

Use of hydrocolloid dressing following wide excision of perianal hidradenitis suppurativa

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Summary

Hidradenitis suppurativa is a chronic inflammatory disease of the apocrine sweat glands of the skin. Occurrence in the perianal region is rather frequent (30 per cent) but the lesions are often misdiagnosed, leading to inappropriate surgical treatment of fistula-in-ano and subsequent iatrogenic lesions. We have been faced with 5 such desperate situations evolving for several years (range: 4–35 years). These patients presented multiple abscesses and chronic sinuses in the entire perianal area and in the groins.

Wide excisions of perianal lesions were performed and the perianal wounds were allowed to heal by granulation. Starting on the third post-operative day hydrocolloid dressings were applied daily to the site of excision. The cosmetic result was satisfactory and the technique caused little limitation of movement. The use of hydrocolloid dressings in the post-operative phase were found to minimize patient discomfort and allow faster post-operative mobilization; to be less painful than conventional gauze dressing; to demand less nursing time; and to remain dry for longer periods, accelerating the patient's return to normal life. Cosmetic results were also satisfactory. The mean duration of post-operative hospitalization was 20 days (range: 4–50 days) and time taken for complete healing was 9 weeks (range: 4–16 weeks).

Introduction

Verneuil's disease (1854) is classically described as a chronic hidradenitis suppurativa of the apocrine sweat glands of the skin. The apocrine glands are restricted in their distribution to some regions of the skin: the axillary, mammary, inguinal, genital and perianal regions.

According to Jackman and McQuarrie (1949), the axilla is apparently the commonest site of Verneuil's disease (72 per cent). The perianal region is the second most frequently involved region (32 per cent). Unfortunately this disease is often overlooked when it affects the perianal region, mainly because it has not been thought of or not been recognized.

The worst aspect of the perianal location of this disease is the fact that sometimes the lesions are mistaken for fistula-in-ano and treated accordingly. Iatrogenic lesions and inappropriate surgical scars will then complicate the clinical picture and delay the correct surgical treatment.

Those are the situations we were faced with in 5 advanced cases of hidradenitis suppurativa.

Materials and methods

Patient material

From January 1982 to January 1984, we treated 5 male patients presenting extensive perianal lesions of hidradenitis suppurativa (age range: 24–58 years). During the same period only 1 case of Verneuil's disease restricted to both axillary regions was treated in a female patient. Evolution of the disease was characterized by frequent remissions alternating with relapses over periods of time ranging from 4 to 35 years.

At the time of diagnosis all patients had undergone several surgical operations for drainage of perianal abscesses and/or for laying open low anal fistulae. One patient was even assumed to have a transsphincteric fistula and was treated accordingly without success.

Two patients presented also untreated pilonidal sinus and axillary lesions of Verneuil's disease. Two patients who had been affected for more than 20 years presented themselves to the emergency room: 1 after a severe alcoholic debauch and the other after a suicide attempt. These 2 patients were psychologically, socially and sexually disturbed by the severity and long range evolution of their disease.

Blood tests showed in each patient an inflammatory syndrome with elevated white cell counts.

Clinical features on admission were the large extent of the lesions in the perianal region (Fig. 1), but also groin lesions and scrotal lesions. The subcutaneous tissues were diffusely thickened with scattered nodules or superficial pustules. The presence of numerous sinus opening and tracks was also noticed, but no obvious cavity could be demonstrated. Some sinuses were intercommunicating.

Treatment

All patients were operated under peridural anaesthesia. Complete single stage excision of the lesions was performed except in the first case, probably because of the extension



Fig. 1. Perianal hydradenitis suppurativa in a 24-year-old male patient.

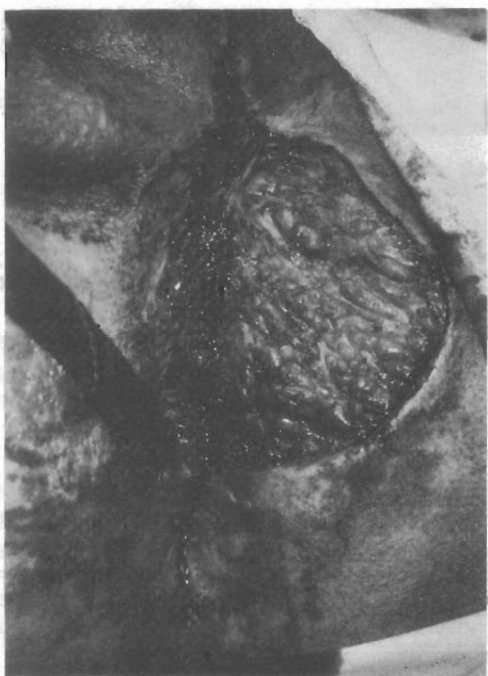


Fig. 2. Surgical excision performed down to the underlying fascia (case illustrated in Fig. 1).

of his lesions and because of the fact we were still insecure about the treatment of such an unusual pathology. In this particular case complete excision of the lesions required 2 stages.

