

New Techniques

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Hidradenitis suppurativa: V-Y plasty as a therapeutic option

Hidradenite supurativa: V-Y plastia como opção terapêutica

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ABSTRACT

Hidradenitis suppurativa is a chronic inflammatory, recurrent and debilitating skin disease. Its etiopathogenesis involves follicular occlusion and genetic, environmental and immunological factors. Diagnosis is predominantly clinical, and the therapeutic approach is a major challenge due to its impact on the patient's quality of life. The surgical option is the most indicated in severe cases, nevertheless there is no consensus on the ideal treatment, as outcomes are diverse, and the aesthetic aspect after the procedure is generally unfavorable. This article was aimed at reporting a surgical option with primary wound closure, whose aesthetic result was superior to those derived from traditional techniques.

Keywords: Hidradenitis Suppurativa; Hidradenitis; Dermatologic Surgical Procedures; Dermatology; Therapeutics

RESUMO

Hidradenite supurativa é doença inflamatória crônica, recorrente e debilitante. Sua etiopatogênese envolve oclusão folicular e fatores genéticos, ambientais e imunológicos. O diagnóstico é predominantemente clínico e a abordagem terapêutica é o principal desafio da doença, devido seu impacto na qualidade de vida. Em casos graves a opção cirúrgica é a mais indicada. Não há consenso sobre o tratamento ideal, pois os resultados são variados e o aspecto estético após o procedimento é geralmente desfavorável. O objetivo deste artigo é relatar uma opção cirúrgica com fechamento primário da ferida, cujo resultado estético foi superior ao das técnicas tradicionais.

Palavras-chave: hidradenite supurativa; hidradenite; procedimentos cirúrgicos dermatológicos; dermatologia; terapêutica

INTRODUCTION

Hidradenitis suppurativa (HS), also called inverse acne or Verneuil's disease, is a chronic, recurrent and debilitating inflammatory disease that usually manifests after puberty with painful lesions in the apocrine glands areas, most commonly in the axillary, inguinal and anogenital regions.¹ Currently, infundibular keratosis and follicular occlusion are known to be the most important factors in the pathogenesis of HS, and are linked to genetic predisposition, environmental factors and changes in the immune system.¹⁻⁴ The cytokines involved in this process are still being studied, however increases in IL-17, IL-1b, IL-10, TNF- α and IL-23 have already been described, suggesting the disease's autoinflammatory character, which would justify the use of biological medications in its treatment.⁴⁻⁶

Its prevalence is estimated in the range of 1% to 4%, and some factors such as smoking habits, obesity and secondary bacterial colonization are strongly associated with HS.^{3,5} The diagnosis is based on clinical analysis and is characterized by painful nodules, abscesses, *sinus*, cicatricial bands, and comedones in the typical cutaneous topographies: axillary, inguinal, perianal, and infra-mammary regions, in addition to the buttocks. It is a chronic disease with frequent recurrences.⁵

Treatment is the crux of the discussion due to the significant impact of HS on the patient's quality of life. Recently, studies have proven the presence of correlation between HS and increased risk of cardiovascular events.⁷ The indicated initial approach includes losing weight, quitting smoking, managing the pain, treating infections and wearing appropriate clothing.^{5,8,9} The Hurley's clinic classification is useful to indicate the severity of the disease and provide guidelines on the choice of therapeutic modality. This classification separates patients into three groups based on the presence and extent of scarring and sinus tracts: a) Stage I - single or multiple abscess, without sinus or scar; b) Stage II - one or more recurrent abscesses with sinus and scar formation, c) Stage III - multiple sinuses interconnected with abscesses in the entire affected area.^{5,9} Patients with mild to moderate degree of the disease can choose the treatment with topical and systemic antibiotic therapy and, depending on the response, evaluate the use of immunobiologicals such as infliximab and adalimumab.^{2,5,8,9} In cases of severe and / or refractory disease and Hurley's stages II and III, the surgical option is the ideal approach. The use of CO2 laser based excision can be considered for Stage III.²

The authors of the present paper present a case of a patient bearing HS, in which the surgical technique employed led to superior outcomes when compared to other methods described and commonly used.

CLINICAL CASE

A 16-year-old female patient sought care complaining of an axillary lesion that had emerged two years before. Clinical examination revealed bilateral extensive lesions in the axillary region, with abscesses, sinuous tracts and cicatricial lesions (Figure 1). Due to the clinical diagnosis of severe hidradenitis suppurativa (Hurley's Stage III), the authors decided for surgical



FIGURE 1: Clinical examination of the right axillary region revealed abscesses, sinuous tracts and cicatricial lesions



FIGURE 2: Demarcation of the surgical incision with multiple "v" shapes, circularly arranged in the axillary region



FIGURE 3: Complete excision of the lesion up until the subcutaneous tissue treatment after oral antibiotic therapy. The v-y plasty technique was chosen, with the incision being demarcated in multiple "v" shapes (Figure 2), followed by the complete excision of the lesion (Figure 3), closure of the wound by approaching the flaps (Figure 4), and primary suture with drain placement (Figure 5).



FIGURE 4: Approximation of the resulting flaps



FIGURE 5: Surgical wound closure by primary suture with drain placement



FIGURE 6: Late postoperative with the surgical scar restricted to the axillary region and satisfactory outcome resulting from the described technique

In the postoperative period, the patient had no interurrences and enjoyed comfort, absence of secondary infection in the surgical site and healing of the surgical wound, all of which culminating in a good aesthetic outcome (Figure 6).

DISCUSSION

Hidradenitis suppurativa is recurrent and has a considerable impact on the patient's quality of life since its clinical picture is commonly associated with pain, secretion discharge and local aesthetic deformity impose a limit to the bearer's daily activities. These factors, coupled with an increase in cardiovascular risk and depressive disorders, mean HS management an important challenge.^{1,9,10}

Patients with severe or refractory disease are indicated for surgical treatment. Among the techniques described are the locally limited or wide excisions, followed by primary or second intention closure, flaps (cutaneous, myocutaneous and fasciocutaneous) and grafts. Other therapeutic options are the CO₂ laser and the ablative Nd:YAG laser. Currently, radical excision is the treatment of choice for severe HS.

The V-Y plasty consists of performing a triangular incision and advancing the flap to cover the y-shaped defect. In this way, it was possible to observe a reduction in local tension, which contributed to the prevention of the cicatricial contracture and provided greater comfort for the patient, with a considerably favorable aesthetic outcome when compared to other techniques traditionally performed for the treatment by second intention and direct closure. It is a surgical technique that did not present complications in the immediate and late postoperative periods, and should be regarded as a therapeutic option, especially in cases of severe HS ●

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