Case 6

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64 year old Indian man presents in UK in 2003 as emergency with painful blistering lesion on legs for 3 days

From Gujarat to UK 1965, last in India
  4 years ago
Retired textile worker
Married, 3 children

Diabetes for 2 years
  Treatment: gliclazide
Seeing dermatologist for
  6 months, treatment
  hydroxyzine

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What is the most likely diagnosis? (Choose one)

1. infected insect bite
2. Lyell's disease (staphylococcal)
3. contact dermatitis
4. erysipelas (streptococcal)
5. something else

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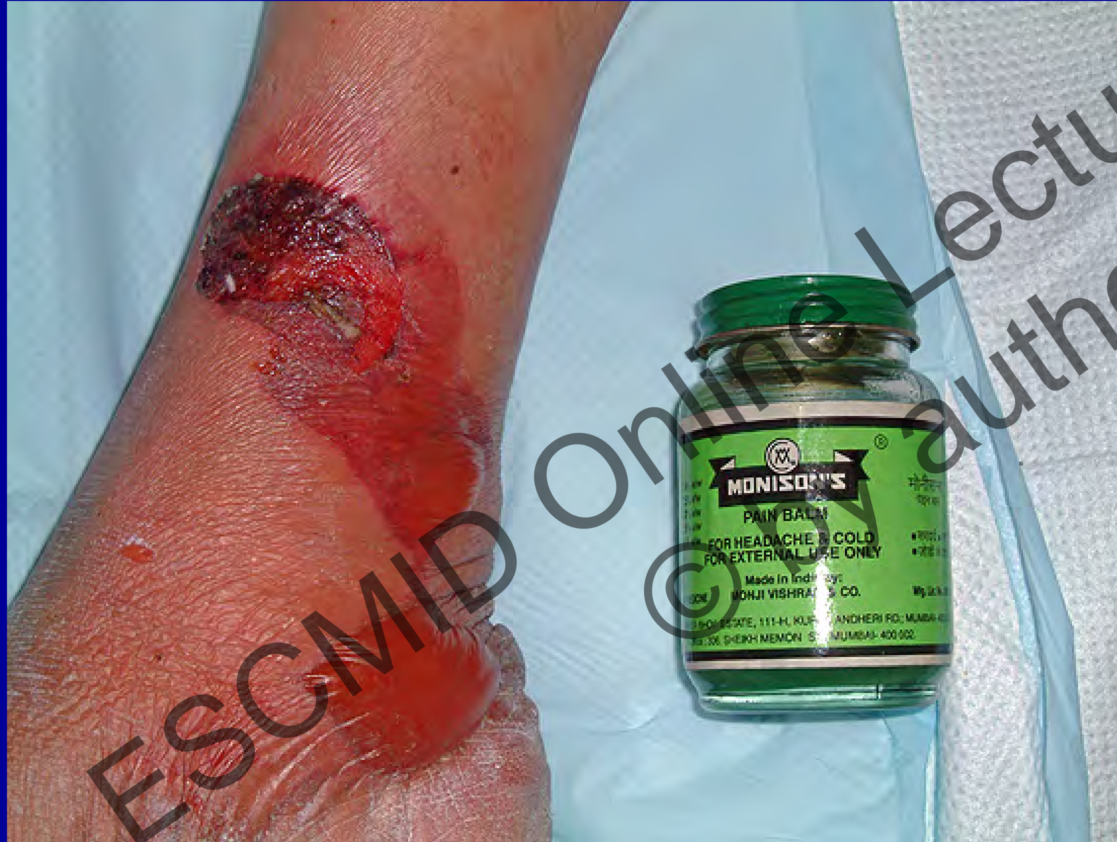
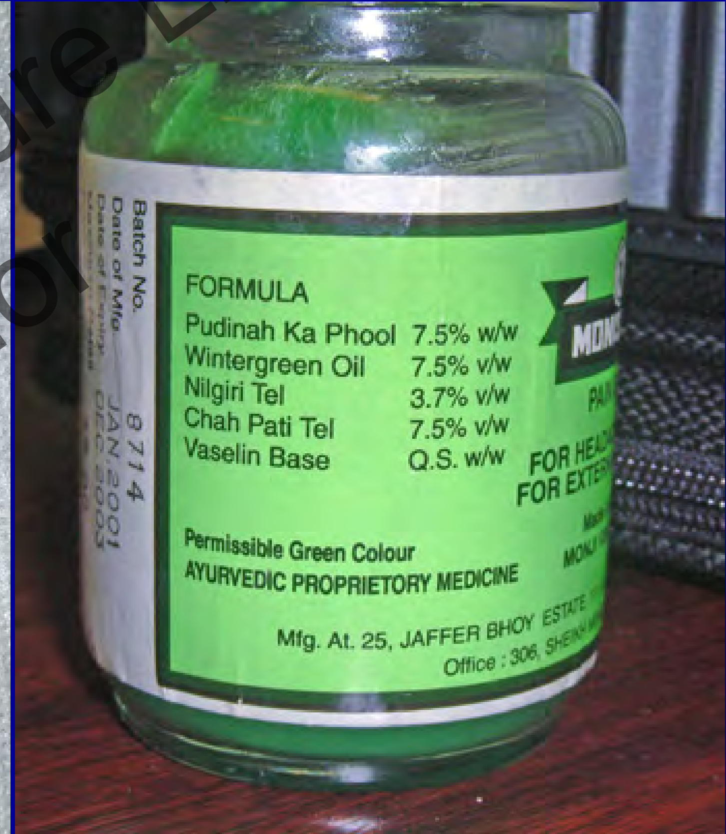
The cause





