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RESEARCH NEEDS IN THERAPY OF LEPROSY

by

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THERAPY OF LEPROSY

Leprosy, a chronic communicable disease, caused by M. leprae, occurs in most of the developing countries, the number of estimated cases being in excess of 10 million according to indications from a recent WHO estimate. The disease is of great public health importance not only due to a proportion of patients, belonging to certain types of leprosy, carrying and discharging very large numbers of organisms, but also due to a significant proportion of patients coming down with physical disability which is permanent and progressive.

In the 1950s it was believed that dapsone therapy of all infectious cases would result in the control of leprosy, and this approach was recommended by WHO. In some countries where this WHO-recommended approach to leprosy control has been applied for 20 years or more, substantial reductions of prevalence have been achieved, as confirmed by means of random sample surveys, notably in Burma, Thailand, and Upper Volta. However, the implementation of this strategy has faced serious problems in the majority of countries where leprosy is endemic, at least partly because of inadequate public health infrastructures. The necessity for treatment of multibacillary forms of leprosy with dapsone alone to be continued for more than ten years imposes a nearly unbearable burden on the resources of countries with endemic leprosy, and it is difficult to get patients to comply with such treatment.

What are the characteristics of M. leprae which distinguish the organism as so much different from others, and how do these characteristics make treatment of leprosy a challenging task? Firstly, the organism cannot be cultivated in vitro making drug sensitivity tests by standard methods not possible. Secondly, even when the organisms could be grown in vivo in the foot pad of the mouse the multiplication is extremely limited and slow, as the bacillus multiplies only once every 12 to 14 days.

The immune-suppressed animal models such as the thymectomimized irradiated mouse, the nude mouse, etc. are further advancements with special application: Lastly, the armadillo model,which is being fully exploited as a laboratory source of M. leprae, has not been exploited much for other purposes due to several limitations. Further, leprosy is unique in that there is no effective cell-mediated immunity against the infecting organisms among patients of lepromatous leprosy. This makes chemotherapy in leprosy even more critical.

Current methods of treatment are far from adequate. The drug most commonly used, dapsone, has, of course, several advantages such as ready availability, low cost, and fewer side effects. In addition, the greates advantage with dapsone is the fact that dapsone, among all antileprosy drugs known, has the highest ratio of peak serum concentrations to MIC. As can be seen from the table (slide) when 100 mgs of dapsone are administered, the peak blood level achieved is something like 500 times the minimum inhibitory concentration. Although dapsone is primarily bacteriostatic in action, during the first three to four months of treatment of patients of lepromatous leprosy with the drug in full dosage, 99 to 99.9% of the patient's M. leprae are rendered non-infective as indicated by the mouse foot pad test.

In spite of the above advantages dapsone therapy falls short of the ideal for two important reasons. Firstly, M. leprae, like M. tuberculosis, throws off drug-resistant mutants with a frequency that has not been measured but probably approaches one per million, the frequency of ioniazid-resistant M. tuberculosis. The evidence for dapsone resistance has come from studies in Malaysia, Costa Rica, Ethiopia, India, and Israel, in which the estimates of risk of dapsone resistance have varied from a prevalence of about 2% to over 30%. The greater risk appears to be related to the practice in some areas of initiating dapsone therapy with a low dosage, or with a derivative that provides only a low dosage of dapsone. Although dapsone and other sulfones have been used in the chemotherapy of leprosy for

as long as 35 years, relapse of leprosy associated with dapsone-resistant M. leprae has been recognized widely for only about ten years. The time from start of treatment to relapse with drug-resistant organisms, which may be shorter than one year in tuberculosis, is at least five years and as long as 20 years in leprosy. This difference in the time of appearance of drug resistance may reflect the difference in the doubling time of the two mycobacterial species.

