

Management of reactions in Leprosy

How should lepra reactions be managed?

Reactions require urgent treatment as they can lead to irreversible deformities. Thus, early diagnosis and the timely initiation of anti-inflammatory measures are crucial. MDT should be continued at full dosage without interruption. Aspirin or paracetamol should be given to reduce pain and fever, and rest is essential.

In specific cases, corticosteroids (e.g., prednisolone) should be prescribed at the following dosage:

- 40 mg daily for weeks 1 and 2
- 30 mg daily for weeks 3 and 4
- 20 mg daily for weeks 5 and 6
- 15 mg daily for weeks 7 and 8
- 10 mg daily for weeks 9 and 10, and
- 5 mg daily for weeks 11 and 12.

It is important that the patient is examined every week and that the dose of corticosteroids is reduced every 2 weeks. Maximum dosage of prednisolone is 1 mg/kg of body weight.

How should severe ENL reactions be managed?

WHO Guidelines for management of ENL reaction

General principles:

- Severe ENL reaction is often recurrent and chronic and may vary in its presentation.
- The management of severe ENL is best undertaken by physician at a referral centre. The dose and duration of anti-reaction drug treatment may be adjusted by the physician according to the needs of the individual patient.

Definition. Severe ENL reactions include:

- numerous ENL nodules with high fever
- ENL nodules and neuritis
- ulcerating and pustular ENL
- recurrent episodes of ENL
- involvement of other organs (e.g. eyes, testes, lymph nodes, joints).

Management with corticosteroids

- If the patient is still on antileprosy treatment, continue the standard course with MDT.
- Use adequate doses of analgesics to control fever and pain.
- Use standard course of prednisolone at a daily dosage not exceeding 1 mg/kg body weight for a total duration of 12 weeks.

Management with clofazimine and corticosteroids – is indicated in patients with severe ENL who are not responding satisfactorily to treatment with corticosteroids or when the risk of toxicity with corticosteroids is high:

- If the patient is still on antileprosy treatment, continue the standard course with MDT.
- Use adequate doses of analgesics to control fever and pain.
- Use standard course of prednisolone at a daily dosage not exceeding 1 mg/kg body weight.
- Start clofazimine 100 mg three times a day and continue for a maximum of 12 weeks.
- Complete the standard course of prednisolone. Continue clofazimine as below.
- Taper the dose of clofazimine to 100 mg twice a day for 12 weeks and then 100 mg once a day for 12–24 weeks.

Management with clofazimine alone – is indicated in patients with severe ENL when use of corticosteroids is contraindicated:

- If the patient is still on antileprosy treatment, continue the standard course with MDT.
- Use adequate doses of analgesics to control fever and pain.
- Start clofazimine 100 mg three times a day and continue for a maximum of 12 weeks.
- Taper the dose of clofazimine to 100 mg twice a day for 12 weeks and then 100 mg once a day for 12–24 weeks.

Notes:

1. If the MDT treatment is already completed, management of ENL should follow the guidelines. There is no need to restart MDT.
2. The total duration of a standard course of corticosteroids (prednisolone) is 12 weeks.
3. The total duration of treatment with high dosage clofazimine should not exceed 12 months. It takes about 4–6 weeks for clofazimine to take full effect in controlling ENL.
4. Another drug claimed to be useful in ENL is pentoxifylline, alone or in combination with clofazimine/prednisolone.
5. Because of the well known teratogenic side-effects, WHO does not support the use of thalidomide for the management of ENL in leprosy.

Can WHO assist programmes to procure thalidomide for treating patients with lepra reaction?

No. WHO does not assist or support the use of thalidomide by programmes because of the well known teratogenic side-effects of the drug. In addition, the importation of this drug is banned by many countries where leprosy is endemic. In the rare instance that a referral centre decides to import thalidomide for its patients, this must be arranged directly with the manufacturers, with careful national/international ethical, legal, and scientific justification. Most importantly, patients who require thalidomide for complicated ENL-type reactions are very rare: in practice, most patients with lepra reactions can be successfully managed by the proper use of other available anti-reaction drugs.