Diagnosing sexual disease with no facilities

by R.T. Mossop

There is no notification of sexually transmitted disease in Zimbabwe so that we are unaware of the true prevalence. However the College of General Practice of Zimbabwe conducted a morbidity survey in which it appeared that about twenty five per cent of adult black patients seen by general practitioners were suffering from sexually related disease.

Undergraduate training in venereology in most medical schools is for the most part confined to discussion of syphilis and gonorrhoea.

For practical purposes my own training in Cape Town consisted of struggling with my fellow students for the opportunity to give an intravenous injection of arsenic.

While visiting Britain I visited a famous venereology unit, hoping to be educated. The staff were busy treating syphilis and gonorrhoea mainly amongst prostitutes and homosexuals.

They had a magnificent case contacting system, and all the staff were good at darkground microscopy, but they had seen only three cases of Chancroid in ten years, and were much more interested in the possibility of homosexual transmission of Hepatitis B.

Since sexually transmitted disease is not notifiable in South Africa, we have no idea of its prevalence here but the mine medical officers of Anglo American properties report that if you are an black mine worker you have about a 6% chance of picking up a venereal disease each year, and on some mines a 30% chance.

This is about the same chance you would have of contracting an upper respiratory infection worthy of reporting. Moreover, it is highly unlikely that the label given to your problem would be anything but gonorrhoea or syphils.

In Zimbabwe there is a dreadful new disease called "Wenera". This is named for WENELA, a reputable organisation which recruits labour for the mines from outside South Africa.

The disease presents with variations of a basic syndrome of a penile sore which has failed to heal after much treatment.

The inference is that the disease is acquired in South Africa - while on contract to the mines. The treatment given has been ineffective so that the patient returns home still suffering.

The possibility exists, that while South Africa may well have some sophisticated venereology units, the bulk of the sufferers are treated as they are in Zimbabwe, by rule of thumb, with little or no laboratory help.

For some time to come it is unlikely there will be laboratory help apart from serology for syphilis and culture and stained smears for gonorrhoea.

It follows that you might care to join us with a rule of thumb method to deal with the many thousands of sufferers.

In Salisbury a team consisting of a clinician, a pathologist, technicians and a photographer had a look at a series of male patients. A clinical assessment was made, photographs taken and a number of tests done.

The tests included darkground microscopy, Fontana staining, gram staining, FTA (Abs), gonococcal CFT, viral studies for Hepatitis B and Herpes, and a number of selective growth methods for virus, haemophilis ducreyi and others.

Since this is not a research paper some aspects may be dismissed in a few words. Darkground microscopy requires not only experience and a good instrument, proximity of patient, clinician and microscopist, but 20 minutes of clinical and 20 minutes of microscopy time.

The gonococcal CFT is a poor test in acute gonorrhoea. Hepatitis B and Herpes are no commoner in venereology patients than in the general population in Zimbabwe. Haemophilis ducreyi is difficult to isolate even by experts, and there is no chance if the material is not taken from a bubo.

The positive aspects are of much greater importance.

It is useless trying to label a penile sore seen peeping coyly through an open fly. Despite the text books, sores are not necessarily characteristic.

It is most important to have the underpants well down and the shirt well up. The inguinal nodes are all important, and often a vital clue may be seen on the pubis and in the natal cleft.

The history and the incubation period may also be important, but to rely on them is often confusing in people who are sexual athletes or whose sole desire in giving a history is to please you.

Primary syphilis (in the male)

The patient has penile sores, text book or not, with painless discrete rubbery glands in the groin. He is suffering from syphilis.

Syphilis (primary)

Glands, painless rubbery discrete, usually bilateral. Sore(s) usually painless, firm, clean often single. 9 - 90 days (3 weeks).
ally transmitted laboratory

Standard treatment is 2 - 3 ml of procaine penicillin daily for eight to ten days. Some people use Benzathine penicillin in one way or another. This is a fine public health cure, but leaves the patient open to late neurosyphilis.

Chancroid
The patient has penile sores, painful or not, hard or soft, together with painful glands which tend to coalesce, fluctuate and break down. He is suffering from chancroid. The chancroid may be masking an early presymptomatic syphilis, in about 10% in our series.
If he can return for a later serology test, well and good. If not start treatment with 8 ml of procaine penicillin. This will cure an incubating syphilis. Follow this with whatever treatment works for Chancroid. Short acting sulphonamides in a dosage of 4G daily are recommended by text books, but we find that these and tetracyclines in high dosage no longer work for us. The most satisfactory regime in Zimbabwe is Streptomycin 1.5 G M daily, for seven days, with or without sulphonamides.
Bubos are best dealt with by aspiration and replacement with streptomycin through the same needle. Cotrimoxazole in high dosage also works.

