ually transmitted diseases were performed. A provisional diagnosis of gonorrhoea was made, and the patient was treated with a single oral dose of 250 mg of ciprofloxacin followed by a two week course of Deteclo twice daily. He reported an intermittent sexual relationship with a known female partner, who was seen one week later at this clinic. She denied any other recent sexual contacts, and after careful testing (including rectal and throat swabs) was found to be free of genital infection.

Culture of the male patient's urethral swab yielded an organism of the moraxella group, but unfortunately the organism was not kept for further study. Chlamydia ELISA and gonococcal cultures were negative. At a review visit three weeks after commencing treatment, he was found to be clinically and microbiologically cured. He gracefully accepted an explanation about the nature of his infection, and volunteered the information that he was exposed to many unusual germs in the course of his work as a fitter at a pharmaceutical factory. The Occupational Health Doctor at this factory confirmed that *Moraxella urethralis* (recently renamed *Oligella urethralis*) was currently being studied. Category 2 precautions were being taken by staff handling the organism, but our patient was merely carrying out maintenance work in the department. It is possible that his hands may have become contaminated during work, and that he subsequently transferred the organism to his penis during urination.

Organisms of the moraxella group can be found as normal inhabitants of the mucous membranes of the respiratory and uro-genital tracts. They rarely cause disease although *M. lacunata* is a recognised cause of eye infection and other species are occasionally reported as a cause of serious systemic infection.

Moraxella urethralis is found almost exclusively in the urogenital tract of man. It is generally considered to be a non-pathogenic member of the normal mucosal flora at this site although isolates from blood cultures have been reported.¹ It includes some of the strains formerly called *Mima polymorpha* var *oxidans*. Differentiation in the laboratory from other *Moraxella* spp can be difficult² and is not often attempted in a routine diagnostic laboratory. The possibility of a

causative role in acute gonorrhoea was made for this organism many years ago^{3,4} although changes in taxonomy make interpretation of these earlier reports difficult.

It is suggested that the acute urethritis in this patient was caused by the *Moraxella* sp isolated from the clinical specimens taken at presentation, given the lack of other identifiable causes, the response to treatment and the documented microbiological cure. The possibility of another unidentified pathogen being responsible cannot be dismissed. The lack of infection in the reported sexual contact and the occupational exposure also raises the intriguing possibility that this infection was occupationally acquired.

Effective control of gonorrhoea requires that treatment and contact tracing of suspected gonorrhoea are commenced immediately on the basis of clinical and microscopy findings, before definite laboratory confirmation has been obtained. However, other organisms with a similar morphological appearance can also cause acute urethritis, and an erroneous diagnosis of venereal disease could be a very serious matter. There are several recent reports of urethritis caused by meningococci^{5,6} and this case indicates that moraxella could also be a cause. It is policy in our clinic to use the expression "suspected gonorrhoea" until a firm diagnosis has been established.

Microbiologists and genitourinary physicians have a responsibility to advise all staff working in their laboratories and clinics about the potential hazards and the appropriate precautions. This advice should include the need for staff to wash their hands before and after visiting the lavatory.

D M COKER

Department of Genito-Urinary Medicine
L R GRIFFITHS

Department of Microbiology
Furness General Hospital
Dalton Lane
Barrow in Furness
LA14 4LF, UK

- 1 Bizet C, Bure A. Recovery of *Moraxella urethralis* from clinical material. *Eur J Clin Microbiol* 1987;6:692-3.
- 2 Riley PS, Hollis DG, Weaver RE. Characterisation and differentiation of 59 strains of *Moraxella urethralis* from clinical specimens. *Appl Microbiol* 1974;28:355-8.
- 3 Svihus RH, Lucero EM, Mikolajczyk RJ, Carter EE. Gonorrhea-like syndrome caused by penicillin resistant *Mimae*. *JAMA* 1961;177:121-4.

- 4 Kozub WR, Bucolo S, Sami AW, Chatman CE, Pribar HC. Gonorrhea-like urethritis due to *Mima polymorpha* var *oxidans*. *Arch Int Med* 1968;122:514-6.
- 5 Wilson APR, Wolff J, Atia W. Acute urethritis due to *Neisseria meningitidis* group A acquired by orogenital contact; case report. *Genitourin Med* 1989;65:122-3.
- 6 Shanmugaratnam K, Pattman RS. Acute urethritis due to *Neisseria meningitidis*. *Genitourin Med* 1989;65:401-2.

Accepted for publication 3 December 1990.

Podophyllotoxin—is it user friendly?

Topical podophyllin has been standard treatment for ano-genital warts for many years. Self therapy may lead to local and systemic side effects. The active agent podophyllotoxin has been purified, in a stable form, and is marketed as a safe home treatment for male genital warts. We have encountered two cases where problems have resulted from home therapy.

Patient 1 presented with prepuce warts and was prescribed podophyllotoxin 0.5% twice daily for three days weekly. Routine screening for other sexually transmitted diseases was negative. He defaulted from follow up but was referred three months later by the general surgeons having been admitted with a possible strangulated right inguinal hernia. He had been unable to follow the podophyllotoxin application instructions. After the first application, his prepuce became swollen and took one week to subside. This was then repeated with the same response. After about 10 weekly applications, he had an excessive reaction taking him to A & E where cephadrine was prescribed. The following day his general practitioner arranged his admission. The surgeons noted severe balanoposthitis and referred him to us after commencing intravenous amoxycillin-clavulanic acid. He had secondarily infected podophyllotoxin burns with associated right inguinal lymphadenopathy. Once settled further treatment to the warts was by cryotherapy.

