

EXTENSIVE GROIN AND PERINEAL HIDRADENITIS SUPPURATIVA COMPLICATED BY HIGH FISTULA IN ANO

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SUMMARY

Anal fistula is a common cause of perianal sepsis in surgical practice. We share our experience in the management of a high fistula in ano caused by hidradenitis suppurativa an uncommon condition in Ghana.

Keywords: Hidradenitis suppurativa, fistula in ano, seton.

CASE REPORT

A thirty two year old Ghanaian male who has been domiciled in the United Kingdom for ten years presented to the surgical clinic with a history of chronic perineal sepsis and multiple discharging sinuses of the perineum, groin, buttocks and the natal cleft (Figure 1) of four years duration. Discharge was purulent and had a fishy odour and had persisted despite repeated courses of antibiotics prescribed in the UK. He had no diarrhoea or bleeding per rectum.



Figure 1 Extensive perineal sepsis secondary to hidradenitis suppurativa in the patient

He also had a history of bilateral axillary hidradenitis suppurativa and had had excision and split skin grafting of the right axilla three years prior to presentation in Ghana. He had been a smoker who

smoked about a packet of cigarettes daily for about ten years but had stopped smoking for about a year before presentation.

The frustration of apparent failure of medical treatment in the UK brought him to Ghana to seek herbal treatment. After six months of herbal treatment there was no improvement in his condition which actually worsened during the period. Due to the offensive nature of the discharge from the perineal sinuses he had become an outcast. He therefore sought help in the surgical department of the Korle-Bu Teaching Hospital.

On presentation he looked well though was very worried and apprehensive. He was afebrile and had areas of healed sinuses in the left axilla and a grafted right axilla. There were extensive areas of multiple discharging sinuses involving both groins, the perineum, the buttocks and the area of the natal cleft. The perineal discharge had an offensive fishy odour and was purulent. There was accompanying discharge from the anus. No mass was however, palpable in the anus on digital examination. All other systems were normal.

An initial diagnosis of multiple anal fistulae secondary to hidradenitis suppurativa was made and investigations ordered to exclude tuberculosis, HIV and diabetes mellitus. Haemoglobin was 14.5g/dl, white cell count (WBC) was $9.5 \times 10^9/l$, with a neutrophilia of 78%. ESR was 50mm fall/hour Westergren. Chest x-ray was normal and HIV test on two occasions were non reactive. The fasting blood sugar was normal. Culture of the perineal and groin discharge grew mixed organisms of *Staph. aureus*, *E. coli*, and *Strep. faecalis*. Anaerobic culture was not done.

He was initially given a course of ciprofloxacin and metronidazole for a week and was scheduled for excision of perineal skin and fistulotomy.

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The findings at operation were extensive hidradenitis suppurativa of the perineum, groin, buttocks and the natal cleft with multiple blind sinuses (Fig 1). There was however, a single high fistula track on the right lateral aspect. Sigmoidoscopy and proctoscopy showed a single internal fistula opening above the dentate line. The rest of the anal and rectal mucosae were normal.

Excision of the involved skin and laying open of the multiple tracts were performed. The high fistula was treated with the insertion of a nylon number 2 cutting seton which was tightened daily till it cut through in fifteen (15) days. The wounds were dressed with povidone iodine impregnated gauze and postoperatively the patient had twice daily sitz baths after every bowel movement. He had inspection of his perineal wounds under anaesthesia after three weeks during which sinuses which were missed during the initial operation were laid open or excised. He did well postoperatively and the wound granulated well and contracted well (Figure 2). He was continent of faeces. He was eventually discharged from hospital after six weeks. Ten weeks after excision his wounds healed fully and he went back to the UK.



Figure 2 Good granulation tissue and healing following extensive excision of perineal hidradenitis suppurativa.

Histology of the excised specimen confirmed hidradenitis suppurativa.

He was seen a year later and was doing well with small areas of hidradenitis suppurativa of the back and the axilla. There was no recurrence of perineal hidradenitis suppurativa. The left axillary and the back lesions were excised and grafted with split skin graft with good results. The patient went back to the UK and has been lost to follow up.

DISCUSSION

Hidradenitis suppurativa is a chronic suppurating infection that affects the apocrine glands of the axilla, groin and the perineum^{2,3,4,5}. The disease begins with the obstruction of the apocrine gland duct, resulting in the infection of the retained secretions. Following gland obstruction, there is rupture of the gland with spread of infection into the dermis leading to abscess formation and involvement of other apocrine glands^{3,4,5}. There is the formation of multiple intradermal abscesses which lead to the development of multiple sinuses, fistulae and scarring of the skin. Occasionally the disease extends beyond the dermis into the subcutaneous fat, fascia and muscle. Alternatively the disease is thought to originate from follicular occlusion with secondary involvement of the apocrine glands.⁴ Aetiology may also have a genetic component whose expression is probably influenced by sex hormones.⁴ The organisms involved are mixed but the presence of anaerobic organisms impart an offensive smell to the pus discharge.^{1,2}

Hidradenitis suppurativa has also been known to cause perianal abscesses which can lead to fistula-in-ano formation but this is not the usual course of the condition. Fistula-in-ano usually results from neglected perianal or ischioanal abscesses but can also be complications of chronic inflammatory diseases like tuberculosis, and Crohn's disease that affect the anus. Occasionally fistula-in-ano results from anal or rectal carcinoma. Chronic severe hidradenitis suppurativa is also known to cause squamous cell carcinomas in the perianal region.⁶ The disease is also associated with obesity and tight clothing, poor hygiene, smoking as seen in this patient, deodorant use, chemical depilation and diabetes mellitus^{2,4}.

Medical treatment in the form of antibiotics, hormonal therapy^{3,4,5}, retinoids^{3,4,5}, immunosuppression^{3,4,5}, intralesional steroids⁵, and radiotherapy^{3,4,5} can offer temporary relief only. The most effective treatment of hidradenitis suppurativa is excision of the affected area^{3,4,5} and split skin grafting, flap advancement or leaving the wounds to heal by secondary intention. Alternatively, the multiple sinuses can be laid open and allowed to granulate and heal.

Low anal fistulas are treated surgically by deroofing (fistulotomy) or complete excision of the track (fistulectomy). High fistulae on the other hand if treated by these methods may result in incontinence since the anal sphincters have to be cut if fistulotomy or fistulectomy is performed. The use

of a cutting seton allows for the treatment of high fistula-in-ano by controlled cutting of the anal sphincter muscles gradually which allows healing to take place behind the seton⁷. This case illustrates a case of fistula-in-ano resulting from hidradenitis suppurativa which has been adequately treated by wide excision, insertion of a cutting seton and sitz baths.

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