Biopsy of male genital dermatoses

In 1993 a paper was published in *Genitourinary Medicine* on the experience of genitourinary physicians in the diagnosis of penile dermatoses and the usefulness of penile biopsy. Of 71 patients seen over a 1 year period, 60 (85%) underwent a penile biopsy, as the diagnosis was not made on clinical grounds. A clinical diagnosis was made in nine patients and penile biopsy considered unnecessary. Histological findings were consistent with the initial clinical diagnosis in 33% of the 60 patients undergoing a biopsy and it was concluded that diagnosis based on clinical appearance alone is inadequate. We would like to report our experience with the use of penile biopsy in the setting of a special penile dermatoses clinic in the dermatology department in which the patients were assessed by a dermatologist with an interest in dermatoses of the male genitalia.

A specific monthly clinic was set up in the dermatology department in 1993 for the diagnosis and management of men with penile dermatoses. Patients are referred to the clinic from various sources including the genitourinary clinic, the general dermatology clinic, dermatologists from other hospitals, and general practitioners. The clinic is run by a dermatologist with an interest in diseases of the genitalia and attended by a genitourinary physician (DH) and, more recently, a urologist (MD). In all, 286 patients have been assessed over a 4 year period. Patients ranged in age between 18 and 50 years. The commonest presenting condition was psoriasis (n = 68), penile infections (n = 47), seborrhoic dermatitis (n = 26), lichen sclerosus (n = 36), lichen planus (n = 28), Zoon's balanitis (n = 23), and eczema (n = 21). Less common diagnoses were vitiligo (n = 7), irritant contact dermatitis (n = 9), lichen simplex (n = 6), allergic contact dermatitis (n = 3), Bowen's disease (n = 3), Bowenoid papulosis (n = 3), squamous cell carcinoma (n = 1) and balanoposthitis (n = 2), idiopathic penile psoriasis (n = 2), and circinate balanitis (n = 1).

In most cases (n = 218, 77%) a clinical diagnosis was reached without the need for a penile biopsy. In total 6% of patients (n = 18/263) were biopsied: 19/36 (53%) patients with lichen sclerosus were biopsied of whom six (32%) had a biopsy performed to elucidate the diagnosis as a firm diagnosis could not be made on clinical grounds; 13 patients with lichen sclerosus (68%) had a biopsy performed to confirm the clinical diagnosis and assist clinical management; 17/23 (74%) of patients with Zoon's balanitis were biopsied, in all cases to confirm the clinical diagnosis, two patients with a clinical diagnosis of Zoon's balanitis and lichen sclerosus had dual pathology confirmed histologically; 10/28 (36%) patients with lichen planus were biopsied, of these four (40%) were biopsied to elucidate the diagnosis because of clinical uncertainty, while six were biopsied to confirm the clinical diagnosis; 5/21 (24%) patients with eczema, 4/30 (13%) patients with viral warts, 2/68 (3%) of patients with psoriasis were biopsied, in each case to confirm the clinical diagnosis. In all patients a firm diagnosis was obtained for each of the above conditions. Bowenoid papulosis (n = 3), and the case of squamous cell carcinoma had a penile biopsy to confirm the diagnosis and inform the clinical debate about management. A clinical diagnosis without the need for biopsy was made in all cases of seborrhoic dermatitis, lichen simplex, allergic contact dermatitis, idiopathic oedema, vitiligo, and in the case of chronic eczema.

There was a very high concordance between clinical diagnosis and histological diagnosis and in only two cases did the findings result in a change in the diagnosis. In both of these a clinical diagnosis of lichen sclerosus was made while in one feature of lichen planus were present histologically and in the other the histological findings were non-specific.

In our experience most patients with inflammatory penile disease such as psoriasis, eczema, lichen simplex, contact dermatitis, and lichen planus have cutaneous signs at extragenital sites and a full examination is mandatory. It is important to observe the need for biopsy. The presence of extragenital cutaneous inflammatory skin disease helps to corroborate the diagnosis.

Most dermatoses of the male genitalia are amenable to clinical diagnosis reached on classic dermatological grounds of full history taking and complete physical examination. Penile biopsies do not need to be performed routinely although they may be useful in confirming the clinical diagnosis. Secondly, a histological diagnosis may be valuable in advancing patient management—for example, increasing the authority with which surgery is advocated in diseases such as lichen sclerosus and Zoon's balanitis where circumcision may be necessary.

