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Case Report

Case series: The modified skoog approach for definitive management of severe hidradenitis suppurativa of the axilla

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ABSTRACT

Hidradenitis Suppurativa (HS) is a chronic, recurrent, suppurative, cutaneous disease, manifested by abscesses, fistulating sinus tracts and scarring (Brown, Rosen, & Orengo, 1998). After failed conservative management, surgical excision is the only definitive option (Edlich et al. 1986). There are several approaches to the excision and wound closure of axillary HS, mostly involving radical excision with associated risks of poor wound healing despite advanced wound closure techniques. We present a case series using the Modified Skoog approach for the management of axillary HS as a skin sparing technique that offers adequate wound healing, a short hospital stay and high patient satisfaction.

Background and introduction

Hidradenitis Suppurativa (HS) is an inflammatory process of the apocrine glands, whose distribution it closely follows. Its pathology originates at the terminal epithelium of the hair follicle,[1] where inflammation leads to occlusion and obstruction of the apocrine glands draining into the follicle at the pilosebaceous interface.[2,3] This cascades into dilation of ducts and sweat glands with rupture and

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spillage of contents including bacteria into the surrounding dermis and tissues. The clinical manifestations are abscesses and chronic inflammatory changes associated with HS.[4,5]

HS of the axilla can be a distressing problem for a patient. Conventional treatment ranges from topical and systemic antibiotics to radical excision with healing by secondary intention or flap coverage. Recently, the use of hormonal, immunosuppressive drugs, antibodies,[6–8] laser therapies[9] and radiofrequency ablation[10] has been described for mild to moderate disease. Surgical resection of involved tissue remains the mainstay for definitive management of severe disease.[11] Surgical resection traditionally leaves a skin deficit, creating a problem of coverage. We present an alternative skin sparing treatment method for severe HS which has been traditionally used to treat axillary hyperhidrosis.

Case series

Method

Nine (9) patients presented to our service from 2010 to 2013 with long-standing recurrent axillary abscesses. Three patients had bilateral disease, resulting in twelve treated axillae. Patients ranged from 24 to 48 years old with a median age of 29 years. The population was West Indian of Indo-Trinidadian, Afro-Trinidadian and Mixed ethnicities. All patients had recurrent disease despite previous conservative treatment with antibiotics plus or minus intermittent drainage procedures. All severe active infection was completely treated with antibiotics prior to the surgery. Any patients with HS that resolved with other forms of management were excluded. No patients met the exclusion criteria.

Clinical examination revealed obvious HS characterized by abscesses, scarring and sinuses of the apocrine distribution of the axillae. Surgery was offered to remove the apocrine bearing tissue while sparing the dermis and epidermis. The surgical technique was as follows:

1. General anaesthesia with standard preparation and infiltration of 1% lignocaine and epinephrine(1:100,000) to the affected axilla
2. The axilla was exposed with the arm in external rotation and abduction.
3. The apocrine distribution of the axilla is defined by marking an oval to include clinically involved tissue.
4. Methylene blue is injected into the sinuses for later identification in the resected tissue
5. Two parallel skin crease lines are drawn to divide this oval into a middle 50% and lateral 25% on either side. This represents the actual incisions. Any residual active disease is included as an ellipse within one of the incision lines (Figure 1). Care is taken to ensure that the skin flaps were made with a wide base (at least half length of incision to increase vascular supply)

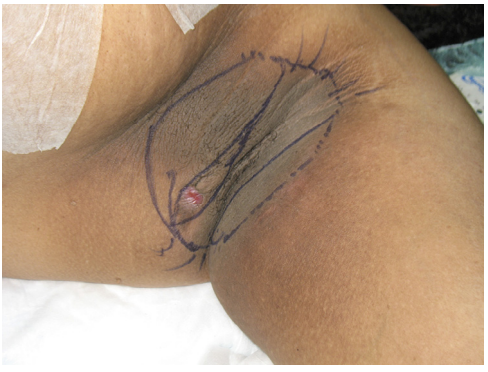

Figure 1. Left axillary incision planning.