Dapsone therapy of leprosy falls short of the ideal in a second important respect. It is well recognized now that cessation of treatment of lepromatous leprosy patients with dapsone carries a great risk of relapse even when this treatment had been administered with reasonable regularity for more than ten years. The demonstration of surviving dapsone-susceptible M. leprae in ten out of 37 biopsy specimens from 12 patients who had been treated for at least ten years with supervised dapsone therapy in full dosage, and more recently the demonstration of viable organisms in seven out of 12 patients treated with rifampicin for five years, suggests that microbial persistence, a feature of tuberculosis and other infectious diseases, is also a common feature in lepromatous leprosy.

The failure of treatment with dapsone to eradicate M. leprae infection may be of greater consequence than even in tuberculosis. Unlike the patient with tuberculosis, the patient with lepromatous leprosy exhibits an immunological deficiency of uncertain cause that appears to be specific to M. leprae, and that persists despite many years of effective dapsone therapy. Thus there is concern that after cessation of treatment, even a few surviving organisms may pose a threat to the patient with lepromatous leprosy, whereas the tuberculosis patient might be expected to cope with a smaller number of viable organisms by means of his own immune defences.

Apart from dapsone, the other antileprosy drugs which are currently available also have their limitations. Clofazimine, a red phenazine dye, which shows moderate bactericidal activity as tested by proportional bactericidal test in mice, is expensive and objectionable to light-skinned patients as the drug induces skin pigmentation after regular use. Fortunately as yet no strains of M. leprae resistant to clofazimine have been identified with any relapse in lepromatous leprosy, although the possibility cannot be excluded. Acedapsone (Diacetyl dapsone, or DADDS), an insoluble derivative that acts through slow release of dapsone, is inexpensive and non-toxic. It has a great advantage as it can be administered parenteral[1] at intervals of as long as 2½ months. However, this results in plasma levels of dapsone which, although effective because of the exquisite susceptibility of M. leprae to dapsone, lead to a slower killing of the organisms compared with dapsone administered orally in full dosage. Thus treatment of multi-bacillary cases with acedapsone can considerably enhance the risk of drug resistant relapse. Rifampicin, a semi-synthetic derivative of rifamycin, is rapidly bactericidal against M. leprae. Even a single dose of 1200 mgms or 600 mgms daily for four days kills over 99% of the viable organisms. However, rifampicin is very expensive and has considerably more toxic side-effects Further, rifampicin-resistant mutants of M. leprae have already emerged and have been identified. Ethionamide and prothionamide, which are also bactericidal against M. leprae, have been used less extensively. Although found effective, the drugs are both expensive and somewhat toxic. There is very little evidence that any of the antileprosy drugs identified so far have any action against persisting M. leprae.

Thus there are currently four drugs of proven efficacy and a few additional drugs of some promise. In view of the increasing occurrence of sulfone resistance, monotherapy with dapsone for multibacillary cases of leprosy is no longer considered advisable, although such monotherapy is still widely prevalent.

GUIDELINES FOR TESTING

1st PHASE : To be done, if possible during 1979 (but at the latest before 1st August 1979). 2 types of patients :

Group 1. Patients newly registered in 1978 (± 100 patients) to be filled retrospectively from routine records :

individual patient form Line 1
Line 2

Group 2. Old patients existing before 1-1-1978 (± 100 patients) to be filled individual patient form Line 2
Line 1 SEX
AGE
MODE OF DETECTION

To be filled also :

- Detection form for all patients in group 1, 1978
- Annual statistic form for all patients in groups 1 + 2, 1978.

2d PHASE : To be done during the year 1979. 2 types of patients :

Group 1. Patients newly registered during 1979 (± 100 patients)

- to be filled at the time of registration
  Individual patient form : Line 1
- to be completed on 31.12.1979
  Individual patient form : Line 2

Group 2. For all the patients included in Phase 1 (± 200 patients) on 31.12.1979

To be completed : individual patient form : Line 3

To be filled in also on 31.12.1979 :

- Detection form for all patients in group 1, 1979.
- Annual statistic form for all patients in groups 1 + 2, 1979.

