With compliments from
THE SUPERINTENDENT
Anti-V. D. Campaign

VENEREAL DISEASES

Notes for the Guidance of the Medical Officers

1963

PRINTED AT THE GOVERNMENT PRESS, CEYLON, ON PAPER MANUFACTURED AT THE EASTERN PAPER MILLS CORPORATION, VALAICHCHENAI, CEYLON

PREFACE

THE INSTRUCTIONS given in this pamphlet are intended to guide medical officers in the treatment of Venereal Disease and cancels all previous recommendations.

It is published with the approval of the Director, Health Services.

Dr. (Mrs.) E. D. C. PEREIRA,
Superintendent,
Anti-V. D. Campaign.

Office of the Anti-V. D. Campaign,
De Saram Place,
Colombo, 31st July, 1963.

EARLY SYPHILIS

EARLY syphilis is syphilis of less than 4 years' duration. It has the best prognosis for cure, and treatment should be vigorous. Poor treatment in this stage may lead to infectious relapse, late forms of syphilis and serum fastness. Patients with *EARLY syphilis* should be observed for a minimum period of *Two Years* after completion of treatment and should not be dismissed until blood tests and spinal tests are negative.

Diagnosis

Sero-Negative Primary (S1)

Clinical.—Characterized by single, or occasionally multiple lesions, which often fail to fit the typical text-book description of a chancre. In addition, there is enlargement of the regional lymph nodes. In this stage the blood test is negative but becomes positive within 4-5 weeks and is then known as :—

Sero-Positive Primary (S2)

Same clinical symptoms as in above stage.

Laboratory.—(S1 & S2) Darkfield examination is practically 100 per cent. positive in early lesions, when satisfactory specimens are examined by a competent person. Low titred serological tests should always be checked for a rise in titre before treatment is started if darkfield examination is negative. Suspect all genital lesions in the male or female as being syphilitic until proved otherwise.

Secondary (S3)

Clinical.—Usually associated with rash, generalized lymph adenopathy, sore throat, condylomata, mucous patches, headache, malaise. May have a healing chancre or history of recent primary lesion.

Laboratory.—Diagnosis confirmed either by darkfield, blood test, or both. Blood tests always 100 per cent. positive in *secondary syphilis.*

Latent (S4) (*a*) Early

Clinical.—No lesions present, but history indicates an infection of less than 4 years' duration. Patients are usually under 25 years of age.

Laboratory.—Diagnosis is made on finding two positive blood tests. Spinal fluid test is important for correct diagnosis of this stage. *Spinal fluid is negative.*

LATE SYPHILIS

Latent (S4) (*b*) Late

Clinical.—No lesions present, but history indicates an infection of over 4 years' duration. Patients are usually over 25 years of age.

Laboratory.—Diagnosis is made on finding two positive blood tests. Spinal fluid test is important for correct diagnosis of this stage. *Spinal fluid is negative.*

Neuro-Syphilis (S5)

Neuro-syphilis should be treated by the specialist, since accurate neurologic examination and spinal fluid interpretation, require considerable skill and experience. However, since many physicians in general practice are treating these patients, the following general recommendations are made :—

1. *Spinal fluid examination* should be done in all cases of late syphilis and neuro-syphilis before any treatment is given, and should consist of an accurate cell-count, protein determination, Pandy test, langé curve, and the VDRL test.

2. Patients with positive spinal fluids but without clinical manifestations of neuro-syphilis should also be diagnosed as neuro-syphilis, i.e., *asymptomatic neuro-syphilis.*

Cardio-Vascular Syphilis (S6)

Cardio-vascular syphilis should also be treated by the Specialist in consultation with a Cardiologist. These cases need general medical care and symptomatic treatment more than anti-syphilitic treatment.

Benign Late Syphilis (S7)

Gummata of bones, skin, viscera, &c.

