

GENITO-URINARY MEDICINE

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INTRODUCTION

The bible, the art world, and a textbook of veterinary medicine may seem unlikely starting points for an article on sexually transmitted disease (STD) in the 20th century. However, the old testament provides recognisable descriptions of several genital infections, and suggests measures by which they could be controlled. For centuries, literature and art have depicted these diseases and indicated their prevalence and social context. STD's in the animal world have major economic implications; a whole host of bacteria, viruses, fungi and protozoal organisms have adapted to this mode of transmission and existence. The genital tract and the sexual mode of transmission constitute an ecological niche which will always exist; treating gonorrhoea and syphilis with penicillin merely leads to an upsurge in viral and chlamydial infections. Human immunodeficiency virus (HIV) emerged as a major threat to public health, dramatically altering the nature of genitourinary medicine (GUM). Unless there are widespread changes in sexual behaviour, there will always be sexually transmitted disease.

There is a tendency to view genital infections in a way that is too simplistic, classifying infections as 'VD' or 'non-VD'. In fact, these micro-organisms form a spectrum ranging from dangerous pathogens to useful commensals. The gonococcus is a pathogen; it is acquired sexually and usually causes disease. By contrast, the Doderlein's bacillus is a useful constituent of a normal healthy vagina. *Candida albicans* and *Gardnerella vaginalis* have an intermediate position. They may be present in celibates, but may also be transmitted sexually; infection being either asymptomatic or pathogenic.

There is also a tendency to adopt a view of human sexual behaviour which is too simplistic. Being 'respectable' confers no immunity to STD. In our society it is unusual for an individual to pass through life having sexual relations with only one faithful partner. Most normal people have patterns of sexual behaviour which allow for the acquisition of disease, and it is clear that STD affects all sections of society. To illustrate this point, sensitive techniques can detect wart virus infection in a high proportion of cervical smear specimens from healthy unselected women.

Globally, STD's and AIDS rank amongst the most important causes of ill-health. In the UK, STD's cause much morbidity, and nearly 2000 people have died from AIDS. Infertility resulting from tubal infection is becoming a major problem. Prevention of tubal damage is preferable to costly, invasive and largely unsuccessful attempts at cure. Locally, we do not know the true prevalence of STD; for a variety of medical and social reasons the problem has

been hidden. However, in one of my clinics, more women present with gonococcal pelvic infection than with early uncomplicated gonorrhoea, indicating a significant background prevalence of untreated infection in the community. Most parts of the UK have seen a decline in the traditional venereal diseases, and an increase in chlamydial and viral infections. In Lancaster and Lakeland, the new diseases are rife, but the old ones are not yet under control.

GENITO-URINARY MEDICINE SERVICES

All GUM clinics strive for high standards in diagnosis and treatment. My specific aims in developing the local service are to improve accessibility and choice for patients, and to improve communication between GP's, other doctors and the GUM clinics. Despite considerable constraints on the service, particularly in Lancaster, attendances at the clinics are increasing rapidly. Most patients refer themselves for a confidential consultation, but a number of GP's have recognised the value of the clinic service and now refer patients. A brief referral note to accompany the patient is appreciated and will be followed by a prompt reply. The atmosphere of the clinics is similar to that of any outpatient department, although many patients comment on the friendly and efficient nature of the service. Patients should attend the nearest clinic wherever possible because cross-border flow of patients makes contact tracing more difficult.

LANCASTER Male and female. Monday and Thursday 5-7pm, no appt. required. Each clinic staffed by GP assistant and consultant. Female doctor usually present on Thursday. Some reviews seen by appointment during daytime hours

KENDAL By appt. (Phone Blackhall Road during daytime hours) Wednesday 5.30-7pm (female doctor + consultant) Thursday 1.30-3.30pm consultant only Thursday 5-6.30pm male clinic (GP assistant)

BARROW Male open clinic - Monday 6-7.30pm (GP assistant). Female open clinic - Tuesday 4.30-6pm (female doctor + consultant) Appt. clinics: Tuesday 1.30-4pm - consultant. Appts: 0229 870870 ext 5219 (phone Tuesdays and Fridays only)

THE DISEASES

Only experienced venereologists can remember how to spell 'syphilis'! This disease has been one of the great scourges of mankind, but in the late 1980's there were hopes that the disease would soon become extinct in Britain. However, syphilis is now spreading again, and continuing vigilance and appropriate screening (eg of pregnant women) should be maintained. It is vital that the GUM clinic is informed about all patients with early infectious syphilis in order to arrange vigorous contact tracing.

