

THE OPERATION OF A VENEREOLOGY CLINIC IN THE WEST END OF LONDON

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As a result of the Venereal Disease Regulations of 1916, facilities were established in Great Britain for the free and confidential treatment of venereal diseases, divorced from Dermatology Clinics. These Venereology Clinics became the responsibility of Regional Hospital Boards after the National Health Act of 1946. James Pringle House is one such outpatient clinic of the Middlesex Hospital, situated in the heart of London. The tendency nowadays is to refer to such clinics as 'Clinics for Genito-Urinary Medicine'. This helps to remove the stigma from the diseases, and encourages patients to come forward. Whether this name describes more aptly the kind of work undertaken there is debatable however. Out of approximately 10,000 new patients seen every year, about one quarter suffer from Gonorrhoea or Syphilis. The bulk of the remainder is made up of people suffering from Non-specific Genital Infection, Candidiasis, and Trichomoniasis, in that order of frequency. Despite a sizable Maltese community in the adjoining area of Soho, the number of fellow countrymen presenting at the clinic is minute.

Reception

The doors of the clinic are open to the public from 9.00 a.m. to 6.00 p.m. Patients are referred by general practitioners, by consultants from outside hospitals, and by family planning clinics. Many come of their own accord, and some arrive with a contact slip given to them by a sexual partner who is infected and is being seen at a Venereology Clinic.

Most patients are seen by appointment. As a rule new patients are allotted 20 minutes, and follow-up cases 10 minutes. However a number of patients without an appointment attend each day demanding urgent attention. These are slotted into

gaps created by patients with an appointment who do not turn up, on a first come first served basis. As the number of patients who attend without an appointment roughly equals the number of defaulters, the clinic manages to run smoothly.

New patients are interviewed by the receptionist. Details of their name, sex, age, address, nationality, occupation, and method of referral are typed in a case sheet. This is given a progressive reference number, and is available to the doctor when he is ready to see the patient.

The Clinics

At all times three doctors are available in the male clinic and two in the female. In addition to the relevant medical history, details are taken of recent and past sexual intercourse, going back three months. This must be taken further back if the patient is suspected of having harboured secondary or infectious latent Syphilis, because all contacts must be chased up and examined. As explained later, this is mainly the responsibility of the Contact Tracer, but the doctor is interested in the nature of the intercourse and precautions taken, because this influences the examination and samples taken. The sheath is said to decrease the risk of contagion if used properly (Richards R.N., 1974). Early Syphilis in London nowadays is predominantly a disease of promiscuous homosexual men (British Cooperative Clinical Group, 1973). Passive homosexuals should undergo proctoscopy and have rectal swabs taken. A throat swab is indicated if orogenital sex has occurred with an infected partner. And so on.

In the short time available the general physical examination must obviously be orientated towards the manifestations of sexually transmitted diseases. The response of the pupils to light and accomoda-

tion is noted, the reflexes are elicited, the appreciation of vibration sense tested for, and the presence of skin rashes, enlarged glands, and ectoparasites looked for. Special attention is paid to the external genitalia, and to the oral and anal orifices, being on the lookout for discharges, erosions, ulcers, and warts. The respiratory and cardiovascular systems are assessed.

Female patients are examined with a bivalve speculum. The condition of the vagina and cervix are noted. The following specimens are obtained with a sterile platinum loop:

i. Specimen from the posterior fornix. This is smeared with a drop of saline on a slide for the dark ground microscopy of *Trichomonas Vaginalis*, and is also inoculated into liquid Feinberg-Whittington medium for culture of the same organism.

ii. Specimen from the lateral fornix. This is smeared on a slide and Gram stained for the direct microscopy of *Candida*, and is also plated onto Sabouraud's medium for culture of the same organism.

iii. Specimen of mucus from the cervical os. This is smeared on a slide and Gram stained for the direct microscopy of the Gram negative intracellular diplococci of *Gonorrhoea*, and is also plated onto Columbia Agar medium for culture of the same organism.

iv. Specimen from the urethra. This is processed like the cervical specimen.

Suspicious ulcers are squeezed at the base, and three smears made from the serum which exudes with a drop of saline on a slide for the dark ground microscopy of *Treponema Pallidum*. Cervical smears for the early cytological changes of cervical cancer may be performed with an Ayre spatula, especially in high risk groups. A bimanual pelvic examination is done at the end to look for signs of pelvic disease. Disposable polythene gloves are worn throughout the external genital and pelvic examinations.