The involved skin and the subcutaneous tissues were excised down to the underlying fascia (Fig. 2). A maximum of subcutaneous fat was also removed, because in such advanced stages of the disease the suppuration has already developed sinus tracks.

In one case with pubo-inguinal and scrotal extensions of the disease radical excision of the skin in the flexural creases of the groins and of the adjacent scrotal skin was also performed. An attempt was also made to preserve intact skin bridges between the different areas of excision in order to allow faster healing by granulation.

At the end of surgical excision, the wounds were rinsed with povidone-iodine solution and packed with antiseptic gauze pads. On the third post-operative day, the dressings were removed 15 min after intra-muscular injection of 10 mg piritramide (Dipidorol®; Janssen Pharmaceutica).

Wounds were irrigated with normo-saline solution, then dried and hydrocolloid dressings (Duoderm®; Squibb Surgicare) applied to the wounds. The sheets of hydrocolloid dressings were cut in order to obtain a precise map-making of the wounds so that the whole of the excised areas was adequately covered by the dressing.

Application of the dressing was made easier after heating it for 1 min duration under a 75-watt spotlight. Dressings were changed every 24 h for at least 15 days. Narcotic injections were generally not required after the second dressing change. As soon as healing by granulation was progressing and when dressings were still dry after 24 h, the sequence of dressings change was reduced to once every 48 h. In order to hold the dressings in place, we applied special tightly fitting underwear that we use routinely after ano-rectal surgery.

Following discharge from the hospital the patients attended a follow-up clinic twice weekly; wounds were carefully inspected, irrigated and a new hydrocolloid dressing was moulded before being applied. Excessive granulation could be controlled easily by early application of silver nitrate by means of a special silver-nitrate pencil.

Needless to say, the enthusiasm and the competence of the nursing staff were of major importance in the care of the patient and the result of treatment.

Results

No post-operative complication was recorded. All wounds healed completely, but time taken for healing was rather different between patients. Mean post-operative hospital stay and mean time taken for healing are detailed in Table 1. Those numbers can appear high, but for the patients such a relatively long hospital stay was nothing compared with the length of their evolution (4–35 years of perianal suppuration!).

Table 1
Radical excision of perianal hidradenitis suppurativa followed by hydrocolloid dressings

No. of patients	Post-operative hospital stay	Time to healing
5	Mean 20 days (range: 4–50)	Mean 9 weeks (range: 4–16)

Our results would be far more impressive if we had discounted the first patient we had to deal with, for whom radical excision was not performed in one stage.

There have been no recurrences so far, after a mean follow-up of 18 months (range: 6–36 months).

Cosmetic result is excellent in 3 cases (Fig. 3). No patient presents loss of mobility of hip joints, wound contracture or anal incontinence. All patients had re-established their social and professional activities 3 months after initial treatment.



Fig. 3. Cosmetic result obtained in the same patient.

Discussion

The deep infection of the perianal skin described in detail by Verneuil (1854) is one of the causes of suppuration of the anal region not related to anal fistula.

It is likely that hidradenitis suppurativa is related to acne conglobata and pilonidal sinus. According to Lever and Schaumburg-Lever (1983), the *primum movens* of this disease is a chronic suppurative folliculitis rather than an hidradenitis. At any rate the treatment is surgical. Antibiotic therapy is efficacious for acute contamination of the lesions, but will not cure the disease by itself. None of our patients received any antibiotic drugs.

We think that perineal and perianal lesions of hidradenitis suppurativa should be widely excised. Healing can then be obtained by secondary intention.

Free skin grafts after excision or primary closure are satisfactory alternatives for axillary hidradenitis suppurativa. However those techniques are inappropriate for treatment of highly contaminated perianal lesions. In fact a variety of microorganisms can be cultured from the chronic sinuses and the discharging tracks of advanced

perianal hidradenitis suppurativa. Contamination of the sites of excision by these microorganisms at the time of surgery or afterwards will inevitably lead to wound infection if primary closure has been performed, or to graft failure if primary split skin grafts have been applied to the sites of excision.

The classic method of excision followed by healing by granulation is still the safest and, most likely, the fastest technique for perianal lesions.

Hydrocolloid dressing is an indisputable improvement as far as minimizing patient discomfort is concerned. It also allows rapid mobility of the patients. Furthermore, this technique is less painful than conventional gauze packing, and less demanding of nursing time.

After the first week of treatment the patient can also become familiar with dressing changes, and no longer be perpetually soaked by damp dressings. His social restoration is therefore accelerated and he is able to return to active normal duties before complete healing is obtained.

Hydrocolloid dressing in our experience has brought the same advantages as Silastic foam dressing described by Hughes and colleagues (Margan *et al.* 1980), but that are not readily available in Europe.

Our conclusions concerning the use of hydrocolloid dressings following wide excision of perianal hidradenitis suppurativa are as follows:

1. It minimizes patient discomfort and allows faster post-operative mobilization.
2. It is less painful than conventional gauze packing of the wounds.
3. It demands less nursing time.
4. Patients can keep dry dressings for a longer time which accelerates their return to normal life, even before complete healing.
5. Cosmetic results are satisfactory.

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