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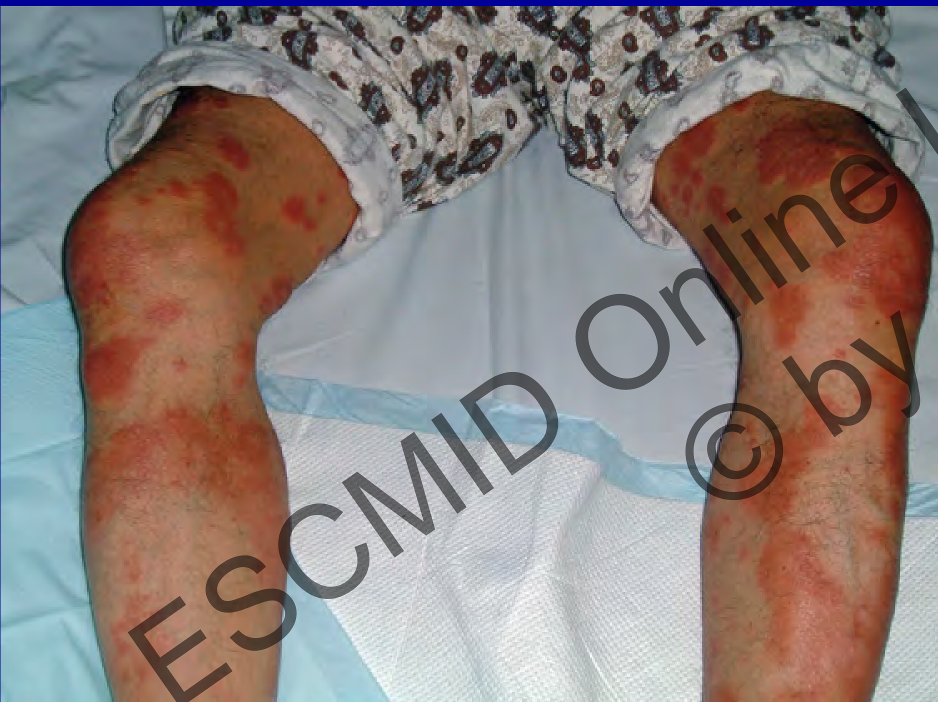
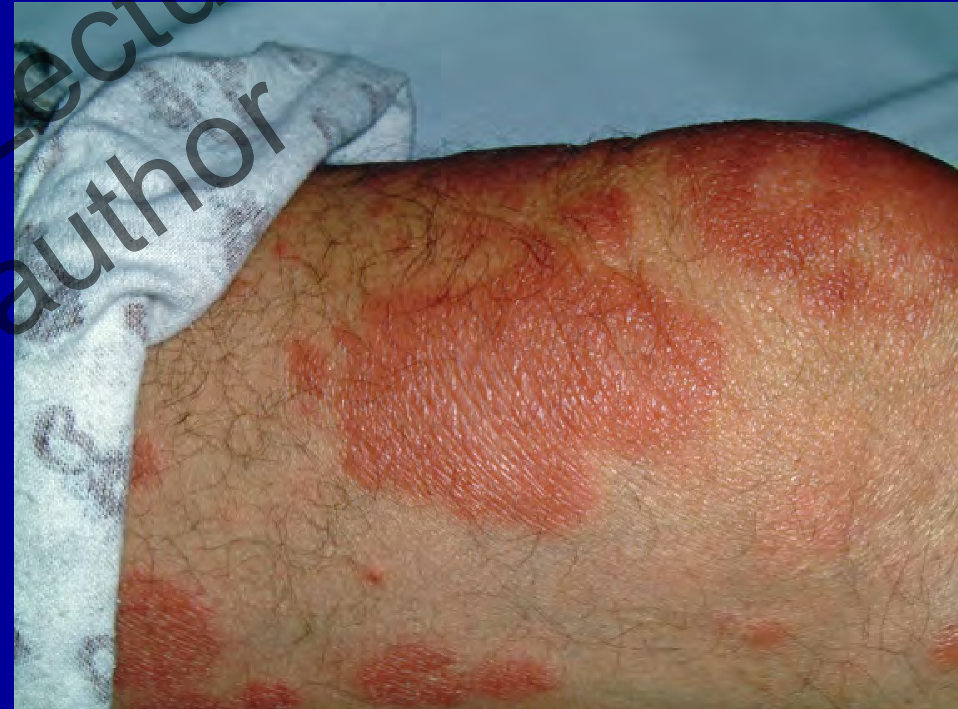
Rash for 6 months, worse for 1 month