Gonorrhoea lends itself to control or even eradication. Men have unmistakable symptoms after a short incubation period. Rapid diagnosis, effective treatment, and contact tracing are readily achieved in the GUM clinic which is set up specifically to achieve these objectives. However, the disease is much more difficult to manage in other settings, a point which was recognised 60 years ago when the VD legislation was first drafted. The current level of gonorrhoea in this locality is unacceptably high, and will remain so until doctors recognise the importance of referring all patients suspected of having this infection to the GUM clinic. This simple measure would rapidly bring gonorrhoea under control in this area.

Chlamydia trachomatis infection, the main cause of 'NSU', has many clinical similarities to gonorrhoea. However, symptoms tend to be milder, and the infection is likely to remain undiagnosed until late complications develop. Tubal damage resulting from chlamydial infection is now one of the major causes of infertility. Gynaecologists and GU physicians see this problem from different angles. The gynaecologist is called upon to deal with an established problem of tubal damage; raising the spectre of previous sexually transmitted disease would be tactless. The GU physician sees a considerable number of healthy young women who may have chlamydial infection. Some of them will become infertile unless they can be identified, treated, and protected from reinfection from a partner. However, control of chlamydial infection is not an easy task; patients presenting to the GUM clinic represent the tip of an iceberg. All doctors treating young people need to be on the look out for this infection. Urinary symptoms in young men should not be ascribed to 'cystitis'; the correct diagnosis is likely to be a urethral infection requiring the help of the GUM clinic. Chlamydia testing kits are now readily available, and there are many clinical situations in which it would be appropriate to test a young female patient. Cervical 'erosions' often become symptomatic when infected with chlamydia. Treating for chlamydia is pointless unless all the current sexual contacts are treated concurrently.

Vaginal infection is one of the most common conditions causing female patients to present to doctors. The three main infections are *Candida*, *Trichomonas*, and anaerobic vaginosis. Accurate diagnosis requires immediate microscopy to visualise the motile trichomonad, the 'clue cells' of anaerobic vaginosis, and the yeast forms of *Candida*. The presence of *Candida* or *Gardnerella* on a high vaginal swab is of little significance, and adds little to clinical suspicion alone. In fact, the high vaginal swab is a very poor diagnostic test for any condition. Gonorrhoea and chlamydia can only be excluded by taking specific swabs (eg from the cervix in specialised media). Vaginal discharge requires immediate microscopy. General practitioners

therefore have a problem in that they can only guess a diagnosis. There are clinical situations in which an educated guess is a perfectly reasonable approach, but there are also instances in which prompt referral to the GUM clinic for full evaluation is more appropriate.

Thrush responds well to topical antifungal preparations. There are situations in which the new oral antifungal agents may be valuable, but failure to respond to topical preparations usually indicates that the diagnosis was wrong. Many women with recurrent "thrush" have other causes for their symptoms. A visit to the health section of a typical bookshop will reveal a whole shelf of dubious material on yeast infection, but its mere existence could indicate that doctors do not satisfy the needs of patients with vaginal problems.

Of all these conditions, **anaerobic vaginosis** is the least well understood. It is a complex vaginal disturbance, and the presence of *Gardnerella* is only one facet of the condition. It is best diagnosed by its characteristic history, supplemented by immediate microscopy, the high vaginal swab being of little value. Many women now attend the GUM clinic in order to receive rapid diagnosis and treatment of vaginal discharge.

Genital herpes is rapidly going out of fashion. It was once regarded as being the most serious STD, and was wrongly implicated in several important contexts. Most humans are infected with herpes simplex virus, usually in the form of cold sores acquired in childhood. Genital herpes can be spread venereally, but most patients have merely transferred the virus from lips to genitalia. Only a tiny proportion of patients suffer from troublesome recurrences, and these can now be effectively suppressed. Simple advice prevents the spread to sexual partners. There is no evidence (despite years of suspicion) that herpes has a causal role in the aetiology of cervical cancer, although it is clearly appropriate for these women to undergo cytological screening of sufficient frequency to detect developing abnormalities (as indeed should all women!). The problems associated with herpes in pregnancy have been grossly distorted, in part by medicolegal pressures. Neonatal herpes is a rare cause of illness in the neonate, and most babies with this condition are born to mothers with no history of genital herpes. There is no evidence that screening mothers in pregnancy is of any benefit, the only intervention at the present time being a Caesarean delivery which is usually inappropriate. In conclusion, genital herpes, handled in a pragmatic fashion, is not a significant public health problem, and should not be an emotive diagnosis.

