Skin conditions of the male genitalia

Chris Bunker

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 (Figure 1), 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 cause concern in patients. 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.

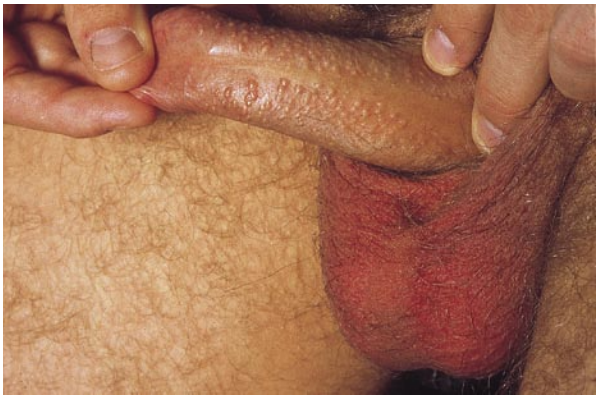
Angiokeratomas (of Fordyce) (Figure 2) are blue-purple, smooth papules on the scrotum or penile shaft that appear and multiply during life. They may bleed, and are sometimes misdiagnosed as Kaposi's sarcoma or bacillary angiomatosis. The angiokeratomas of Anderson–Fabry disease (angiokeratoma corporis diffusum) are smaller, less hyperkeratotic, pinhead lesions that are found more extensively around the lower limb girdle.

Pearly penile papules (Figure 3) – some normal variants of male genital skin can cause patients undue concern, particularly in adolescence. Pearly penile papules 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]

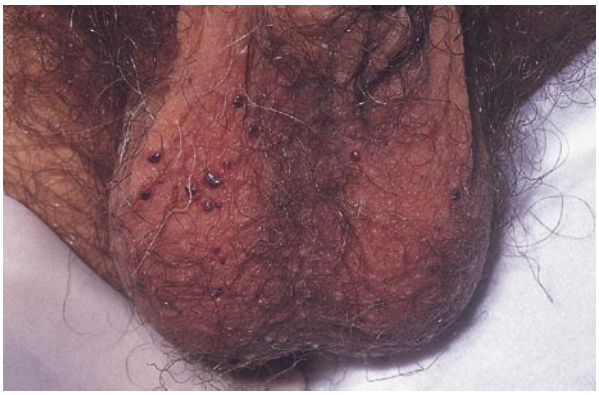
Genital mollusca (Figure 4) are caused by infection (usually sexually acquired) with a human DNA pox virus. They present as small, flesh-coloured, monomorphic, dome-shaped papules indented with a central dell or 'umbilicus'. Multiple lesions are usually present. Giant and polypoid lesions may occur in HIV infection. Inflammation and purulence are common and may occur as a result of infection. Individual lesions involute spontaneously. The differential diagnosis includes genital warts, lichen planus, syphilis (condylomata lata) and Bowenoid papulosis. Patients and their sexual partners should be counselled and screened for other STIs. Mollusca respond to cryotherapy, curettage and cautery. Phenolization is not recommended.

Chronic 'idiopathic' penile oedema (Figure 5) 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 antistreptolysin O titre measured. Pelvic tumours must also be excluded. Treatment is with long-term antibiotics (occasionally short courses of oral corticosteroids) and eventual circumcision.

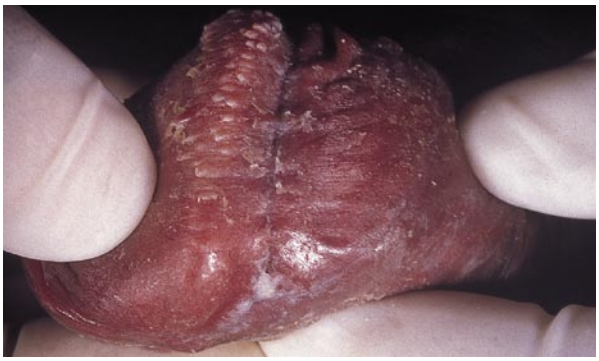
Zoon's plasma cell balanitis (Figure 6) is a disorder of middle-aged and older uncircumcised men. The presentation is often indolent and asymptomatic. Well-demarcated, moist, shiny, bright-red