Please note : When the individual patient form will be printed, it will have 4 carbon copies attached. The original will remain at the treatment centre and the respective copies will be sent each year to the supervisory level. Meanwhile for the testing only we propose to use simply a new set of forms for the 2d year, taking care to complete the identification number.

Instructions for filling in the Individual Patient Form (IPF)

Line I First examination (new cases) boxes 1-8

Box 1 Year and month of detection

To be filled in when a new patient is registered for the first time or when a patient has relapsed or been transferred and is registered again.

B 2. Form of leprosy

Choose the classification which is generally in use in your country, either Madrid or Ridley-Jopling. The form NC (non-classified) is to be used when the form of leprosy has not been determined. Do not fill in the patient's card for persons "suspected" of having leprosy.

B 3. Mode of detection

Indicate how the new patient was detected. When the mode of detection does not exactly correspond to one of the proposed boxes, check the box which most closely approximates to the actual situation.

Notification: patient referred after casual finding.

Voluntary: ("self reporting") patient who came to the leprosy unit of his/her own accord or was referred after voluntarily presenting him/herself at another health institution.

General Survey: patient discovered during a systematic mass screening.

Survey of Contacts: case discovered during a systematic examination of patients' contacts.

Selected Group Survey: patient detected during an examination of selected populations (for example: schoolchildren).

Unknown

Contact Yes/No

Indicate if the patient is a contact of a patient, whatever the mode of detection. For example, a patient found through a school survey who happened to be a contact will be marked both as "school" and "contact yes". Leave the square blank if unknown.

For a patient who was registered previously

Relapsed: patient who had completed treatment and was released from control but who has now relapsed.

Transferred: patient who has been receiving treatment at another health institution and has now been transferred or patient whose record has been lost.

B 4. Sex

r female.

B 5. Age at time of detection

Give approximate age if exact age is not known.

B 6. Bacteriological status

If smears are made, the appropriate box should be filled in:

Globi: positive or negative

AFB (Acid-fast bacilli): positive or negative

SB (Solid bacilli): positive or negative

~~BI stands for Bacterial Index, MI for Morphological Index.~~

It is recommended that the sites of smears be selected as follows:

site 1: the most active lesion

site 2: the ear lobe

site 3: additional smear from an elective site.

If the result of the bacteriological examination is BI (BACTERIAL INDEX) positive or negative or MI (MORPHOLOGICAL INDEX) positive or negative, fill the boxes in as follows:

BI positive = AFB positive
BI negative = AFB negative
MI positive = SB positive
MI negative = SB negative

B 7. Deformity

Check the appropriate box with an X when deformities are present (for the extremities: bone absorption, clawhands and foot-drop only, omit anaesthesia; use only grade 2 according to the WHO Classification of Disabilities [1]

B 8. Histopathological diagnosis: if done, check the appropriate box with an X.

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[1] Classification of disabilities resulting from leprosy, for use in control projects Bull. Wld Hlth Org., 1969, 40: 609-612, and in: WHO Technical Report Series, 1970, no. 459 (Annex)

Lepromin reaction

If done, give lepromin reading at 28 days in mm~~under Yes or as negative~~. The post lepromin scar is to be read after 4-6 months. State under "Yes" present or absent. Leave this square blank if the scar has not been read.

Line II First year of treatment, boxes 10 to 18

To be filled in at the end of the calendar year for those patients who were for the first time registered during the year. If the patient is examined only once a year, fill in this form at the time of that examination. If the patient is examined more than once a year, the last available data should be recorded.

B 10. Year

The same as for Line I Box 1.

Month

The month of the examination, the results of which are recorded here.

B 11. Form of leprosy: see Line I Box 2

B 12. Clinical status

active, undergoing treatment;
inactive undergoing treatment: patient with inactive disease who is on maintenance treatment until qualifying for release from control;
inactive under surveillance: patient qualifies for release to be kept under surveillance because of the possibility of a relapse such as lepromatous and borderline cases;
unknown.

