ABC of Sexually Transmitted Diseases

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A CHANGING AND GROWING PROBLEM

The range of diseases spread by sexual activity continues to increase. In the United Kingdom the number of cases seen in sexually transmitted disease clinics (now known as departments of genitourinary medicine) has risen threefold over the past 15 years and now amounts to half a million new cases a year. For this reason sexually transmitted diseases need to be suspected and investigated in any patient who presents with what might at first look like a common clinical problem, such as a urinary tract infection, rash, or pelvic pain.

What are they?

The commonest diseases are non-specific genital infection and gonorrhoea, both of which are increasing in incidence. Over the past 25 years 400% more women and 150% more men acquired gonorrhoea. In women the rates are highest in those aged 20 to 24 years, but the largest increase has been among those under 20. Syphilis is not now a major problem, and the small recent rise in the incidence of syphilis (mainly primary and secondary) has occurred mainly in homosexuals.

Trichomoniasis, pediculosis pubis, and genital warts are common and are sexually transmitted. On the other hand, scabies and vaginal candidosis are often diagnosed in sexually transmitted disease clinics, although they are not usually acquired sexually. Herpes genitalis now accounts for 12 000 cases a year and is increasing more rapidly than any other disease. Similarly, sexually transmitted hepatitis (A and B) is becoming more common, and recently those working in clinics have become aware of the possible sexual transmission of 'haemolytic streptococci, cytomegalovirus, and enteric pathogens. The acquired immune deficiency syndrome with concomitant opportunistic infections and Kaposi's sarcoma in homosexuals is the most recent condition thought to be spread sexually.

Among a wide variety of other conditions presenting to clinics, and requiring specialist investigation and treatment, are urinary tract infections, pelvic inflammatory disease, dermatological and psychosexual problems as well as patients with a morbid fear of sexually transmitted diseases. Chancroid, granuloma inguinale, lymphogranuloma venereum, yaws, and pinta are now rare in Britain. Finally, many patients (23% of the total cases) seek reassurance, require simple counselling or advice, and want check ups; all need to be investigated.

Why have they increased?

Like many other medicosocial conditions—for example, suicide, alcoholism, cancer, and heart disease—the explanation for the increase in the sexually transmitted diseases is multifactorial.

The age of sexual maturity has decreased, the age at which people have sexual intercourse for the first time is lower, and more people have premarital sexual intercourse than previously. None of these indicate promiscuity, but it must be a factor. Also, the increasing use of the oral contraceptive pill and intrauterine devices has removed the protective effect of barrier techniques such as the sheath.

Because of the greatly improved service offered by the clinics and their ability to trace sexual contacts more people are seeking treatment who may not have previously done so. Thus how much of the increase in the number of recorded cases reflects a real or apparent trend is unknown.

Since populations are now more mobile nationally and internationally certain groups (tourists, professional travellers, members of the armed forces, immigrants) are at risk. They are separated from their families and social restraints and are more likely to have sexual contact outside a stable relationship.

Over the years the partial resistance of the gonococcus to penicillin has increased in many countries so that higher and higher curative doses have had to be used. More worrying than this is the recent emergence of penicillin resistant strains of *Neisseria gonorrhoeae*. The number of cases of gonorrhoea in the United Kingdom due to these penicillinase producing strains has doubled each year since they were first reported in 1976.

The final factor in the increasing incidence is the lack of resources for both good treatment facilities and coordinated research. Many countries still do not accept the importance of an open access, free service for sexually transmitted diseases, and even those countries with this facility often provide it in poor and old premises.

How do they present?

The three commonest presenting symptoms are urethral discharge, genital ulceration, and vaginal discharge with or without vulval irritation. The descriptions in later articles of the many diseases that may be spread sexually will show that patients may present with other symptoms (rash, dysuria, jaundice, arthralgia, rectal discharge). Additionally, several diseases may present initially with complications (abdominal or scrotal pain, urinary retention). Since they may affect any system in the body they should not be regarded solely as diseases of the genitals. Finally, the diseases are not always acute; many chronic conditions of the genital tract require long term management—for example, pelvic pain, recurrent herpes genitalis, and vaginal candidosis.

How should they be managed?

Management

Sexual history
Physical examination
Microbiology
Serology
Tracing sexual contacts
Education
Reassurance
Follow-up

The most important aspects of management are accurate diagnosis and effective treatment. Diagnosis needs time and skill in taking a detailed sexual history from both the patient and his or her sexual contacts and in carrying out a comprehensive physical examination. But above all microbiological and serological facilities are essential initially and at follow up for all patients to differentiate between the various diseases, exclude more than one occurring at a time, and identify asymptomatic disease. Some doctors have the facilities to perform some microbiological tests in their surgeries, but if not referral to a clinic is strongly advised. These clinics now have a much more relaxed image and offer the patient a chance to seek help and advice with complete confidence and confidentiality.

To prevent the spread of sexually transmitted diseases treatment must be effective and be seen to be effective. This means selecting the correct drug for the disease, carefully monitoring its administration, and carrying out regular follow up microbiological tests. The patient's sexual contacts must be traced so that they can be treated and thus prevent the disease from spreading further. The doctor may also play an important part in controlling the diseases by advising patients how best to avoid them, to recognise them, and to have them treated and by offering the opportunity for routine checkups for those who have put themselves at risk or who simply want reassurance. All of these facilities are offered within sexually transmitted disease clinics.

The workload of specialists in genitourinary medicine is continually increasing. This is due to the realisation over the years, firstly, that more and more diseases may be spread sexually and, secondly, that other acute and chronic, non-sexually acquired conditions are being well managed in clinics. Genitourinary medicine is now a specialty in its own right, offering total care of people with a wide variety of conditions. The increased breadth of the specialty, and the knowledge that many patients seen in clinics do not have a sexually transmitted disease, have helped to reduce the stigma attached to clinics and should be of help to general practitioners, gynaecologists, and others wishing to refer patients for specialist advice.

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Sexually transmitted diseases in the United Kingdom for 1981 (Figures are numbers of cases.)

Non-specific genital infection	132 391	Other treponemal diseases	884
Gonorrhoea	58 301	Molluscum contagiosum	1 305
Candidosis	50 954	Chancroid	100
Genital warts	33 480	Lymphogranuloma venereum	41
Trichomoniasis	21 625	Granuloma inguinale	29
Genital herpes	12 080	Other conditions:	
Pediculosis pubis	9 749	Not requiring treatment	121 918
Syphilis	4 211	Requiring treatment	73 817
Scabies	2 434		
		Total	523 319

Micro-organisms that can be sexually transmitted

Bacteria:

Chlamydia trachomatis
Neisseria gonorrhoeae
Gardnerella vaginalis
Treponema pallidum
Group B haemolytic streptococcus
Haemophilus ducreyi
Calymmatobacterium granulomatis
Shigella species

Mycoplasmas:

Ureaplasma urealyticum
Mycoplasma hominis

Parasites:

Sarcoptes scabiei
Phthirus pubis

Viruses:

Herpes simplex virus types 1 and 2
Wart virus (papillomavirus)
Molluscum contagiosum virus (poxvirus)
Hepatitis A and B virus
Cytomegalovirus
? Acquired immuno-deficiency syndrome

Protozoa:

Entamoeba histolytica
Giardia lamblia
Trichomonas vaginalis
Fungi:
Candida albicans