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Rash for 6 months, worse for 1 month

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What is the most likely diagnosis? (Choose one)

1. generalised reaction to Ayurvedic medicine
2. sarcoid
3. lupus vulgaris
4. paucibacillary leprosy
5. multibacillary leprosy

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Rash for 6 months, worse for 1 month

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Exam: mild temp 37.5

no thickened nerves

no sensory neuropathy

no uveitis

Skin smears: 6 sites & nasal scrape:

Positive for AFB: bacterial index 2-3+

morphological index 65%

Skin biopsy: 1 month ago reported to show atypical active granulomata without caseation, repeat biopsy showed AFB. Review in London (Prof Sebastian Lucas) borderline lepromatous leprosy

Inflammatory markers & neutrophils normal

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Cardinal Signs of Leprosy

- Definite loss of sensation in a skin lesion consistent with leprosy
- Skin smears positive for acid fast bacilli
- Thickening of one or more peripheral nerves

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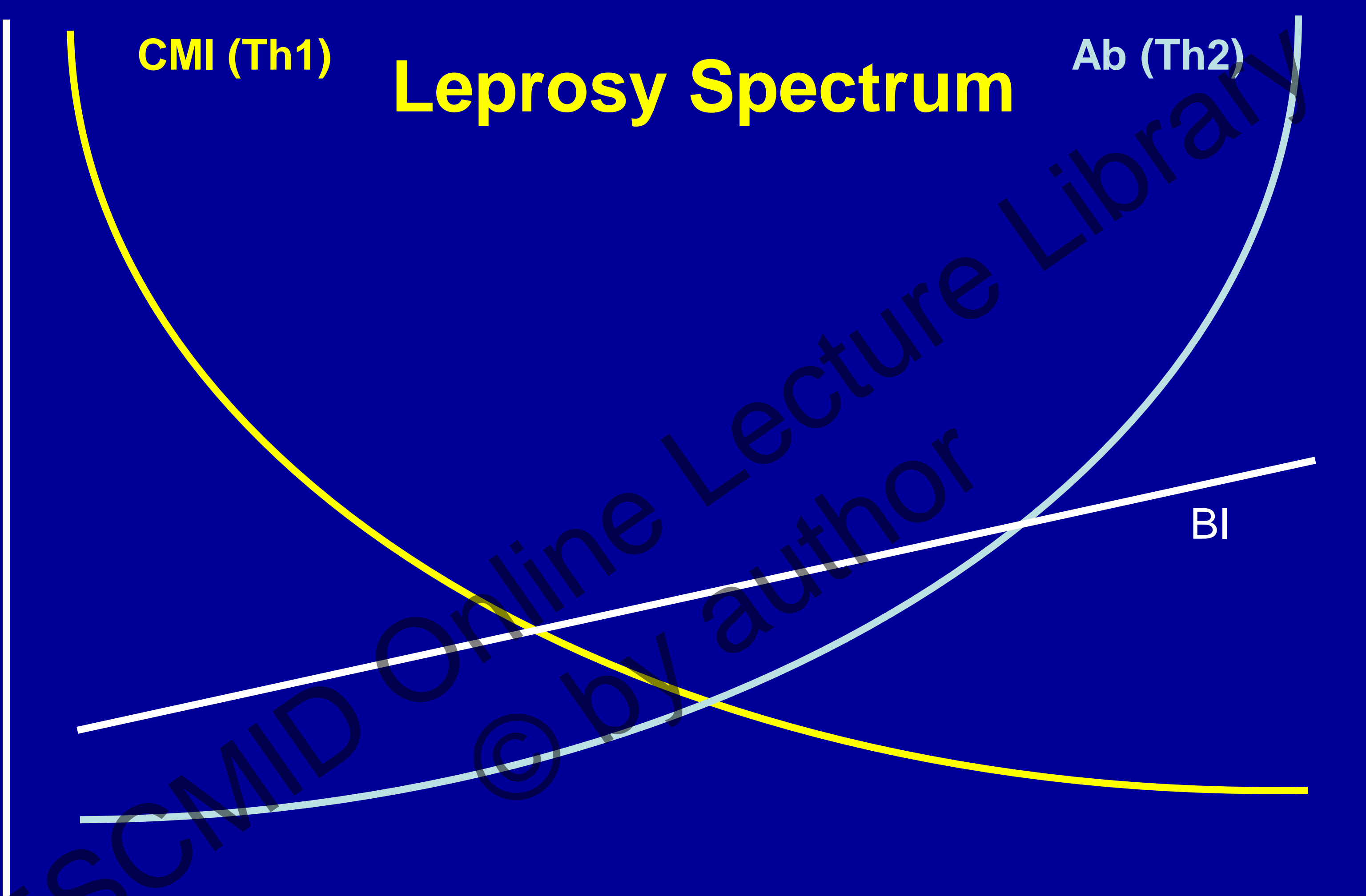

TT BT BB BL LL

Type 1

Type 2

Reversal reactions

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Leprosy classification

Ridley-Jopling TT - BT - BB - BL - LL

- Skin lesions
- Bacterial load
- Histology

Referral centre/research

WHO Classification

- Paucibacillary (2-5 skin lesions)
- Multibacillary (>6 lesions)
- Paucibacillary single lesion leprosy