B 13. Bacteriological status: see Line I Box 6

B 14. Treatment

If necessary fill in several squares, indicating the duration of each type of treatment in months (for example, 4/12).

MT Standard: Monotherapy Standard (50-100 mg daily of dapsone);
MT Other: dapsone given in other dosages;
CT: Combined Therapy (dapsone and clofazimine or dapsone and rifampicin, or dapsone with another drug);
AT: Alternate Therapy (clofazimine or rifampicin either singly or combined or other specific drug to be specified, without dapsone);
Other: other anti-leprosy drugs.

B 15. Attendance at treatment sessions

Use entries in treatment registers or on individual record cards to calculate the actual attendance as a percentage of the required attendance during the year.

$$\frac{\text{number of treatment sessions attended}}{\text{number of treatment sessions required}} \times 100$$

Regular: patient who attended 75% or more of the treatment sessions;
Irregular: patient who attended less than 75% of the treatment sessions;
Out of control: patient who has been absent for more than one calendar year but who remains on the register. (This square cannot be filled in during the first year).

B 16. Reaction: Check the box if a lepra-reaction (ENL or other) has occurred during the year.

B 17. Deformity: Check the appropriate box if some new or additional deformity has developed during the year.

B 18. Off Register:

died;
released;
left area: patient who has left the area permanently without seeking transfer. Use this box also for a patient who has left the country;
transferred: patient who is transferred to another health unit in the same control area. This box is to be used when the medical records are transferred.

Line III Second year of treatment, Boxes 20-28

Instructions for filling in the Detection Form (DF)

This form is the end-of-year summary of all new patients registered during the year. It is compiled from the Individual Patient Form (IPF) Line 1, boxes 1-8, Before beginning your compilation, make sure that the year written in box 1 of the IPF is the year that has just finished. We suggest you proceed as follows: first group the IPFs according to form of leprosy (IPF box 2), now continue:

Col. 1 DF (Detection Form): record the number of new patients according to mode of detection (IPF box 3);

Col. 2 DF: add up all the new patients recorded in Col. 1 DF (Notification + and Voluntary + General Survey + Contact Survey + Group Survey + Unknown);

Col. 3 DF: record the number of patients who relapsed or who have been transferred (IPF box 3);

Col. 4 DF: add together all new patients (DF Col. 2) plus those who have relapsed and those who have been transferred (DF Col. 3).

Col. 5 DF: record the number of new patients according to sex (IPF box 4);

Col. 6 DF: record the number of new patients according to age at time of detection (IPF box 5);

Col. 7 DF: add up the number of new patients who have an X in at least one of the boxes Hand, Foot, Eye or Face (IPF box 7);

Col. 8 DF: record the number of new patients who have an X in the box Histopathological Diagnosis, Done (IPF box 8);

Col. 9 DF: record the number of new patients who have a result in mm for the lepromin reaction (IPF box 8);

Col 10 DF: record the number of new patients who have an X in the box Contact, Yes (IPF box 3)

Instructions for filling in the Annual Statistics Form (ASF)

This form is a yearly summary of all the cases on the register during the year. It is compiled from the Individual Patient Form (IPF) Lines II and III, boxes 10 to 18 and 20 to 28. The information will be on Line II for patients in their first year of treatment and on Line III for the other years as recorded in the IPF. Make sure that the year given in box 10 or 20 of the IPF is the year that has just finished.

We suggest you proceed as follows: group the IPFs according to form of leprosy (IPF box 11 or box 21).

Col 1 ASF (Annual Statistics Form): enter the same figure as that in col. 10 of the ASF of the previous year.

Col. 2 ASF: record the number of patients according to their clinical status (IPF box 12 or box 22). (Number of patients: Col. 10 ASF).