The slides are processed, examined, and reported on the spot by nurses who become proficient at spotting the causative organisms by dint of doing it all the time. They also report on the presence of polymorphonuclear leucocytes, epithelial cells,

and other organisms in the stained smears.

In the male clinic the nurses oblige by taking the specimens also. Specimens from the urethra are plated onto Sabouraud's medium, inoculated into liquid Feinberg-Whittington medium, plated onto Columbia Agar medium, and smeared on slides for staining and dark ground microscopy. A two glass urine test is performed for threads or flakes in the first glass when urethral discharge is scanty, and cloudy urine in both glasses is posterior urethritis. The urine is also examined for protein and glucose.

The doctor performs proctoscopy on passive homosexuals. Specimens from rectal discharge are taken and processed as for urethral discharge, except that culture of the *Gonococcus* is done on the more selective Thayer-Martin medium. If indicated, the throat is swabbed with cotton wool on a stick and the specimen plated onto the same medium.

Blood samples for serological tests for Syphilis are taken from all patients on the first visit. Disposable plastic syringes are used throughout, and disposable polythene gloves are worn when drawing blood from patients who have had serum hepatitis. If requested, the result of the Venereal Disease Research Laboratory test is available within minutes using a Manual Slide Test.

Within minutes of the first examination, therefore, laboratory findings are available to add support to a diagnosis of Candidiasis, Trichomoniasis, *Gonorrhoea*, early Syphilis if treponemes are present in the lesions, and, by exclusion, Non-specific Genital Infection. The patient can be treated and followed up accordingly without delay.

The Laboratory

The routine serological tests for Syphilis undertaken in the laboratory are the Venereal Disease Research Laboratory (VDRL) test, and the *Treponema Pallidum* Haemagglutination (TPHA) test.

The VDRL test, which is a flocculation test using a cardiolipinlecithin-cholesterol-carbon antigen (Searle Diagnostic), is performed on an Auto-Analyser on neat

serum, and in titre if positive. Quantitative tests are important because they provide a standard against which further change or lack of change may be compared. The VDRL test measures a reagin in the serum, and is prone to give both acute and chronic Biological False Positive results. It takes one technician one morning to supervise the test on about 100 sera obtained the day before and stored in a refrigerator. The same technician does other laboratory chores concurrently.

The TPHA test is technically easy to do, and quite cheap to run if only microlitres of reagent are used. It involves the reaction between the patient's serum and a component of *T. Pallidum* (Nichols Strain) which has been adsorbed onto previously fixed sheep red blood cells. Haemagglutination occurs when serum containing antibody to *T. Pallidum* is mixed at a suitable dilution with the sensitized red blood cells suspended in distilled water. The test is performed manually, and again it takes one technician one morning to do the tests on the same 100 sera. The test is available commercially in kit form (Fujizoki Pharm. Co. Ltd). A special absorption diluent is included in the kit to eliminate Biological False Positive reactions, which then causes the test to have almost the same sensitivity, specificity, and life-long positivity of the *Treponema Pallidum* Immobilisation (TPI) test (Johnston N.A., 1972) which is technically more difficult to perform.

The Fluorescent *Treponemal* Antibody Absorption (FTA Abs) test is performed on sera which are positive on routine tests as a double check. A variety of non specific antibodies are first absorbed away from the patient's serum. This is then incubated with *T. Pallidum* fixed to a microscope slide, to which the antibodies adhere. Anti-human globulin tagged with fluorescein is then added, and this binds with the patient's antibody coating the *treponema*. flouresce a faint green on a dark background. The test is specific, sensitive, and easy to carry out if the equipment is available (Mackey D.M., Price E.V., Knox J.M., 1969).

Despite the TPHA test and the FTA

(Abs) test there always remain a certain number of sera in which the final diagnosis of Syphilis will depend on the TPI test. Facilities are not available at James Pringle House for this test, and these sera are sent to the Venereal Diseases Reference Laboratories at the London Hospital.

The culture plates are examined after 48 hours incubation. *Candida* produces a characteristic white colony on Sabouraud's medium. *Trichomonads* are pipetted from the bottom of the Feinberg-Whittington liquid medium and looked for under the dark ground microscope. In this same medium the yeast cells of *candida* form characteristic germ tubes. The *Gonococcus* produces typical pinhead sized semitransparent colonies on Columbia Agar medium which contains 5% horse blood, if care is taken to provide it with an atmosphere of CO₂ in a candle jar. A few drops of a 1% solution of tetramethyl-p-phenylenediamine are dropped on the colony, which goes purple if it is *N. Gonorrhoeae* (the oxidase reaction).

