Skin conditions of the male genitalia

Chris Bunker

Abstract

Non-sexually acquired male genital dermatoses occur most commonly in the uncircumcised. They can cause psychological morbidity and sexual dysfunction, amounting to male dyspareunia. Some, such as lichen sclerosus, have a significant precancerous potential. Diagnosis depends on accurate history taking, systematic examination of the anogenital area (and often the extragenital skin) and investigations to exclude diabetes, sexually transmitted infections and cancer. Some patients require a biopsy. Specific management depends on the clinicopathological diagnosis. General and non-specific interventions include avoidance of contact with soap and urine, and the use of soap substitutes and moisturizers. Many people with genital skin problems 'overwash', compounding the problem and creating irritant contact dermatitis. Failure of maximal conventional medical management usually necessitates the surgical intervention of circumcision.

Keywords Bowen's disease; bowenoid papulosis; carcinoma in situ; dyspareunia; erythroplasia; foreskin; Kaposi; lichen planus; lichen sclerosus; penis; psoriasis; pyoderma gangrenosum; Zoon's

What's new?

- Understanding of male dyspareunia and the dysfunctional foreskin has increased
- Less mutilating surgery can be offered for penis cancer and pre-cancer

Prominent sebaceous glands

Tyson's glands, sebaceous hyperplasia and ectopic sebaceous glands (of Fordyce) are common normal variants of the skin of the scrotal sac and penile shaft, but may be of concern to patients (Figure 1). It is unusual for the lesions to occur on the glans. Reassurance is usually adequate, but the patient shown here developed somatopsychic symptoms amounting to dysmorphophobia.

Angiokeratomas

Angiokeratomas (of Fordyce) are blue-purple, smooth papules on the scrotum or penile shaft that appear and multiply during life. They may bleed, and are sometimes misdiagnosed as Kaposi's sarcoma. The angiokeratomas of Anderson–Fabry disease (angiokeratoma corporis diffusum) are smaller, less hyperkeratotic, pinhead lesions that are found more extensively around the lower limb girdle.

Pearly penile papules

Pearly penile papules (Figure 2) are common (up to 15–20% of men) and present as flesh-coloured, smooth, rounded papules (1–3 mm), predominantly around the coronal margin of the glans, often arranged in parallel rows or concentric rings. They are often mistaken for warts by both patients and physicians, and can be misdiagnosed as Tyson's glands or ectopic sebaceous glands. The histology is that of angiofibroma. Confident reassurance is the recommended approach to management, but cryotherapy can be effective.[1]

Chronic 'idiopathic' penile oedema

Chronic 'idiopathic' penile oedema (Figure 3) is uncommon and is thought to result from chronic/recurrent staphylococcal/streptococcal cellulitis/lymphangitis of the prepuce, the penis and sometimes the lower abdominal wall. Sexually acquired infection should be excluded, swabs taken and the anti-streptolysin O titre measured. Crohn's disease, sarcoid and pelvic tumours must also be excluded. Treatment is with long-term antibiotics (occasionally short courses of oral corticosteroids) and eventual circumcision.[2,3]

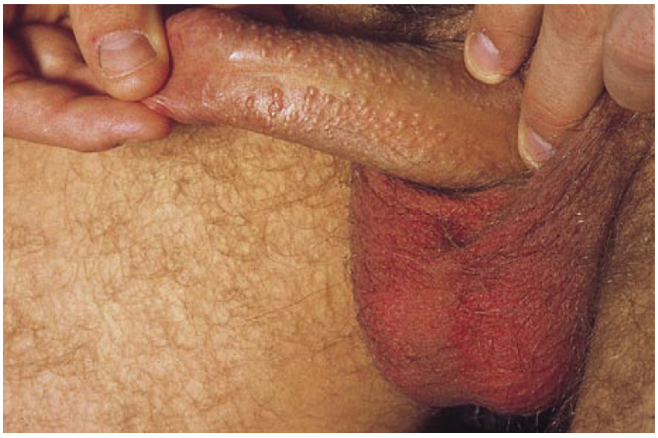

Figure 1 Prominent sebaceous glands.