Genital warts, which are usually sexually acquired, are a nuisance. They can be time-consuming to treat; patients do respond to vigorous regular therapy, but podophyllum derivatives used alone are usually ineffective. Treating warts requires skill and patience, and occupies a lot of time in the GUM clinic. The controversy about warts surrounds their alleged association with cervical carcinoma. Initial enthusiasm for wart virus as a cause for this disease ignored the lessons of epidemiological history. Recent studies with proper control data have greatly weakened the case for a causal role, leading many to believe that wart-virus is, at most, a co-factor. Smoking, and early exposure to the immunomodulatory effects of semen are probably more important. Clearly, patients who have had warts should have cytological follow-up. Many women presenting with invasive cervical cancer have never had a smear test; therefore our role is to ensure that none of our GUM

patients evade the cytological screening programme. The current interest in patients with wart virus infection is not contributing to the goal of preventing cervical cancer.

By now, all doctors will be familiar with the risk of **AIDS** in gay men and intravenous drug abusers. Worldwide, heterosexual spread of HIV is the commonest route of infection. It appears that a heterosexual epidemic is favoured by two factors; a high rate of change of sexual partners, and a high prevalence of STD (which damages the genital mucous membranes and localises white blood cells in the genital tract). HIV is already established in our districts, and heterosexual spread is inevitable. The future scale of our problem will be determined by the willingness of our community to direct sexual health education towards young people before they become established in dangerous lifestyles. The message is not getting through to young heterosexuals; if we cannot control STD in this population, the spread of HIV is inevitable.

CONCLUSION

This article finishes, as it started, with mention of the bible, the art world, and the veterinary textbook. Doctors

who are concerned with the health of individuals and populations will find few moral dilemmas in the practice of GUM. An objective reader of Leviticus chapter 15 might conclude that public health, rather than morality, lay behind the biblical regulations and that public health guidelines need frequent updating!

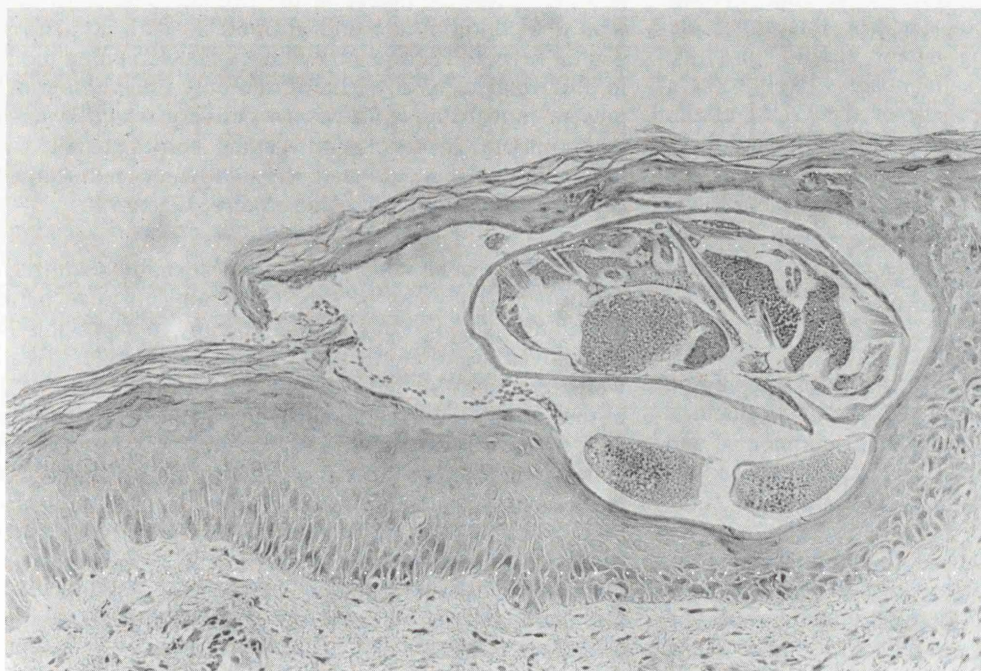
The art world has responded to AIDS with an output which will form a permanent record of the disease and of its social implications. Centuries ago, Hogarth and Rowlandson treated those afflicted with syphilis with great sympathy, and directed their satire at authority figures and doctors. How will history judge the medical profession's response to AIDS?

The veterinary textbook trains its readers to view sexuality as an integral part of life, and to deal with the health consequences in a pragmatic way. Medical training is often less helpful!

GUM has a big task, and the clinic staff work hard in circumstances which are often difficult. The aim is to provide a service which meets the real, but often unrecognised, health requirements of the local population. In time, I hope that doctors will appreciate and support the service and encourage its development.

QUIZ

Skin biopsy of itchy rash in 20-year old female



Question

What is this condition?

Answer on page 135