Because of the presence of other members of the *Neisseria* group in the throat, a positive culture from this site presents diagnostic problems. In this case the colony is subcultured onto C.T. Agar medium, and filter paper soaked in Dextrose, Maltose, Lactose, and Sucrose added on top. The different members of the *Neisseria* group ferment these sugars to varying extents with the production of acid (Cruickshank, 1965). C.T. Agar which has a pink colour, contains an indicator which causes the agar to turn yellow when acid diffuses into the medium. A true *N. Gonorrhoeae* may be identified by the pattern of sugars it ferments. All positive *Gonococcal* colonies are subcultured for quantified antibiotic sensitivity tests. There is a correlation between failures and the lessened sensitivity of *Gonococci* to antibiotics. When cultures do not verify a diagnosis of *Gonorrhoea* entertained on direct microscopy, the original slide is retrieved from storage and examined by the experienced pathologist. The organism may fail to grow despite being present in the discharge. In the case of women, the smears are frequently negative for *gonococci*, whilst the cultures

are positive.

Other facilities available to the doctor is the detection of anti-bodies in sera to the Herpes Virus, and the detection of the cytopathic effect of Herpes Virus on foetal lung tissue culture, but these are performed in a virus laboratory in the main hospital.

Treatment

Rapid diagnosis facilitates prompt and rational treatment. A supply of oxytetracycline tablets, metronidazole tablets, nystatin pessaries, and a variety of antifungal and steroid ointments are available in the doctor's desk to be handed over to the patient free of charge. Gammabenzene hexachloride powder, benzyl benzoate emulsion, podophyllin solution, and trichloroacetic acid crystals are at hand and applied by the nurses.

Uncomplicated cases of Gonorrhoea receive one intramuscular injection of 5 mega units of benzyl penicillin made up in 5 ml. of a 0.5% solution of xylocaine, thirty minutes after 1 Gram of probenecid by mouth. If this fails or the patient is allergic to penicillin, a single intramuscular injection of 2 Grams kanamycin, or three sulphamethoxazole trimethoprim tablets twice a day for three days are administered. The patient is discharged as cured after three negative cultures at weekly intervals, but is instructed to return after three months for a repeat of the serological tests for Syphilis.

Early Syphilis is treated with 600,000 units of procaine penicillin intramuscularly daily for ten days. Patients allergic to penicillin receive erythromycin 500 mg tablets four times a day for 15 adys. Serological tests for Syphilis are repeated at monthly intervals for three months, then at three monthly intervals until one year after treatment. The cerebrospinal fluid is examined at the end of the first year after treatment. If the VDRL test becomes negative in the first year it is repeated at six monthly intervals during the second year, and if still negative at the end of the second year the patient is discharged as cured. If it remains positive it is repeated at three monthly intervals until it is per-

sistently negative.

Non-specific Urethritis is the commonest condition seen in men. Its treatment is most unsatisfactory. For a first attack a five day course of oxytetracycline 500mg tablets twice daily is prescribed, and the patient told to abstain from sex and alcohol. Recurrences are common however, and at this stage a further course of ten days is prescribed. The further treatment of those patients who relapse more than once is not standardised, and depends on the personal experience of the doctor in charge.

Since the advent of modern therapy the vast majority of patients with sexually transmitted diseases are treated successfully as outpatients. The occasional person who needs inpatient treatment is admitted in a general medical ward, and care is taken not to distinguish him in any way from the other patients in the ward.

The Contact Tracer

Control of sexually transmitted diseases depends on the tracing of infecting contacts (Scottish Health Services Council, 1974). It is desirable to see the regular sexual partners of patients who have relapsing Non-specific Genital Infection, Candidiasis, Trichomoniasis, and Scabies. The onus of explaining this to the patient rests with the doctor at the time of examination. On the other hand, tracing the contacts of patients with infectious Syphilis and Gonorrhoea, being of vital importance from a public health point of view, is undertaken by professional Contact Tracers, two of whom are employed full time at James Pringle House.

Contact Tracers are otherwise known as Health Visitors. However this is a misnomer, because they try to achieve their aim without moving from the office, and regard an outside visit as an admission of failure causing loss of time and money (The Health Education Council, 1976).