Patient 2 had been prescribed podophyllotoxin 0.5% by his general practitioner, either with instructions being misunderstood or not given and he had misinterpreted the product informa-

tion sheet. He had taken "apply the solution to each wart in turn using the same applicator" and "On each occasion the maximum number of loops applied should not be in excess of 50" to mean "apply up to 50 loops to each wart!" Gross over application to a small number of prepuccial warts resulted in marked sub prepuccial burns. This reaction prompted him to seek help at our department. Screening for other sexually transmitted disease was negative. He was given hygiene advice and cotrimoxazole 960 mg bd for one week and on review normal anatomy had been restored and his warts had resolved.

Effective treatment of viral warts with any modality be it surgical, chemical, or thermal will result in some degree of normal tissue damage. Local self treatment with podophyllotoxin 0.5% has been advocated to alleviate pressure on clinic and medical time. Purified podophyllotoxin 0.5% in recommended doses is felt to have minimal toxicity compared with that of unpurified podophyllin resin. Local reaction (mostly mild or moderate) with inflammation, erosion, burning and pain can occur in up to 64% of patients.¹ Our first patient required hospital admission for an erroneous diagnosis. The second developed problems due to misinterpretation of the product information. The moderate severity of his burns, however, confirms the underlying lack of serious side effects even in relative local overdosage.

All patients prescribed home therapy should have the procedure explained clearly and demonstrated before ending the consultation. Left to the patient, errors of application may occur both in amount and duration of treatment. Podophyllotoxin is as safe and effective a method of treatment of male genital warts as other modalities, but it is not without side effects.

C WHITE
R A SPARKS

Department of Genito-Urinary Medicine,
West Wing,
Cardiff Royal Infirmary,
Cardiff CF2 1SZ, UK

- 1 Beutner KR, Conant MA, Friedman-Kien AE, et al. Patient applied Podoflox treatment of genital warts. *Lancet* 1989;i:831-4.

Accepted for publication 7 January 1991

MATTERS ARISING

Sexual assault of men: a series

We read with interest the recent paper by Hillman *et al.*¹ This prompted us to review our own experience. Eight men, alleging recent sexual assault, presented to our department within the last three years. The victims ranged in age from 10 to 25 years (mean 16 years). Six of eight patients attended within three months of the assault (range two days to 18 months).

Referrals were arranged by general practitioners (GPs) in two cases, Accident and Emergency departments in two cases and a social worker in one case. Four of the eight assaults were reported to the police.

The assailant was known to two of the victims. One case involved multiple assailants. HIV/AIDS anxiety was a prominent symptom in three patients. Oral and/or anal penetration took place during seven of the eight assaults. Sexual orientation was unknown for six victims and in five of these the assault was their first sexual experience. One patient considered himself to be heterosexual. One man had been exclusively heterosexual prior to the assault, but had had a number of both male and female partners thereafter. Voluntary intercourse had occurred in two patients after the rape and before presentation. Alcohol was reported to be a factor in only one assault.

Three patients had a sexually transmitted infection. These were scabies, rectal chlamydia and rectal gonorrhoea. The patient with rectal gonorrhoea was seen 18 months after the incident and had had a number of partners in the intervening period. All patients were investigated according to standard guidelines.² Three patients attended only once. For the other five, average follow-up time was three months. HIV and hepatitis B serological testing were negative in five patients at three months from the time of the assault.

One case is particularly worthy of mention as it involves an infection not heretofore reported in the context of male sexual assault. A 15 year old boy was referred to us by his GP complain-

ing of a four week history of anal soreness. He had run away from home 3 months earlier. He had stayed with a man whom he stated was homosexual, who forced him to have anal intercourse four times against his will, the last occasion being ten days prior to presentation. No condoms were used on any occasion. He had no prior sexual experience. There was no history of intercurrent antibiotic therapy. The boy was mildly withdrawn and very anxious about AIDS. On examination, he was found to have perianal erythema, anal dilatation and two small ulcers at the anal margin. He declined proctoscopy. *Chlamydia trachomatis* was isolated from a blind rectal swab. Rectal cultures for *Neisseria gonorrhoeae* and herpes simplex virus were negative. Gonococcal and chlamydial cultures from the urethra and pharynx were negative. Serological testing for syphilis and hepatitis B were negative at presentation and at three months follow-up. An HIV test was performed at three months following informed consent, the result being negative. The chlamydial infection was treated with oral doxycycline 200 mg daily for one week and subsequent cultures were negative. Counselling and support were provided by health advisors within the department.

We agree with Hillman *et al.*¹ that cases of male sexual assault are under-reported. More data are required, enabling us to counsel our patients about the risk of acquiring STD, including HIV, following sexual assault.

GRAINNE COURTNEY
S SESTREICH
G E FORSTER
The Ambrose King Centre,
The Royal London Hospital,
Whitechapel,
London E1 1BB, UK

- 1 Hillman RJ, Tomlinson D, McMillan A, French PD, Harris JRW. Sexual assault of men: a series. *Genitourin Med* 1990;66:247-50.
- 2 Schwarz SK, Whittington WL. Sexual assault and sexually transmitted diseases: Detection and management in adults and children. *Rev Inf Dis* 1990;12:Suppl 6:S682-90.

Value of performing biopsies in genitourinary clinics

We fully agree with the views expressed by Arumanayagam and