Treatment for Early Syphilis

(i.e., S1 to S4 Early)

Out-patient.—Procaine penicillin with 2 per cent. aluminium monostearate in oil is available from the Central V. D. Clinic in Colombo for all V. D. patients. Hence, stop all treatment with Arsenic and Bismuth. A total dose of 6 million units of PAM should be given I. M. as 600,000 units (2 cc.) daily or on alternate days for 10 injections. Where this is not practicable PAM 1.2 million units (4 cc.) may be given I. M. bi-weekly for 5 injections.

Information received from various sources and other W. H. O. projects show that 85-90 per cent. success had been obtained in the cure-rate by treating early syphilis with 2.4 units PAM as an initial injection. In view of this the following treatment schedule was recommended.

PAM, 8cc. (2.4 million units), 4cc. intramuscular into each buttock, followed on the 4th or 5th day by further injections of PAM, 2cc. each on alternate days for a sum of 6 million units PAM (i.e., 2cc. × 6).

In this way, the majority of patients can be rendered non-infectious with the initial injection and even if they default, sufficient treatment would have been received by most of them to control the spread of syphilis.

However, the tendency to default is higher in this schedule and therefore one of the earlier schedules is now recommended.

Patients who have become hypersensitive to penicillin can be treated with erythromycin—500 mgm. 6 hourly for 10 days.

Follow-up

1. Do a blood test for syphilis at monthly intervals and depend on the change in titre to determine the patient's response to treatment. The blood test may not become negative for 4-6 months following treatment. A continuous fall in titre indicates a satisfactory response.

2. Examine patient's marital partner and sexual contacts ; take blood tests at time of initial examination and monthly thereafter for four months. Failure to do this may lead to re-infection of your patient and the infection may thus be carried backwards and forwards.

3. *Indications for Re-treatment* :—

(*a*) Recurrent syphilitic lesions with darkfield examination positive.

(*b*) Sharply rising titre of 2 or more dilutions. This rise in the titre should be confirmed with repeated blood tests every week and physical examination for any lesions.

Treatment.—PAM 2cc. × 15 injections on alternate days.

(*c*) When a case of re-infection is diagnosed, re-register the patient as a new case giving him a new number. This procedure should be followed in the case of both *Syphilis* and *Gonorrhoea.*

OBTAIN ADVICE OR WRITE TO US WHENEVER IN DOUBT

Treatment for Late Syphilis

(i.e., S4 LATE TO S7)

PAM 2cc. on alternate days to make up a total of 9-12 million units. Where only bi-weekly sessions are held PAM 4cc. × 8 or 10 injections may be given. The higher total dose is advised for Neuro-syphilis and Cardio-vascular syphilis.

C. S. F. should be examined in all cases before commencing treatment.

All family contacts of cases of late syphilis should be examined and treated, if found positive.

False Positive Tests for Syphilis

False positive results for syphilis are sometimes found in patients suffering from a variety of infectious diseases. Hence, considerable caution should be exercised before diagnosing syphilis on the basis of tests alone in patients with *upper respiratory infections, recent febrile illnesses or immunizations.* Such conditions as *vaccinia, infectious mononucleosis, leprosy, malaria* and the *collagen diseases* also cause biologic false positive tests for syphilis. False positive reactions are usually of low titre and may show discrepancies when tested by several serologic techniques. Do not hesitate to withhold treatment in patients with recent febrile illnesses, when there is no clinical evidence of syphilis.

Further study of these cases may reveal a false positive test. Whenever a false serologic reaction is suspected, consultation with the laboratory is recommended. Usually a false positive reaction in a patient will become negative if followed-up with repeated blood tests for 4-8 weeks.

The R. P. C. F. (Reiter Protein Complement Fixation) Test is now performed at the M. R. I. on a limited number of problem sera and is a valuable aid to diagnosis.

Congenital Syphilis (S8)

Congenital Syphilis is usually divided into *Early and Late*, depending on the age of the patient. Children under 2 years of age are classified as having *EARLY CONGENITAL SYPHILIS* and their symptoms, treatment and follow-up are similar to patients with early acquired syphilis. Children over 2 years of age with congenital syphilis are classified as having *LATE CONGENITAL SYPHILIS* and are in general comparable to patients with late acquired syphilis.