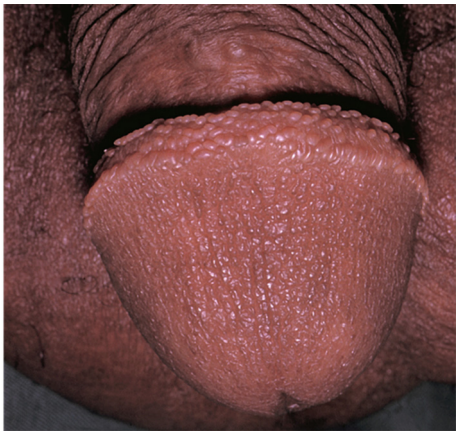

Figure 2 Pearly penile papules.

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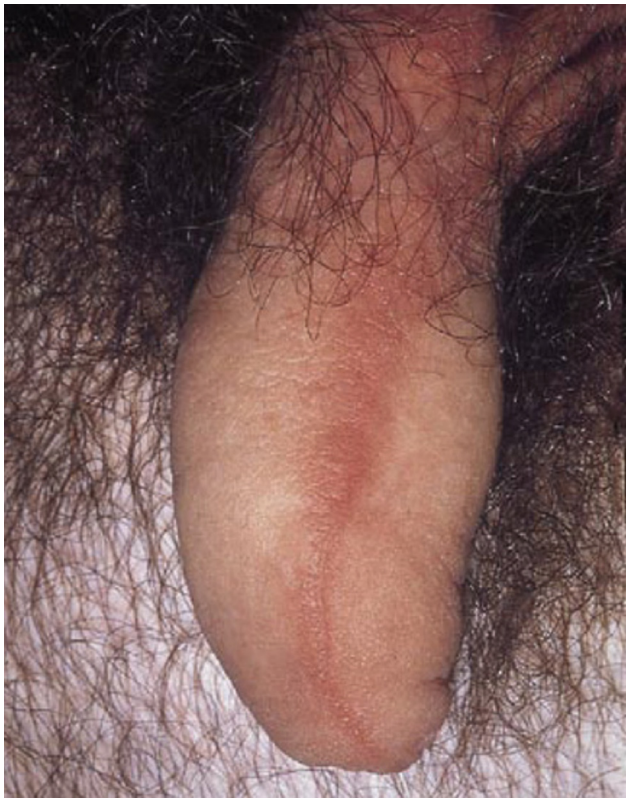

Figure 3 Chronic 'idiopathic' penile oedema.

Zoon's balanitis

Zoon's plasma cell balanitis (Figure 4) is a disorder of middle-aged and older uncircumcised men. The presentation is indolent and asymptomatic. Well-demarcated, moist, shiny, bright-red or autumn-brown patches involve the glans and prepuce (apposed in a 'kissing' distribution). The differential diagnosis includes erosive lichen planus, psoriasis, seborrhoeic dermatitis, fixed drug eruption, secondary syphilis, erythroplasia of Queyrat and Kaposi's sarcoma. Biopsy is often indicated. The pathologist must search for concomitant disease (e.g. lichen sclerosus). True Zoon's is probably very uncommon. Although Zoon's balanitis may improve with altered washing habits and intermittent application of a mild or potent topical corticosteroid (with or without antibiotics and anticandidal drugs), it often persists or relapses. Definitive curative treatment is surgical circumcision.