The Contact Tracer interviews all newly diagnosed cases of Gonorrhoea and infectious Syphilis. A rapport of trust is set up, care is taken not to moralise, but in the meantime a detailed sexual history is taken. The patient is given a slip of paper

to deliver to the person who has presumably infected him, and one for each sexual partner since, including the wife or husband. The slip of paper contains the name of the clinic from where it is being issued, the patient's reference number, and the diagnosis in the official code of the Department of Health and Social Security, e.g. B — Gonorrhoea. The contract will hopefully realize or be convinced by the patient that it is in his interest to present at a V.D. Clinic with this contact slip in order to be examined and treated. After the contact is examined, the findings are entered in the same code at the back of the contact slip which is sent back to the clinic it was issued from. By this method a check is kept on the efficacy of contact tracing.

Very often the use of the contact slip may be obviated by the patient volunteering to phone his contact directly. Habitual promiscuous male homosexuals in particular are becoming so aware of their increased risk of contracting and spreading Syphilis, that some members of that community keep a name and telephone number book of all contacts for the preceding three months, knowing that this is the longest incubation period of the disease!

At the end of the clinic the doctors review the case sheets of those patients who had an appointment but defaulted. If these constitute a public health hazard because they may still be infective, a note to this effect is entered in their case sheets against the date. Before filing away the day's case sheets into potential oblivion, clerks examine all the notes. A list of the dangerous defaulters is made and handed to the Contact Tracer. At this stage a telephone call, letter, or in the last resort a house visit is mandatory.

As appointments cannot be fixed more than three weeks in advance, patients being followed up for Syphilis every so many months have their name entered in a diary against the date near which they are expected to attend. It is the Contact Tracer's duty to check the diary every morning and see that the patients scheduled to attend do so, and chase them up if they default. This method is also applied in the short

term to patients whom the doctor suspects may default despite a firm appointment a few days hence.

The Medical Social Worker

A Medical Social Worker works part time in the department. There are many patients with personal, financial, emotional, domestic, and other problems who can benefit by talking to her.

The Psychiatrist

Some patients attend the clinic with genuine sexual problems such as impotence. Others suffer from mental disease expressed as a persistent, unjustified fear of venereal infection. The services of an experienced psychiatrist are available in the clinic once a week to deal with these problems.

Discussion

There is much to be said in favour of one department being responsible for the care of the patient and all his contacts, male or female. Training in dermatology is not particularly relevant to the examination of patients, especially females. A good knowledge of Gynaecology is essential in the examination of the latter. While it is all right to practise Venereology with Dermatology, British experience indicates that it is more advisable to have independent V.D. clinics.

There is no doubt that James Pringle House is well equipped to deal with the problem of Sexually Transmitted Diseases, and may be looked up to as a model on which to organize an efficient clinic should the need arise. James Pringle House caters for a restless cosmopolitan community whose sexual attitudes and behaviour differs from that of the Maltese. The behaviour of the infective agents, once present, is similar in both countries however, and there is a lot to be derived by observing the latest diagnostic and therapeutic techniques adopted in more advanced centres. Besides, in this age of rapid communication the behaviour of our youth will be conditioned more by that of their counterparts abroad. The growth of tourism inevitably brings with it an increased risk

of exposure to the diseases.

In the clinic I was impressed by the frequency with which Gonorrhoea in particular was discovered in patients who were asymptomatic, especially females who came forward for a check up after taking a risk. This raises the disturbing question of whether the extent of the problem in Malta is being grossly underestimated. Only a change in attitude towards these diseases will allow potentially infected asymptomatic persons to come forward for examination. This, combined with efficient contact tracing will supply the answer. Antibiotics in themselves are not the ultimate solution to the problem. Should the rising tide of Sexually Transmitted Diseases which is affecting Europe reach the shores of Malta, then a clinic operating partly on the lines sketched above would be a very desirable thing to have.

Summary

A period of employment at James Pringle House provided the opportunity of observing how the growing problem of sexually transmitted diseases is being dealt with in London. Paramedical staff plays a vital role in the efficient running of the clinic. Diagnostic procedures which

could be adopted to advantage in Malta are discussed. It is regretted that the services of professional contact tracers are not available in Malta. Failure to chase up asymptomatic carriers leads to underestimation of the problem, and constitutes a public health hazard. While it is all right to practise Venereology with Dermatology, British experience indicates that it is more advisable to have independent V.D. clinics, especially if the incidence of Sexually transmitted diseases reaches the epidemic proportions it has done in most countries.

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