Early

Clinical.—The infant is often acutely ill, and needs paediatric care, good nursing, and careful feeding. Therefore, these cases will be best treated in hospital where the mother also can be with the child. The infant may show a rash, snuffles, pseudo-paralysis, swelling of joints, epiphysitis and dactylitis, condylomata, muco-cutaneous lesions, adenitis, and enlarged liver and spleen.

Laboratory.—Positive darkfield from cutaneous lesions. Serologic tests of high titre or rising titre. X'ray of long bones frequently show osteo-chondritis and periostitis.

Late

Clinical.—Frontal bossing, saddle nose, Hutchinson's teeth, Moon's molars interstitial keratitis and rhagades. Nerve deafness may be found in older children. Antero-posterior thickening of long bones especially marked in the Tibae " Bowing of the Tibae ", clutton's joints gummata and neuro-syphilis may also be found.

Laboratory.—Two positive blood tests for syphilis. Spinal fluid examination should be done in all cases to rule out neuro-syphilis. Some may be sero-negative.

Serologic tests of the cord blood and low-titred quantitative tests in a new born infant are not diagnostic of congenital syphilis unless associated with definite clinical or X'ray manifestations of syphilitic infection. In the absence of the latter it may be due to passive transfer of *reagin* antibody from the mother's blood. On the other hand a positive serologic test may not appear for 2-3 months after delivery. Therefore, children born of syphilitic mothers should be followed with serologic tests every month for a period of four months. If the test is negative at the age of four months it should be repeated at the age of 6 months and again at one year, and if still negative the case can be dismissed as non-syphilitic.

Treatment

Early

Ambulatory.—PAM. 1cc. on alternate days for 10 injections, i.e., a total of three million units. Some infants with congenital syphilis are often premature and under-nourished. General paediatric care is essential in these cases.

Late

The treatment of late manifestations of congenital syphilis such as interstitial keratitis, nerve deafness and juvenile paralysis is, in general, unsatisfactory. These patients require individualized treatment and expert guidance should be sought by the physician in general practice. The treatment of patients with late congenital syphilis is the same as that for late acquired syphilis except for the difference in dosage of the drug. In general, children of 2-5 years should be given half of the adult dose of PAM. Above 5 years the full dose, i.e., 9-12 million units PAM.

Follow-up

1. Follow-up of blood tests and indications for re-treatment in early congenital syphilis are the same as for early acquired syphilis. The serologic and spinal tests should be negative before the child is dismissed.

2. The follow-up observations and indication for retreatment in late congenital syphilis are the same as in late acquired syphilis. The serologic tests in these patients may not become negative following treatment. But this does not of itself indicate an unsatisfactory result. Blood tests should be performed every three months for at least two years.

3. When a case of congenital syphilis is discovered the whole family should be investigated including both parents. Blood tests for syphilis should be done on every case.

SYPHILIS IN PREGNANCY

Adequate treatment of syphilis in pregnancy will prevent infection of the unborn child and will result in a non-syphilitic baby in almost every instance. Early diagnosis of syphilis is

essential. Blood tests for syphilis should be taken on *every* pregnant woman at the *first* pre-natal visit and again at the 7th or 8th month of pregnancy, if possible.

Diagnosis

The clinical and laboratory criteria for diagnosis of syphilis in pregnant women are the same as in other patients. Clinical manifestations of early syphilis may be suppressed in pregnancy, and the diagnosis of syphilis is often based on serologic tests. Although patients with syphilis of many years' duration who have already had adequate treatment are not likely to have syphilitic children, further treatment of these patients during pregnancy is advisable if their blood tests are still positive.

Treatment

Ambulatory.—PAM, 600,000 units (2cc.) given daily or on alternate days to a total of 6 million units, or PAM 4cc. bi-weekly for 5 injections.

Follow-up

1. The quantitative blood test for syphilis should be taken every month until delivery. These patients should be re-treated during pregnancy if they develop (*a*) re-current syphilitic lesions, or (*b*) definite rise in quantitative blood tests.