Donovanosis (granuloma inguinale)
There are no glands. The importance of this is that the sore is definitely NOT syphilis, and probably not Chancroid. If the sore is raised, painless, and when cleaned, has a granulating raw beef appearance, it is most likely to be Donovanosis.
If it is healing at one edge and progressing further at another, and if it has satellite sores on the pubis, lower abdomen or thigh, then it is pretty surely Donovanosis.
It responds well to streptomycin 1.5G daily for 10 days, and rather less well to Tetracycline 2G daily for the same period.

Lymphogranuloma venereum
A bubo appears about four weeks after contact. There are no sores, for this has been fleeting and possibly unnoticed.
The indolent bubo straddles the inguinal ligament which causes a transverse depression — known as "the sign of the groove".
The bubo breaks down and eventually there is a granulomatous mass which spreads down the thigh and elsewhere, with sinus formation and lymphatic obstruction.
In the early stages Tetracycline in high dosage for 10 or 20 days is effective, but later, surgery may be indicated.

Herpes II
This is not often seen, but a burning pain in the glands is followed by the appearance of small blisters which break down. There is no lymph-adenopathy unless secondary infection supervenes.
There is no effective treatment except to keep it clean and deal with secondary infection. It usually lasts

Chancroid
Glands painful tender, coalescing — fluctuating — discharging. Sores usually painful, soft, multiple, dirty red edge. 1 - 10 days. May mask co-existing syphilis.

Donovanosis (granuloma inguinale)
No glands!! (unless secondary infection) Sore(s) usually painless, raised, granulating, advancing edge, healing patchily, raw beef base. Sometimes satellites. Heal with pliant depigmented skin.

Lymphogranuloma venereum
Nodes above and below inguinal ligament — buboes matted swollen painful sinus formation fibrosis, protoclitis, strictures. Sore fleeting. Not seen.
for two weeks and may recur in the same manner as oral herpes.

Exposure to artificial light is said to help, and I have found that in recurrent cases Symmetrel (Amantadine) kept at home and used in normal dosage at the first sign will abort attacks.

![Herpes II]

Glands, nil except E. zary infection.

Sores preceded by burning pain, small vesicles, rupture, small group of sores, heal in two weeks, recurrent.

Gonorrhoea

A creamy urethral discharge appearing 1-7 days after contact and associated with intense dysuria is diagnostic unless proved otherwise. However, about 20% of male patients are symptomless, and this may be one of the reasons why gonorrhoea still abounds.

The treatment of choice is still penicillin, although there are strains which are totally resistant. The dosage is 8 to 16 ml of Procaine Penicillin, which will completely cure an incubating syphilis. The penicillin should preferably be given in one dose, preceded by 1G of Benemid to keep the blood levels of penicillin high. Benzathine penicillin should never be used.

Non specific urethritis

This is probably a persistent discharge, or a discharge which recurs after treatment, and which causes little discomfort. It can be aborted for a while by Tetracycline 500 Mg QID for five days.

One causative organism is said to be a chlamydia, but it may be due to other organisms and foreign bodies such as threadworm.

It has been suggested that a newly acquired penile discharge might be better treated with tetracycline as this drug will cure both Gonorrhoea and chlamydial NSU, which may not recur if treated early. However, this is speculation and the regime would do little for incubating syphilis.

In females

If the primary sore is external to the hymenal ring, the sores and the glands of syphilis and chancreoid are the same as in males. If the sore is deeper within the vagina, the sore is not so obvious, and the initial glandular involvement is intra pelvic and cannot be clinically determined.

It is possible that some cases of recalcitrant pelvic inflammatory disease are due to haemophilus ducreyi, and since this organism is so difficult to isolate, factual proof may be some years away.

In the case of lymphogranuloma venereum, spread is not to the inguinal nodes, but internally, often causing rectal stenosis and obstruction.

Gonorrhoea in females is more often asymptomatic than in males, and many cases are found in screening programmes in pregnant women and in family planning clinics.

It also often presents as a vaginal discharge, and in practice may or may not be considered in the differential diagnosis, depending on the social status of the patient, and on the community in which the doctor works.

In cases where laboratory help is not used, and even where it is available, the suspicion or even proof of gonorrhoea in women often leads to a prolonged low dose course of an antibiotic, instead of a high dose short course of penicillin.

What is so different about the gonococcus in a female? Surely it requires the same type of treatment as in the male? If gonorrhoea is half suspected — must treatment be but half the dose?

Non specific urethritis

This is seldom recognised in females. It would seem logical to treat the female partner of any male so afflicted, to obviate the possibility of re-infection.

While it is not intended to go into the differential diagnosis of vaginal discharges, an additional possibility should be considered. In any vaginal discharge which recurs after treatment, it is worth while doing an anal tape for threadworm. The treatment of this condition may well result in a cure of the vaginal problem.

In conclusion, sexually transmitted disease will never be conquered by treating every case, but it helps to treat those cases we see with some degree of rationality and sympathy. The answer can only come, via contact tracing, with a total change in social conditions and self discipline.

While we wait for this, let us do the best we can with whatever facilities we have, and not blame lack of facilities for doing things badly or not at all.