Operational

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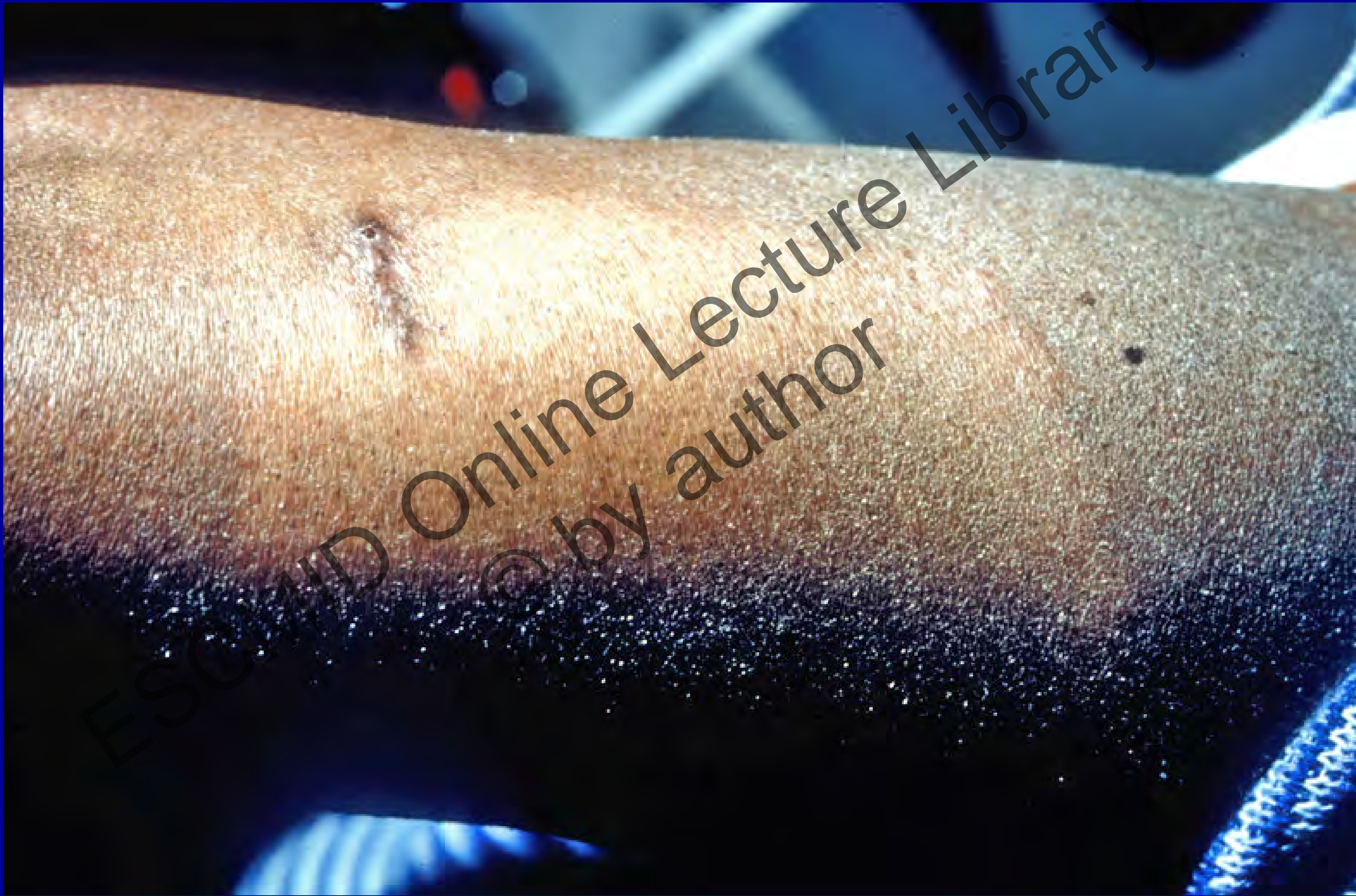