2. All patients should have follow-up blood tests after delivery. This follow-up is the same as that out-lined for *Early and Late Syphilis.*

3. A positive blood test for syphilis at the time of delivery does not necessarily indicate that treatment has been inadequate since it may become negative following delivery.

4. *All infants* born of syphilitic mothers must be followed-up as indicated in the section on congenital syphilis.

TO PREVENT CONGENITAL SYPHILIS TAKE ROUTINE BLOOD TESTS FOR SYPHILIS IN EVERY PREGNANT WOMAN. THE EARLIER TREATMENT IS GIVEN THE BETTER THE PROGNOSIS.

GONORRHOEA

This disease is usually characterized in the male by a purulent discharge per urethra and pain on micturition, and in the female with a purulent discharge per urethra, vagina, and cervix.

Before treatment is started *always* examine a smear stained by Gram's method for G. C. and do a blood test for syphilis.

Treatment

When a positive case is detected in the male always treat the marital partner or his sex contact whenever possible even if, on examination, her smear gives a negative report.

Drug: *PAM is the drug of choice.* One injection of PAM, 2cc. for each patient.

If the patient does not respond to PAM and the smear after treatment shows G. C. give the patient Crystalline Penicillin 1,000,000 units daily for 2 days. Streptomycin 1 gm. daily for 3 days or Tetracycline 250 mgm. six hourly for 2 days are also effective.

Every case of Gonorrhoea should be followed-up with routine blood tests once a month for at least four months in order to detect any concurrent syphilis.

Non-Gonococcal Urethritis

The cases of Non-gon. urethritis may be produced by the following :—

1. Bacterial (organisms other than G. C.)
2. Abacterial (viruses, protozoa, yeasts)
3. Traumatic
4. Local disease (syphilis, chancroid, L. G. V.)
5. Infections above (stricture, cystitis)
6. Systemic diseases
7. Metabolic (phosphaturia, oxaluria)
8. Food (Spinach, pineapple)

Treatment

Before treatment is commenced examine a smear by Gram's method and do a blood test for syphilis.

Drugs.—A single injection of Streptomycin 1 g. with a course of sulphonamide, is given in the first instance.

Should this fail Streptomycin 1 g. daily for 5 days with an alkaline mixture should be tried.

If the discharge still persists, Tetracyline 250 mgm. 6-hourly for 5 days or Dimethyl Chlortetracycline 300 mgm. b.d. for 3 days should be given.

For infections with Trichomonas vaginalis use Metronidazole 200 mgm. t. d. s. for 7 days. The marital partner should be treated at the same time.

CHANCROID.—Characterized by the appearance on the genitals of multiple soft tender ulcers which bleed easily. They are often of irregular contour and are covered with a thin slough. Tender buboes in the groins are found in about 50 per cent. of cases.

Darkfield examinations to exclude syphilis should be done. The Ito-Reenstierna Skin Test is not very dependable.

Treatment—A course of sulphonamides—4 stat and 2 tablets four times a day for about 6-7 days. Should the response be poor, Streptomycin 1 gm. daily for 5-10 days is recommended. Penicillin and the broad spectrum antibiotics *should not be* used as they could mask the symptoms of syphilis.

Follow-up—Serological tests for syphilis must be done at monthly intervals for 3 months.

LYMPHOGRANULOMA VENEREUM (L. G. V.)

Characterized by a small fleeting primary lesion on the penis or vulva and a usaully suppurative regional adenitis. Lymphatic obstruction may lead to elephantiasis and ulceration. Stricture of the rectum may occur.

The Frei Skin Test is a useful aid to diagnosis. The Complement Fixation Test is more reliable but is too expensive for routine use.

Treatment—A course of Sulphomanides as for Chancroid. Should the response be poor, Tetracyline 500 mgm. 6-hourly for 7-10 days or longer according to the clinical response.

GRANULOMA INGUINALE

Very rare in Ceylon.

Characterized by a granulomatous process which usually occupies the groin.

Treatment—Streptomycin 1 gm. daily for 10 days or more.

CONDYLOMATA ACUMINATA (Venereal Warts)

Characterized by a " Cock's Comb " like appearance and must be distinguished from the condylomata lata of secondary syphilis.