Col. 3 ASF: record the number of patients according to their bacteriological status (IPF box 13 or box 23). (Number of patients: Col. 10 ASF).
positive: total patients who have an X in at least one of the boxes marked "positive".
negative: patients who have only an X in the boxes marked "negative".

Col. 4 ASF: record the number of patients according to their mode of treatment (IPF box 14 or box 24) (Number of patients: Col. 10 ASF)

Col. 5 ASF: record the number of patients by attendance at treatment sessions (IPF box 15 or box 25) (Number of patients: Col. 10 ASF)

Col. 6 ASF: count the number of patients with an X in the box marked "yes" (IPF box 16 or box 26) (Number of patients: Col. 10 ASF)

Col. 7 ASF: count the number of patients with an X in the box marked "yes" (IPF box 17 or box 27) (Number of patients: Col. 10 ASF)

Col. 8 ASF: record the number of patients who have been taken off the register during the year (IPF box 18 or box 28)

Col. 9 ASF: enter the figure given in col. 4 (Grand Total) of the Detection Form (DF).

Col. 10 ASF: this is compiled by taking the figure in col. 9 of the ASF and subtracting the total number of patients who have been taken off the register (col. 8 ASF)

	1. MODE OF DETECTION						2.	3.		4.	5.		6.		7.	8.	9.	10
											SEX		AGE					
	NOTIFICATION	VOLUNTARY	GENERAL SURVEY	CONTACT SURVEY	GROUP SURVEY	UNKNOWN	TOTAL NEW CASES	RELAPSED	TRANSFERRED	GRAND TOTAL	MALE	FEMALE	0 - 14	15 +	DEFORMITY	HISTOPATHOLOGICAL DIAGNOSIS	LEPROMIN REACTION	CONTACT
INDETERMINATE I																		
TUBERCULOID TT + BT																		
BORDERLINE BB																		
LEPROMATOUS BL + LL																		
NOT CLASSIFIED NC																		
T O T A L																		

	1.	2. CLINICAL STAT.				3. BACT. STATUS		4. TREATMENT					5. ATTENDANCE AT TREATMENT				6.	7.	8. OUT REGISTER				9.	10
	TOTAL PATIENTS REGISTERED AT END OF PREVIOUS YEAR	ACTIVE	INACTIVE TREATED	INACTIVE UNDER SURVEILLANCE	UNKNOWN	POSITIVE	NEGATIVE	MT.S.	MT.O.	C.T.	A.T.	OTHER	REGULAR	IRREGULAR	OUT OF CONTROL	UNKNOWN	REACTION	NEW DEFORMITY	DIED	RELEASED	LEFT	TRANSFERED	NEWLY REGISTERED CURRENT YEAR	TOTAL PATIENTS REG.
NDETERMINATE																								
UBERCULOID T + BT																								
ORDERLINE B																								
EPROMATOUS L + LL																								
OT CLASSIFIED C																								
T O T A L																								

INDIVIDUAL PATIENT FORM

NAME .....

ADRESS .....

IDENTIFICATION N°

DATE OF REGISTRATION

1	2	3	4	5	6	7	8
YEAR MONTH	TYPE OF LEPROSY MADRID RIDLEY J. I I TT T BT B BB BL L LL NC NC	MODE OF DETECTION NOTIFICATION VOLUNTARY GENERAL SURVEY CONTACT SURVEY GROUP SURVEY UNKNOWN RELAPSED TRANS FERRED FROM CONTACT YES NO	SEX M F	AGE AT DETECTION	BACTERIOLOGICAL STATUS GLOBI A.F.B S.I.B. SITE + - + - + - 1 2 3 NOT DONE	DEFORMITY HAND FOOT EYE FACE NO DIFORNITY NOT RECORDED	HISTOPATHOLOGICAL DIAGNOSIS DONE NOT DONE LEPROMIN REACTION IN MM YES NO POST LEPROMIN REACTION POST LEPROMIN SCAR