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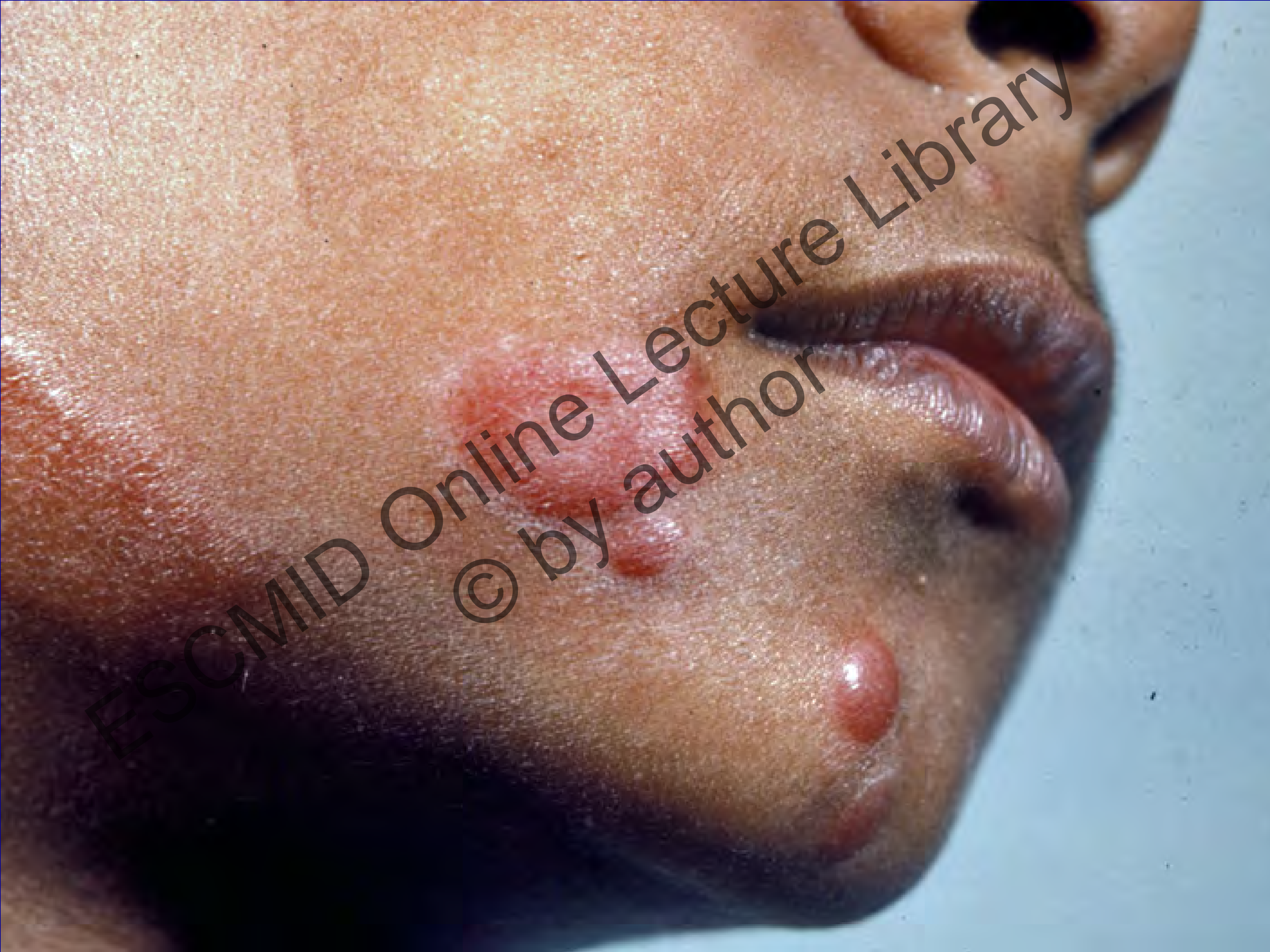
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Progress