Treatment—Local cauterization with 25 per cent. podophyllum in liquid paraffin, tincture benzoin co. or absolute alcohol.

Very large masses may have to be excised by the electric cautery.

HERPES PROGENITALIS

Characterized by the recurrent occurrence on the genitals of groups of small vesicles which rupture to form superficial ulcers. May be painful. Tend to recur even without further sexual contact.

Exclude syphilis with darkfield and serologic tests.

Treatment—If super-infected dress with antiseptics, otherwise keep dry with bland dusting powder. In resistant cases, 6-8 vaccinations with calf lymph at weekly intervals may be tried.

BALANITIS AND BALANO-POSTHITIS

Characterized by very superficial ulceration of geographic pattern on the glans and prepuce.

Treatment—Saline baths and dusting powder.

In all the above conditions serologic tests for syphilis must be done monthly for three months.

YAWS

Yaws is usually divided into two groups—Early and Late. It occurs in communities of low socio-economic level all over the world in the tropical zone.

EARLY—in children with papules and skin framboesides.

LATE—older children and in adults with late lesions in bones and joints.

Treatment

Early and Late Yaws :—

Adults over 15 years PAM 4cc. in one injection.
Children under 15 years PAM 2cc. in one injection.

Latent Yaws and Contacts :—

Under 15 years	1cc.
Over 15 years	2cc.

In cases of doubt as to the possibility of the case being one of syphilis a preliminary lumbar puncture is done and the case treated as one of latent syphilis

PROCAINE PENICILLIN IN ALUMINIUM MONOSTEARATE

This is the drug of choice for syphilis, gonorrhoea, and yaws ; especially so, as it can be given on an ambulatory basis. This drug is available to all V. D. patients throughout the Island from the Central V. D. Clinic, situated at De Saram Place, Colombo.

QUARTERLY REPORT

A quarterly return has to be sent from all V. D. clinics to the Office of the Superintendent, Anti-V. D. Campaign, on form Medical 6 within seven days of the end of the quarter. This quarterly return must be completed by all outstation clinics and hospitals treating V. D. cases. The requirements of penicillin are calculated from the number of cases treated during the previous quarter ; the indent for penicillin must be included in the cage allotted in the Quarterly Report Form.

Notes on the completion of Quarterly V.D. Return Form

ANALYSIS OF NEW CASES

Sero-negative primary syphilis.—This diagnosis only applies to patients with a chancre confirmed by *Dark Ground Microscopic Examination* in whom the blood test is negative.

Other Venereal Diseases, include soft-sore, lymphogranuloma venereum and granuloma inguinale.

Follow-up of Cases.—The total of the first and second lines should equal the total of lines three, four and five.

Public Education Activities.—This refers to public education *outside* the clinic.

Reporting on V. D. R. L. Test

V. D. R. L. test has replaced the Khan and CL tests. Tests are performed by the Central Laboratory of the Anti-V. D. Campaign in De Saram Place, and Laboratories in the provinces in charge of Pathologists, and the laboratory of the V. D. Clinic at Katugastota. M. R. I. performs the test on specimens sent by Private Practitioners, the blood bank in Colombo, the medico-legal department and specimens from private laboratories and private hospitals.

V. D. R. L. is reported Reactive (R), Weakly Reactive (WR), or Non-Reactive (N) quantitatively. All reactive specimens will have the serial dilution at which the specimen gave a reactive result ; thus Reactive (4) or R (4). If the specimen is found,

Reactive undiluted, it is reported Reactive (1) or R (1).

In the case of Weakly Reactive specimens (undiluted) the report is Weakly Reactive (0) or WR (0).

Prozone Reaction—Sometimes this is met with. This shows that a specimen which contains a high amount of antibodies gives a weakly reactive result in the qualitative test but by the quantitative test a Reactive result is seen in the higher dilutions.

