No organisms were identified on PASD or H&E. Tissue culture grew coagulase-negative staphylococcal species, and mycobacterial cultures were negative. Biochemistry showed ongoing transaminisits thought to be a remnant side effect to previous antituberculosis medications. Her white cell count and eosinophils were both within normal ranges.

A diagnosis of acneiform drug reaction secondary to ethionamide was made. Ethionamide was ceased about 5 weeks after the onset of the acneiform eruption. We considered commencing her on oral doxycycline, but due to her ongoing transaminisits and poor tolerance of many previous antibiotic therapies, she was not commenced on any specific therapy for her eruption. The eruption settled spontaneously, and on review about a month after ceasing ethionamide, the papulopustular lesions had almost all resolved, albeit with marked postinflammatory hyperpigmentation (Fig. 1c,d). Some scattered comedones remained, which was in keeping with the mild background acne that she had since adolescence.

The sudden onset of the eruption a few weeks after commencing ethionamide, the extensive involvement and the fairly dramatic improvement upon cessation of the drug are consistent with the eruption being induced by ethionamide. Although the patient did suffer from underlying acne since adolescence, this had been quite mild and had essentially been limited to the face. Based on the Naranjo algorithm, an adverse drug reaction is probable (Naranjo score 6).3

Ethionamide is a second-line agent used in the treatment of multidrug-resistant tuberculosis. It is a prodrug, which when activated, inhibits synthesis of mycolic acid, a key component of the mycobacterial cell wall. Ethionamide is a structural analogue of isoniazid, another antituberculosis drug that has been associated with acneiform drug eruptions.4 Ethionamide has been associated with cutaneous adverse drug reactions including drug rash with eosinophilia and systemic symptoms (DRESS) and Stevens-Johnson syndrome (SJS).4 Although ‘acne’ is listed as a possible adverse effect of ethionamide in the product prescribing information, we were unable to find any case reports or studies that describe this adverse effect. To our knowledge, this is the first description of the clinical characteristics of an acneiform eruption secondary to ethionamide. Based on our case report, ethionamide may cause a predominantly papulopustular monomorphic acneiform eruption on the face, upper trunk and arms, which settles fairly quickly upon cessation of the medication, without any treatment.

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Clinical Letter

Management of genital hidradenitis suppurativa and lymphoedema with the restoration of erectile function

Hidradenitis suppurativa (HS) involving the anogenital and inguinal regions can cause considerable morbidity. Genital lymphoedema is an under-recognised complication of long-standing severe HS. Despite the advent of immunomodulatory therapy, surgical management is still required in some situations. We present a case of anogenital HS with associated genital lymphoedema and discuss the multidisciplinary management of this disease.

A 40-year-old man developed scrotal and penile lymphoedema after a 20-year history of treatment-resistant, anogenital and inguinal, Hurley Stage III HS (Fig. 1a,b). His disease had caused impotence, notwithstanding weekly adalimumab 40 mg with intermittent intralesional steroid injections, doxycycline and a combination of clindamycin and rifampicin for 2 years. Given extensive induration and lymphoedema, he proceeded to surgery without interruption to adalimumab.

Circumcision was performed to enable the visualisation of the buried and obscured glans and urethral meatus, necessary to facilitate urinary catheterisation. Excision of the inguinal and scrotal disease began in the upper inguinal regions and progressed to the perineal body, with the
use of a preoperative MRI (Fig. 2a) to identify the location of the testicles that were impalpable. Following the excision of the inguinal and scrotal disease (Fig. 2b,c), the defects were reconstructed with fenestrated sheets of split-thickness skin graft (Fig. 2d) and covered with a vacuum-assisted closure dressing (Fig. 2e).

Promptly following the procedure, the patient reported regained erectile function. A marked functional and cosmetic improvement was achieved (Fig. 1c,d), including a reduction in penile lymphoedema and induration. The residual perineal HS lesions resolved over next the 6 weeks, while the surgical wounds were healed by 2 months postoperatively.

Hidradenitis suppurativa significantly impairs patients’ quality of life, more so than many other dermatological conditions. Persistent poorly controlled HS results in diffuse scarring, fibrosis and lymphoedema that can impact micturition, social and sexual functioning.

Tumour necrosis factor-alpha inhibitors, namely adalimumab, have significantly improved the management of severe HS. Preoperative medical optimisation can reduce the burden of active disease, thereby reducing the extent and technical difficulty of surgery, and minimising the risk of complications. However, once lymphoedema becomes severe, further inflammation and infection may result, producing a positive feedback loop. Consequently, HS often requires a combination of medical therapy and surgical intervention to maximally control the disease and restore function and cosmesis. This is particularly true in the setting of genital lymphoedema. Furthermore, there is animal evidence to suggest that the lymphangiogenic properties of 9-cis retinoic acid may be useful in the management of lymphoedema.

Surgery, in this case, resulted in improved mentation and resolution of the residual anogenital disease. We postulate this was likely due to a reduced chronic inflammatory burden resulting in enhanced biological efficacy of the adalimumab.

Penile lymphoedema is known to often improve with scroctomy, as occurred in this case, hence it was not excised initially. However, there was likely some fat deposition and fibrosis, which may require further surgery.

This case highlights the need for combined medical and surgical approaches in treating male anogenital HS with lymphoedema. Surgery may improve disease control, sexual function and enhance biological efficacy by lessening the systemic inflammatory burden.

Figure 1 Pre-, and postoperative Images. (a) The extensive mass of inflammation and infection affecting the scrotum, groins and penis preoperatively. (b) 2 weeks postoperatively showing good take of the skin grafts. (c and d) 6 months postoperatively showing mature skin grafts free of disease and a less lymphoedematous penis.
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