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Characterisation of high level tetracycline resistant *Neisseria gonorrhoeae* isolates

Three of 1039 clinical isolates from consecutive patients with urethritis, who attended urological or STD clinics in Tokyo and Kanagawa area between 1985 and 1995, were determined as tetracycline resistant *Neisseria gonorrhoeae* (TRNG). These strains had minimum inhibitory concentrations of >16 mg/l and gave a zone of inhibition of <30 mm from the edge of the 30 μg tetracyc-
clinie disc to the edge of confluent growth (table). In this study, we further characterised the tetM genes of these TRNG strains. Ison et al. previously reported the primer pair: 5'-GGCTGATCAAGCA-
CACAATCG-3' and B: 5'-TTCTCT-
GTTAGGTGTTACTG-3' for detection of
tetM in N. gonorrhoeae. These sequences were derived from that of the Unaplasma
sequence determined. More recently, the nucleotide sequences of the tetM genes of American and Dutch type plasmids have been determined and suggested that the tetM
determinant found in the American type plasmid has a different origin from that in
the Dutch type.1 Because the base sequence of the tetM gene from Dutch type plasmid which corresponds to the primer B is different from that of American type plasmid,2 primer B (5'-TTCTCT-
GTTAGGTGTTACTG-3') was used instead of the primer B to detect Dutch type tetM. The cells grown on a Kellogg's agar medium were lysed in 100 µl of distilled water for 10 minutes at 94°C. The lysate of lyse was added to a polymerase chain reaction (PCR) mixture. The PCR mixture contained 0.2 µM of
each) deoxynucleoside triphosphate, 50
pmol of each oligonucleotide primer, TaKaRa Taq
DNA polymerase (TaKaRa Shuzo, Kyoto, Japan), and buffers provided by the manufacturer in a total volume of 50 µl. The mixture was overlaid with 50 µl of mineral oil and heated in a
DNA thermal cycler PJ-2000 (TaKaRa) for 25 cycles consisting of 45 seconds at 94°C, 60 seconds at 58°C, and 60 seconds at 72°C. PCR amplification using the primer pair of A and B gave a product of the predicted size: 765 bp (figures). More than 540, 140, and 90 bp. The amplified products were sequenced using the ABI PRISM Dye Terminator Cycle Sequencing Ready Detection Kit (Perkin-Elmer Corp CT, USA) and the ABI 310 Genetic Analyzer (Perkin-Elmer Corp), and that from 60061, 6010, and 6012 were identical to corresponding sequence of the tetM gene from American and Dutch type plasmids, respectively.

It is of interest that the isolation rate of TRNG was quite low and both American and Dutch type tetM genes were found in Tokyo and Kanagawa, Japan during the study period. The strain isolated in 1985 was infected in Japan. A strain 5120 was imported from Thailand (table). These facts imply that TRNG already existed in 1985 in Japan and has been transported from other countries, but has not spread in Tokyo and Kanagawa area. Ison et al. found two types of HpaII (MspI) digestion pattern of the PCR products from tetM in TRNG strains. In this study we clearly distinguished the American type tetM gene from the Dutch type one using the PCR with the sets of the primer pairs. Further investigations will be needed to elucidate the prevalence of each type of tetM gene in N. gonorrhoeae infections.

Epidemiology of genital Chlamydia trachomatis
Simms et al.1 in their review of the epidemiology of genital Chlamydia trachomatis in England and Wales state that "adv hoc prevalence and case finding studies carried out over the past 20 years were critically assessed in terms of study design and testing methodologies." The authors, however, do not define what is meant by "adv hoc" and do not make explicit how the cited literature was obtained, sifted, and appraised. As a consequence they fail to identify all relevant published prevalence studies.

I recently reviewed the literature relating to the prevalence of G. trachomatis infection in women attending British general practice (which updated an earlier review of the literature) and British family planning clinics.1 As I wished to ensure that all relevant studies were included I used an explicit search strategy and stated the reasons for inclusion or exclusion of the identified studies. This led to 15 relevant prevalence studies being identified and appraised. Simms et al.,1 in contrast, identified only six of these studies.