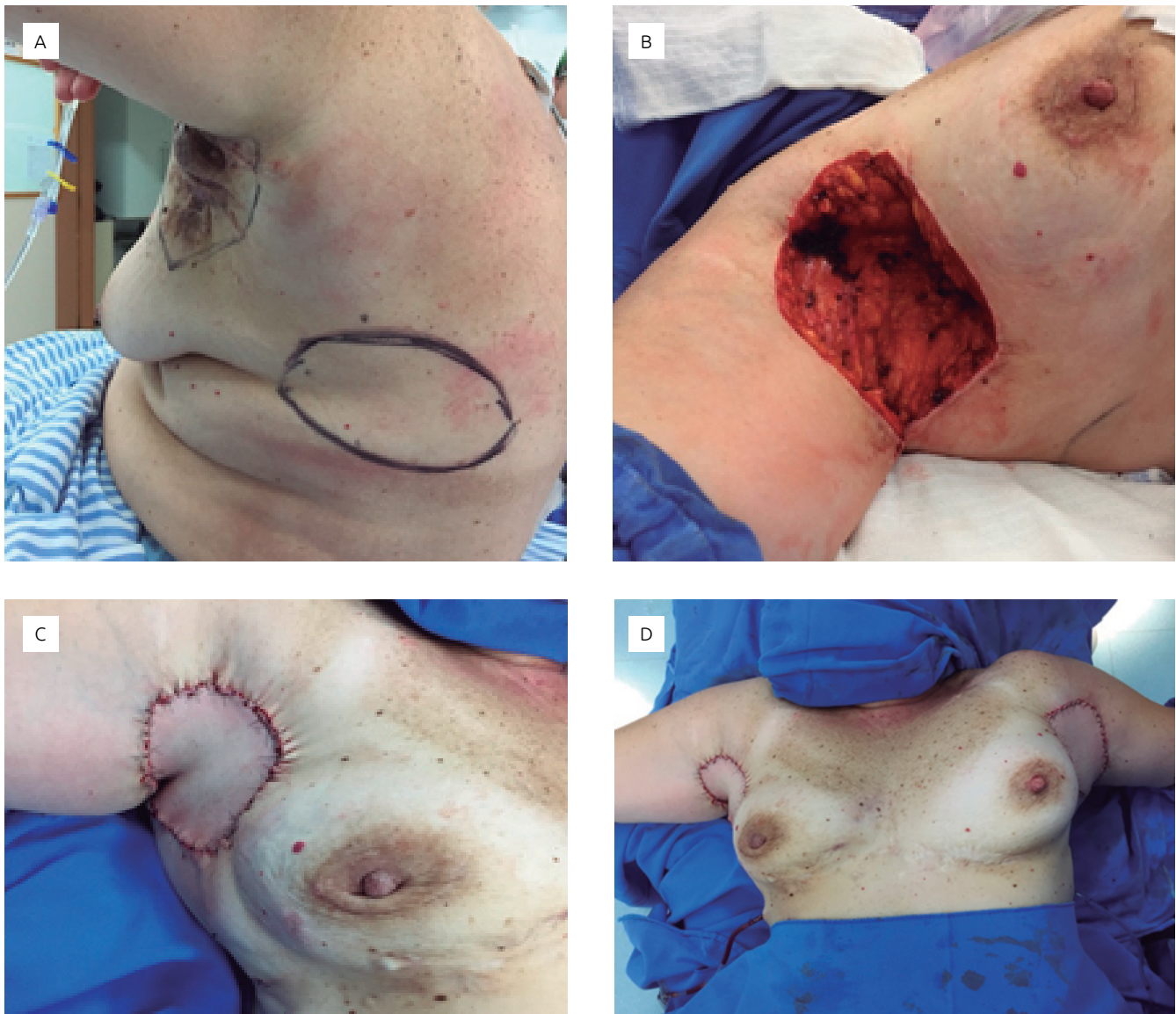


Figure 2. Rotation of latissimus dorsi flap for bilateral axillary resection closure. (A) Surgical marking of the skin island; (B) broad resection of axillary hidradenitis; (C) immediate result of right flap; (D) immediate bilateral result.