Psoriasis

Most young men with a dermatosis confined to the penis probably initially attend a genito-urinary medicine (GUM) clinic, with the consequence that essentially dermatological problems (e.g. psoriasis; Figure 5) sometimes present to doctors with insufficient training and experience. About 2% of the population are said to have psoriasis, but the diathesis may be much more widespread. The anogenital area (sacrum, buttocks, pubic mound and penis) is a common, and sometimes the only, site of psoriasis; the Koebner phenomenon (skin lesions appearing after trauma) contributes to this distribution. 'Inverse-pattern psoriasis' refers to disease of intertriginous skin in the natal cleft, the gluteal folds and the groins, and on the penis and foreskin in men. Psoriasis is usually not itchy. Diagnosis is usually clinical, but biopsy is sometimes necessary for solitary mucosal lesions in uncircumcised patients when Zoon's balanitis, Bowen's disease and extramammary Paget's disease cannot be excluded. Topical treatment includes topical corticosteroids, but weak tar preparations, the vitamin D analogues (calcipotriol, calcitriol and tacalcitol) and calcineurin inhibitors, such as tacrolimus and pimecrolimus, are also useful. Severe anogenital psoriasis can be an indication for systemic treatment (methotrexate or ciclosporin or 'biological' treatments).

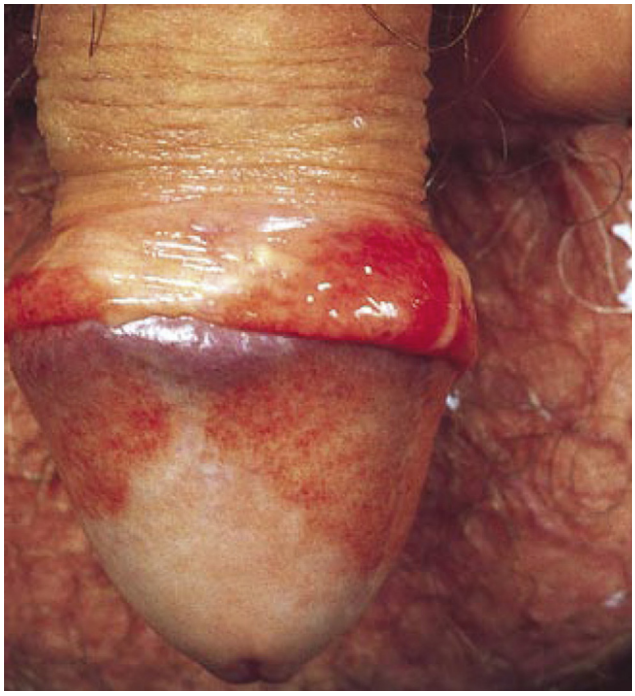

Figure 4 Zoon's balanitis.

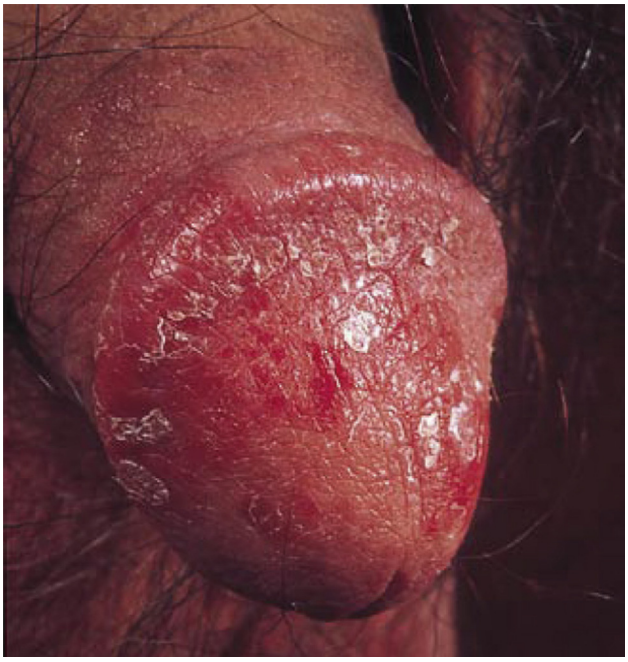

Figure 5 Psoriasis.