Diagnoses:

Borderline lepromatous (multibacillary) leprosy
Type 1 leprosy reaction
Diabetes

Treatment with WHO regimen for 2 years (G6PD normal):

Dapsone 100 mg daily
Clofazimine 50 mg daily plus DOT 300mg monthly
Rifampicin 600 mg DOT monthly

Prednisolone 40 mg daily for 2 months then slow reduction over 4 more months

Skin lesions flat after 1 week

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Follow up

Notified to public health authorities

Wife, 3 children and 5 grandchildren examined (normal)

Grandchildren given 6 months of monthly rifampicin as daily household contacts of a multibacillary case

Mild recurrence of reactions at 1 year, treated with steroids for 2 months

Diabetes not a problem

Skin lesions flat but scaly and brown discolouration from clofazimine

Skin smears for AFB at 12 months:

Bacterial index 0-1+

Morphological index 0%

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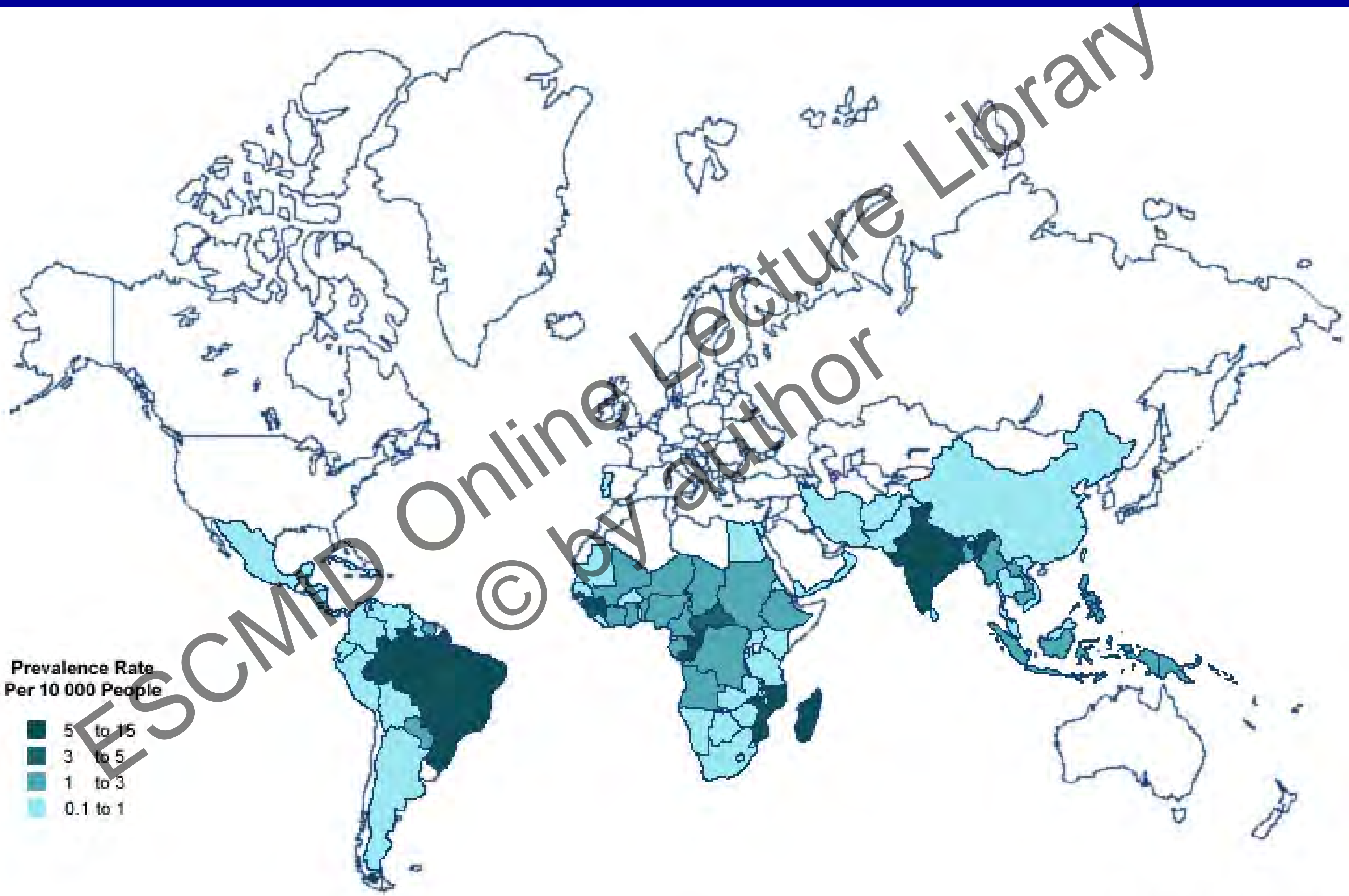

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Leprosy in the UK

- 75% of British cases (~10/year) are from Indian subcontinent [1,2]
- Average delay to diagnosis in UK is 1.5 years after seeing an average of 2.5 specialists [1]
- Consult with experts as reactions may be prolonged and can occur years after eradication of mycobacteria
- Duration of treatment for multibacillary disease ??

WHO says 2 years, but up to 8% relapse if high BI (>3) [3]

[1] Lockwood DN *et al. QJ Med* 2001; 94: 207-12. Delays in diagnosis
[2] Gill AL et al. *QJ Med* 2005; 98: 505-11. Liverpool cases

[3] Britton WJ, Lockwood DN. *Lancet* 2004; 363: 1209-19 Review

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Learning points

- Always ask patients about "traditional" and "over the counter" medicines
- Any skin or neurological problem in immigrant always consider leprosy, even if diabetes is present
- Consult with an expert over management

[1] Lockwood DN *et al. QJ Med* 2001; 94: 207-12. Delays in diagnosis

[2] Gill AL et al. *QJ Med* 2005; 98: 505-11. Liverpool cases

[3] Rodriguez LC, Lockwood DNJ. *Lancet* ID 2011; 11;464-70 Review

[4] Walker SL, Lockwood DNJ *Lepr Rev* 2008;79:372-86. Type 1 reactions

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