WHO Guidelines for the management of severe erythema nodosum leprosum (ENL) reactions

General principles:

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

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 and joints)

Management with corticosteroids:

- 1. If still on antileprosy treatment, continue the standard course with MDT.
- 2. Use adequate doses of analgesics to control fever and pain.
- 3. Use standard course of prednisolone in dosage per day not exceeding 1 mg per Kg body weight. Total duration 12 weeks.

Management with clofazimine and corticosteroids:

This is indicated - In cases with severe ENL who are not responding satisfactorily to treatment with corticosteroids or where the risk of toxicity with corticosteroids is high.

- 1. If still on antileprosy treatment, continue the standard course with MDT.
- 2. Use adequate doses of analgesics to control fever and pain
- 3. Use standard course of prednisolone in dosage per day not exceeding 1 mg per Kg body weight
- 4. Start clofazimine 100 mg three times a day for maximum of 12 weeks
- 5. Complete the standard course of prednisolone. Continue clofazimine as below.
- 6. 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 only clofazimine:

This is indicated - In cases with severe ENL where use of corticosteroids is contraindicated.

- 1. If still on antileprosy treatment, continue the standard course with MDT.
- 2. Use adequate doses of analgesics to control fever and pain.
- 3. Start clofazimine 100 mg three times a day for maximum of 12 weeks
- 4. 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.

Note:

- 1. If the MDT treatment is already completed the 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. Other drug claimed to be useful in ENL is pentoxifylline, alone or in combination with clofazimine/prednisolone.
- 5. For the reason of well-known teratogenic side effects WHO does not support use of thalidomide for the management of ENL in leprosy.

References:

- 1. WHO Expert Committee on Leprosy. TRS 874, 1998, WHO, Geneva
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- 4. Guide to eliminate leprosy as a public health problem. First Edition 2000. WHO, Geneva.
- 5. The final push strategy to eliminate leprosy as a public health problem: Questions & Answers. First Edition 2002. WHO, Geneva.
- 6. Nery JA et al. The use of pentoxifylline in the treatment of type 2 reactional episodes in leprosy. Indian J. Leprosy, 2000, 72 (4): 457-467.
- 7. Welsh O et al. A new therapeutic approach to type II leprosy reaction. International J. Dermatology, 1999,38: 931-933.