RECORDED BY

CHECKED BY

10	11	12	13	14	15	16	17	18
YEAR MONTH	TYPE OF LEPROSY MADRID RIDLEY J. I I TT T BT B BB BL L LL NC NC	CLINICAL STATUS ACTIVE INACTIVE † TREATMENT INACTIVE † SURVEILLANCE UNKNOWN	BACTERIOLOGICAL STATUS GLOB A.F.B S B SITE + - + - + - 1 2 3 NOT DONE	TREATMENT M.T. STANDARD M.T. OTHER C.T. A.T. OTHER	ATTENDANCE AT TREATMENT REGULAR IRREGULAR OUT OF CONTROL UNKNOWN	REACTION YES NO UN-KNOWN	NEW DEFORMITY YES NO UN-KNOWN	OFF REGISTER DIED RELEASED LEFT AREA TRANSFERRED

RECORDED BY

CHECKED BY

20	21	22	23	24	25	26	27	28
YEAR MONTH	TYPE OF LEPROSY MADRID RIDLEY J. I I TT T BT B BB BL L LL NC NC	CLINICAL STATUS ACTIVE INACTIVE † TREATMENT INACTIVE † SURVEILLANCE UNKNOWN	BACTERIOLOGICAL STATUS GLOB A.F.B S B SITE + - + - + - 1 2 3 NOT DONE	TREATMENT M.T. STANDARD M.T. OTHER C.T. A.T. OTHER	ATTENDANCE AT TREATMENT REGULAR IRREGULAR OUT OF CONTROL UNKNOWN	REACTION YES NO UN KNOWN	NEW DEFORMITY YES NO UN-KNOWN	OFF REGISTER DIED RELEASED LEFT AREA TRANSFERRED

RECORDED BY

CHECKED BY

تعليمات لملء الاستمارة الشخصية لمريض الجذام

الخانات من [١] - [٨] مخصصة للفحص الأول للحالات الجديدة

الخانة رقم [١] تاريخ اكتشاف المرض ويعبر عنه بالسنة والشهر

تملأ هذه الخانة في ثلاث حالات:

- حالة جديدة تسجل لأول مرة
- مريض منتكس
- مريض حوّل وتم قيده مرة أخرى

الخانة رقم [٢] نوع الجذام

يمكن استعمال تصنيف مدريد أو تصنيف ريدلي جوبلنج وذلك حسب النظام المتبع في بلدك. استخدم المربع " غير مصنف " اذا لم يتم تحديد نوع الجذام. بالنسبة للأشخاص المشكوك في كونهم مرضى جذام لا يقيد أي شيء بالاستمارة.

الخانة رقم [٣] طريقة اكتشاف المرض

توضح هذه الخانة طريقة اكتشاف المرض بالنسبة للحالات الجديدة. اذا كانت طريقة اكتشاف المرض لا تتمشى مع المربعات المقترحة يختار المربع الأكثر قربا من واقع الأمر.

التبليغ : مريض محوّل اليك بعد اكتشافه بمحض الصدفة.

مريض تقدم من نفسه : مريض تقدم الى وحدة الجذام من نفسه أو حول بعد ما تقدم من نفسه الى وحدة صحية أخرى.

المسح الشامل : مريض اكتشف أثناء فحص جماعي منتظم.

فحص المخالطين : مريض اكتشف أثناء فحص منتظم للمخالطين.

فحص مجموعات منتقاة : مثل أطفال المدارس.

غير معروفة :

مخالط لمريض : نعم / لا

وضح ما اذا كان المريض مخالطا لمريض آخر أم لا بغض النظر عن طريقة اكتشافه.

مثال :

مريض اكتشف عند فحص أطفال مدرسة ووجد أيضا مخالطا لمريض جذام، يرصد المربع " فحص مجموعات " ويرصد المربع " مخالط لمريض / نعم ".

يترك المربع خاليا اذا كانت المخالطة غير معروفة.