Use of Medical 10—Request Form for Examination of Blood for V. D. R. L. Test

The above request form is being revised and will be printed in duplicate. Both forms should be *completely filled* and sent to the testing laboratory with the specimens of blood. The form should not be sent by separate post. Time and date of collection of samples are important. The address of the clinic or institution, the number of patients' files or tickets and the signature of the M. O. and brief notes on the case (when useful for an opinion on the case by the Pathologist or Bacteriologist), should be legibly entered in *ink*. One copy w ll be retained by the testing laboratory and the other will be despatched to the officer requesting the examination with the results. Every laboratory sends a monthly return, to the S. H. S. of the area with a copy to the Superintendent, Anti-V. D. Campaign, De Saram Place, Colombo.

R. P. C. F. Test—Reiter Protein Complement Fixation Test (qualitatively) M. R. I. performs the R. P. C. F. test on sera from problem cases. The result is reported as positive or negative.

F. T. A. Test—Fluorescent Treponemal Antibody Test is expected to be introduced in the near future, at the Central Laboratory of the Anti-V. D. Campaign, De Saram Place, Colombo. This test has great advantages over the R. P. C. F. test in the diagnosis of problem cases.

ANNEXURE I

Headings of Registers that should be maintained at a V. D. Clinic

1. NEW CASES REGISTER

V. D. C. No.	*Name in Full*	*Address in Full, Age, Sex, Marital Status, Nationality, Occupation*	*Diagnosis*	*Treatment*	*Remarks*

2. SUBSEQUENT VISITS REGISTER

			Date						

3. SUMMARY OF ATTENDANCE (a waste book may be used for this purpose)

DATE	*First Visits*	*Subsequent Visits*	*Total*	*Remarks*

4. CONTACT INVESTIGATION REGISTER

Serial No.	*V.D.C. No. of Patient interviewed or diagnosed*	*Date of Interview*	*Patient's Disease*	*Name of Contact*	*Address of Contact*	*Date located*	*Date attended*	*V.D.C. No. of Contact*	*Diagnosis*	*Remarks*

5. MEDICAL OFFICER'S DIARY GIVING DAY-TO-DAY EXAMINATION AND TREATMENT (a waste book may be used for this purpose)

V. D. C. No.	*BLOOD*	*SMEAR*	*T. P.*	*PAM. GIVEN*

6. BLOOD SPECIMEN REGISTER (a waste book may be used for this purpose)

Date on which Specimen sent	*V. D. C. No. of Patient*	*Result of Findings*		
		VDRL	*RPCF*	*FTA*

7. CONTACT SLIP REGISTER

Date Contact Slip issued	*Contact Slip No.*	*Patient's VDC No.*	*Diagnosis of Patient*	*Name, Age and Address of Contact, &c.*

Relationship to Patient	*Clinic referred to*	*Date Contact attended*	*Contact's V. D. No.*	*Diagnosis of Contact*	*Remarks*

ANNEXURE II

Ante-natal Clinic.....

1. REGISTER—ROUTINE ANTE-NATAL BLOOD TEST

Serial No. Annually or Ante-Natal Ticket No.	*Serial No. Monthly*	*Full Name and Address and Husband's Name*	*Blood Report*	*Diagnosis*	*Treatment given PAM in CC.*	*Action taken by M.O.H. or referred to a V.D. Clinic and whether Treatment completed*

2. REGISTER OF V. D. EPIDEMIOLOGICAL WORK

Serial No.	*Date received*	*Referred by*	*E. R. No. and Particulars of Contact*	*Date referred to Field Staff Range P. H. I. or P.H.N. for Investigation*	*Date reported by P.H.I. or P. H. N.*	*Action taken regarding Location and Examination of Contact*	*Date E. R. returned to original Clinic*

3. REGISTER OF V. D. DEFAULTERS

Serial No.	*Date received*	*Referred by*	*V. D. C. No. and Particulars of Defaulter*	*Date referred to Field Staff Range P. H. I. or P.H.N. for Investigation*	*Date reported by P. H. I. or P. H. N.*	*Action taken regarding follow-up of Defaulter*	*Date Defaulter's Report returned to original Clinic*

R 10969—3,000 (7/63) GOVT. PRESS, CEYLON.