1 Prominent sebaceous glands.



2 Angiokeratomas.



3 Pearly penile papules.

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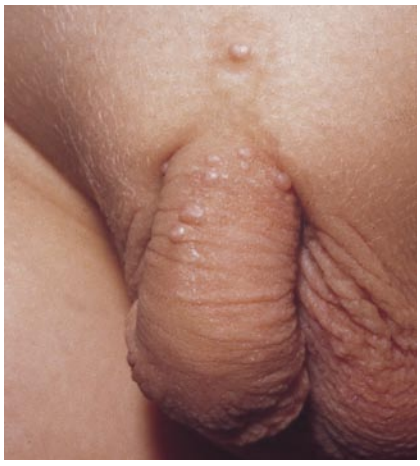
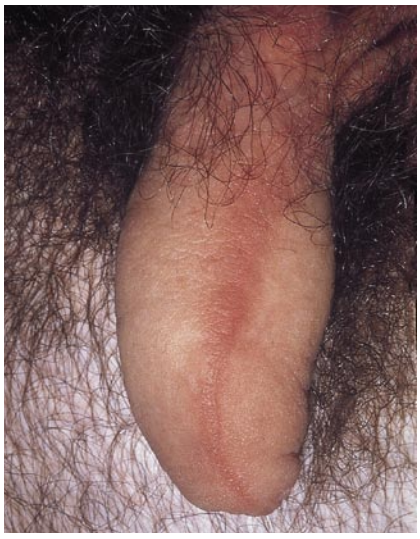
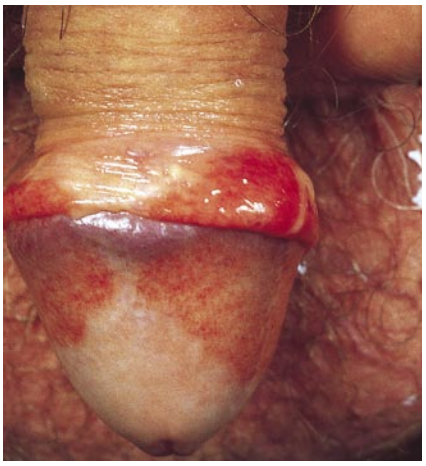


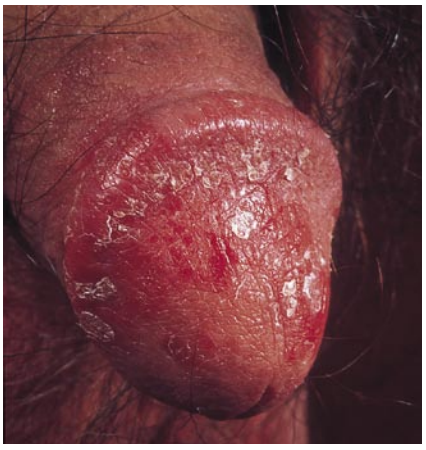
4 Mollusca.



5 Chronic 'idiopathic' penile oedema.



6 Zoon's balanitis.



7 Psoriasis.

or autumn-brown patches involve the glans and prepuce (often opposed 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 should be encouraged to look for concomitant disease (e.g. lichen sclerosus); in the author's opinion, Zoon's balanitis indicates a dysfunctional foreskin. 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, but this is seldom necessary.

Psoriasis (Figure 7) – most young men with a dermatosis confined to the penis probably initially attend a GUM clinic, with the consequence that essentially dermatological problems (e.g. psoriasis) 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 skin (sacrum, buttocks, pubic mound and penis) is a common, and sometimes the only, site of psoriasis; the Koebner phenomenon may contribute to this distribution. 'Inverse-pattern psoriasis' refers to the appearance of the disease on intertriginous skin in the natal cleft, the gluteal folds and the groins, between the dependent, flaccid penis and the preputial sac, and on the glans of uncircumcised men (where the epithelium is unkeratinized). 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 and the vitamin D analogue calcipotriol are also useful. Severe anogenital psoriasis can be an indication for systemic treatment (methotrexate or ciclosporin).

Penile lichen sclerosus (Figure 8) may be asymptomatic, but diverse, often vague symptoms are usually encountered. It is a significant cause of a dysfunctional foreskin. Patients may describe itching, burning, bleeding, haemorrhagic blisters, male dyspareunia, discomfort on urination and narrowing of the urinary stream, and/or may be concerned about the changing anatomy of their genitalia. Lilac, slightly scaly, atrophic white patches or plaques with telangiectasia, purpura, bullae, erosions and ulceration may be seen. Other presentations are non-retractile foreskin (phimosis), foreskin fixed in retraction (paraphimosis), and urinary retention or even renal failure. Phimosis should be regarded as a sinister situation, because it impedes complete inspection and palpation of the glans and coronal sulcus.

Differential diagnoses of lichen sclerosus include lichen planus and, rarely, cicatrizing pemphigoid. Biopsy should be performed when there is clinical doubt. Biopsy is mandatory in patients with erosive or verrucous change. The risk of squamous cell carcinoma is about 6%. Treatment is with an ultrapotent topical corticosteroid (0.05% clobetasol propionate, *Dermovate*) used under supervision. This may obviate the need for circumcision. It is unclear what