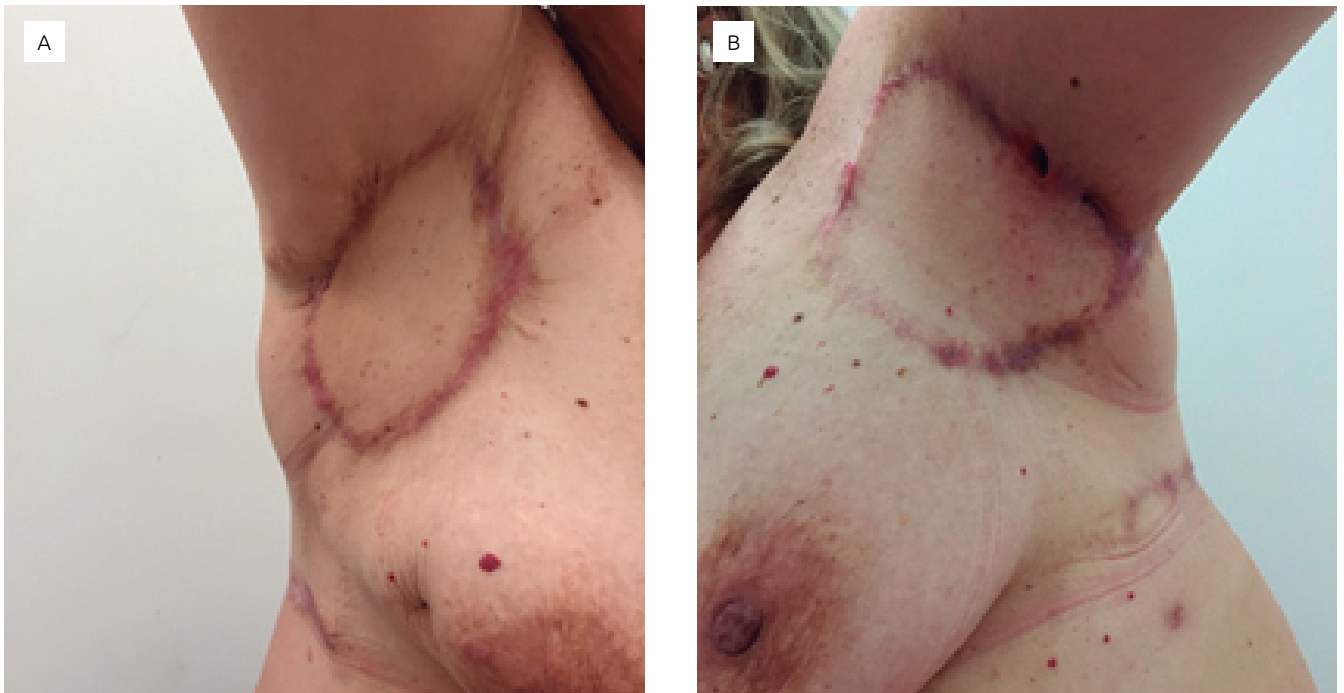


Figure 3. Early postoperative: (A) result of right axilla; (B) result of left axilla, with presence of fistula.



Figure 4. Late postoperative.

Complications are expected with myocutaneous flaps. In the case of the latissimus dorsi, the main complication is donor area seroma⁷. In this report, there was no occurrence of this type of complication, but the presence of a fistula in the left axilla required dressings to accelerate its closure. This complication can be expected because of the large resection and previous infectious state of the surgical site, an issue that is not considered serious, and in the end, there was a satisfactory aesthetic result.

Hidradenitis, especially when severe, has a major impact on the patient's quality of life, affecting well-being. The pain and

lesions make it difficult to live with other people, even in a marital relationship^{3,8}, which can trigger depressive symptoms⁹. Thus, in planning the treatment of such a condition, we must always think of the broad concept of health: physical, mental and social well-being, as proposed by the World Health Organization.

In the reported case, the initial treatment was for right breast cancer, but another pathology, i.e., hidradenitis suppurativa, was observed, which had a major impact on the patient's life. Thus, the use of a surgical technique in breast reconstruction to treat a disease that had not previously been proposed for surgery led to a significant improvement in the patient's quality of life.

REFERENCES

1. Wollina U, Koch A, Heinig B, Kittner T, Nowak A. Acne inversa (Hidradenitis suppurativa): A review with a focus on pathogenesis and treatment. *Indian Dermatol Online J*. 2013;4(1):2-11. <https://doi.org/10.4103/2229-5178.105454>
2. Muzy G, Crocco EI, Alves RO. Hidradenite supurativa: atualização e revisão de suas modalidades terapêuticas. *J Surg Cosmet Dermatol*. 2014;6(3):206-12.
3. Zarchi K, Dufour DN, Jemec GBE. Successful Treatment of Severe Hidradenitis Suppurativa With Anakinra. *JAMA Dermatol*. 2013;149(10):1192-4. <https://doi.org/10.1001/jamadermatol.2013.5377>
4. Alhusayen R, Shear NH. Pharmacologic interventions for hidradenitis suppurativa: what does the evidence say? *Am J Clin Dermatol*. 2012;13(5):283-91. <https://doi.org/10.2165/11631880-000000000-00000>
5. Mendes RRS, Zatz RF, Modolin MLA, Busnardo FF, Gemperli R. Radical resection and local coverage of hidradenitis suppurativa - acne inversa: analysis of results. *Rev Col Bras Cir*. 2018;45(3):e1719. <http://dx.doi.org/10.1590/0100-6991e-20181719>
6. Lamartine JD, Galdino Júnior J, Dahe JC, Guimarães GS, Camara Filho JPP, Borgatto MS, et al. Reconstrução mamária com retalho do músculo grande dorsal e materiais aloplásticos: análise de resultados e proposta de nova tática para cobertura do implante. *Rev Bras Cir Plást*. 2012;27(1). <http://dx.doi.org/10.1590/S1983-51752012000100010>
7. Matthes GZ, Vieira RAC. *Oncoplastia Mamária Aplicada*. São Paulo: Lemar; 2013.
8. Matusiak L, Bieniek A, Szepietowski JC. Psychophysical aspects of hidradenitis suppurativa. *Acta Derm Venereol*. 2010;90(3):264. <https://doi.org/10.2340/00015555-0866>
9. Onderdijk AJ, van der Zee HH, Esmann S, Lophaven S, Dufour DN, Jemec GB, et al. Depression in patients with hidradenitis suppurativa. *J Eur Acad Dermatol Venereol*. 2013;27(4):473-8. <https://doi.org/10.1111/j.1468-3083.2012.04468.x>
10. Napolitano M, Megna M, Timoshchuk EA, Patrino C, Balato N, Fabbrocini G, et al. Hidradenitis Suppurativa: from pathogenesis to diagnosis and treatment. *Clin Cosmet Invest Dermatol*. 2017;10:105-15. <https://doi.org/10.2147/CCID.S111019>