في حالة وجود مريض سبق تسجيله

منتكس : مريض أتم علاجه وأخلي ولكنه الآن منتكس.

محـــول : مريض يعالج بوحدة أخرى وقد حول اليك أو مريض يعالج في وحدتك وقد قيد.

الخانة رقم ٤ الجنس

ذكر / أنثى

الخانة رقم ٥ السن وقت التشخيص

يذكر السن بالتقريب اذا لم يمكن تحديده بدقة

الخانة رقم ٦ الفحص البكتريولوجي

يرصد المربع المناسب اذا أجريت مسحات:

المجموعات البكتيرية : + أو -

الباشلات الصامدة للحمض : + أو -

الباشلات الصلبة : + أو -
(غير المجزأة)

يوصى باختيار أماكن المسحات على النحو الآتي :

المكان رقم ١ : الآفة الأكثر نشاطا

المكان رقم ٢ : حلمة الأذن

المكان رقم ٣ : مسحة اضافية من موقع انتقائي

اذا كانت نتيجة الفحص البكتريولوجي ايجابية أو سلبية بالنسبة لدليل البكتريـــــــا (BI) أو بالنسبة للدليل المرفولوجي (MI) ، تملأ الخانات كما يلي :

ايجابية لدليل البكتريـــــا = ايجابية للباشلات الصامدة للحمض

سلبية لدليل البكتريـــــا = سلبية للباشلات الصامدة للحمض

ايجابية للدليل المرفولوجـــي = ايجابية للباشلات الصلبة (غير المجزأة)

سلبية للدليل المرفولوجـــي = سلبية للباشلات الصلبة (غير المجزأة)

الخانة رقم ٧ التشوهات

في حالة وجود تشوهات، ضع علامة × في المربع المناسب (فقط بالنسبة للاطراف : امتصاص العظم واليد المخلبية وارتخاء القدم ، ويستبعد الحدار). استخدم فقط الدرجة الموازية لـ ٢ أو أكثر طبقـــا لتصنيف العاهات[1] الصادر من منظمة الصحة العالمية (باللغة الانجليزية) .

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[1] تصنيف العاهات الناجمة عن الجذام للاستعمال في مشروعات المكافحة ، نشرة منظمة الصحـــة العالمية ٦٠ ، ١٩٦٣ ، ٦٠٠ - ٦١٢ ، وفي سلسلة التقارير الفنية لمنظمة الصحة العالميـــة ، ١٩٦٣ ، رقم ٢٥٤ (المنحق) .

الخانة رقم [٨] التشخيص البستوباثولوجي : اذا أجرى هذا التشخيص، ضع علامة × في المربع المناسب.

اختبار اللبروسي

اذا أجرى هذا الاختبار ترصد النتيجة سواء كانت ايجابية أو سلبية بعد ٢٨ يوما بالمليمتر، وتقرأ الندبة الدالة على التفاعل بعد ٤-٦ شهور ثم ترصد اذا كانت موجودة أو غير موجودة. يترك هذا المربع خاليا اذا لم تقرأ الندبة.

الخانات من [١٠] - [١٨]

- تمثل السنة الأولى من العلاج :

ترصد هذه الخانات في نهاية السنة بالنسبة للمرضى المسجلين لأول مرة ومضى عام كامل على قيدهم.

ترصد هذه الخانات وقت فحص المريض اذا كان المريض يفحص مرة واحدة سنويا. ولكن اذا كان المريض يفحص أكثر من مرة سنويا فترصد أحد الميانات المناحة.

الخانة رقم [١٠] السنة

مثل الخانة رقم (١).

الشهر

هو الشهر الذى فحص فيه المريض ونتيجة هذا الفحص ترصد في الخانات من (١١) - (١٨).

الخانة رقم [١١] نوع الجذام : مثل الخانة رقم (٢)

الخانة رقم [١٢] الحالة المرضية

نشط : وتحت العلاج

غير نشط وتحت العلاج : حتى يخلى

غير نشط وتحت الملاحظة : مريض موهل لا خلاء سبيله ويبقى تحت الملاحظة خوفا من أن ينتكس مثل الورم الجذامي والحالات الحافية.

الخانة رقم [١٣] الفحص البكتريولوجي : مثل الخانة رقم (٦)

الخانة رقم [١٤] العلاج :

يمكن الرصد في أكثر من مربع مع توضيح فترة العلاج بالأشهر (مثل ١٢/٤)

علاج نمطي : العلاج بعقار الدابسون وحده (٥٠-١٠٠ مجم يوميا)
علاج نمطي جرعات أخرى : العلاج بعقار الدابسون وحده في جرعات غير الموضحة أعلاه.

علاج مركب: د ابسون + كلوفازيمين

أو د ابسون + ريفامبيسين

أو د ابسون + عقّار آخر

علاج بديل : كلوفازيمين وحده

أو ريفامبيسين وحده

أو كلوفازيمين + ريفامبيسين

أو أي عقار آخر مخصص لعلاج الجذام بدون استعمال الدابسون معه .

علاجات أخرى : خاصة بالجذام

الخانة رقم ١٥ الانتظام في العلاج

النسبة المئوية لمرات الحضور الفعلية = $\frac{\text{عدد مرات الحضور الفعلية}}{\text{عدد مرات الحضور المقررة}} \times ١٠٠$

ويمكن تسجيل عدد مرات الحضور على بطاقة العلاج أو بطاقة تسجيل شخصية مخصصة لهذا الغرض.

منتظم : ٧٥٪ أو أكثر من عدد المرات المقررة ،

غير منتظم : أقل من ٧٥٪ من عدد المرات المقررة ،

متخلف : مريض متخلف لمدة تزيد عن عام ولكنه مسجل (هذا المربع لا يرصد خلال العام الأول) .

غير معروف :

الخانة رقم ١٦ التفاعل : ضع علامة × في المربع المناسب اذا حدث تفاعل خلال العام .

الخانة رقم ١٧ التشوهات: ضع علامة × في المربع المناسب اذا حدثت تشوهات حديثة أو اضافية خلال العام .

الخانة رقم ١٨ شطب من القيد :

توفي ،

أخلى ،

ترك المنطقة: مريض ترك المنطقة نهائيا بدون تحويل أو غادر البلاد ،

تحول : يستخدم هذا المربع في حالة تحويل أوراق المريض الى وحدة صحية أخرى .

الخانات من ٢٠ - ٢٨ تمثل العام الثاني من العلاج .

رقم التسجيل

تاريخ التسجيل

٦
...ص البكتريولوجي

باشلات علية		باشلات صامدة للحمض		...وهات ...رية	
+	-	+	-	+	-

...جر

٧
التشوهات

- اليد
- القدم
- العين
- الوجه
- خال من التشوهات
- لم تسجل

٨
التشخيص الهستوباثولوجي

- أجرى
- لم يجر

اختبار اللبروسومين

مم

	نعم	لا
حد وتفاعل		
ندبة دالة على التفاعل		

سجل بمعرفة

روجع بمعرفة

...لاج

١٦
تفاعل

- نعم
- لا
- غير معروف

١٧
تشوهات حديثة

- نعم
- لا
- غير معروف

١٨
شطب من القيد

- توفى
- أخلى
- ترك المنطقة
- تحول

سجل بمعرفة

روجع بمعرفة

...لاج

٢٦
تفاعل

- نعم
- لا
- غير معروف

٢٧
تشوهات حديثة

- نعم
- لا
- غير معروف

٢٨
شطب من القيد

- توفى
- أخلى
- ترك المنطقة
- تحول

سجل بمعرفة

روجع بمعرفة

استمارة شخصية للمريض

الاسم : _____

العنوان : _____