

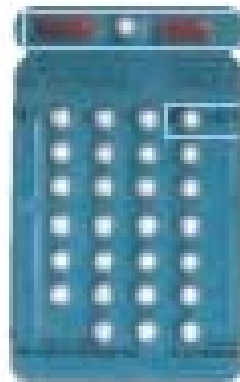
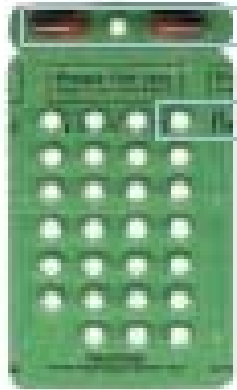


---

# Treatment

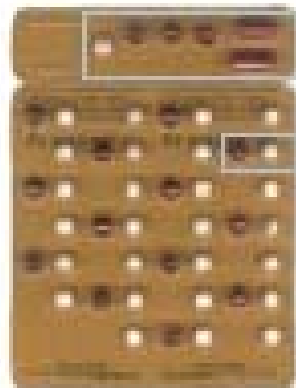
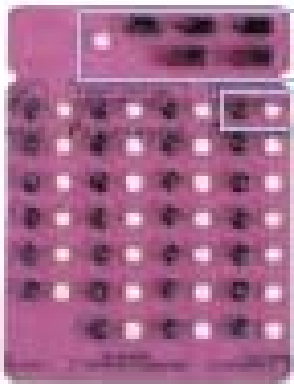


# MDT blisterpacks



PB adult blister pack

PB child blister pack



MB adult blister pack

MB child blister pack

**PB: 6 months treatment  
within a period of 9 months**

**MB: 12 months treatment  
within a period of 18 months**



# MDT side effects

---

## Minor:

- Red urine (rifampicine): reassure
- Darkening skin (clofazimine): counsel
- Gastro-intestinal (all): MDT with food
- Anaemia (dapsone): iron & folic acid

## Serious:

Itchy skin rash, allergy, urticaria, jaundice, shock, purpura, renal failure

Stop medication and refer!!!!



# Definitions

---

## 1. New Case

## 2. Other:

A. Relapse

B. Return after default

C. Transferred in

D. Change in classification PB->MB



# Exercises:

---

**4.1 New or not?**

**4.2. Mix and match**

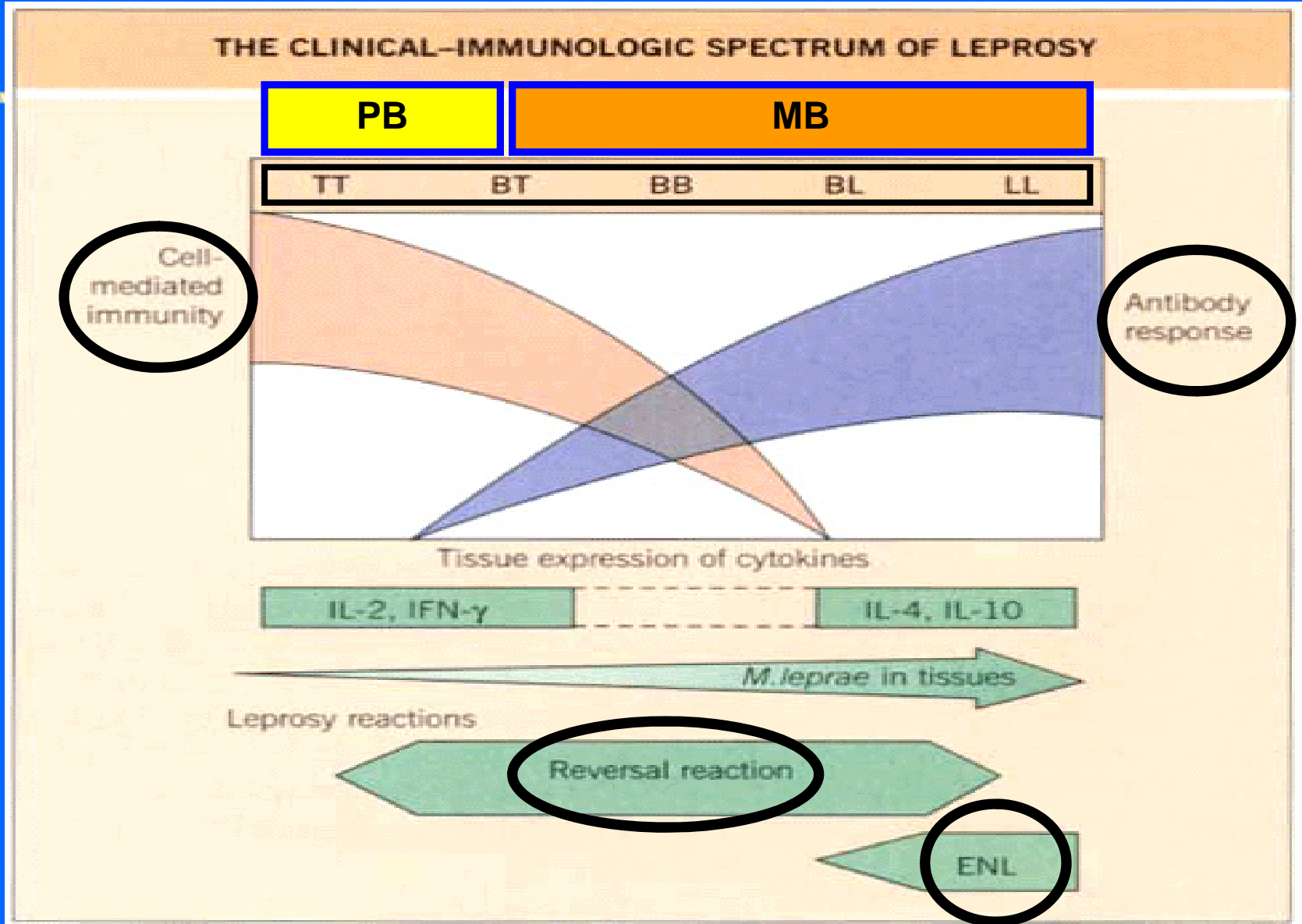
**4.3. Defaulter?**



---

# Reactions

# Immune Reactions





# Reaction basic symptoms

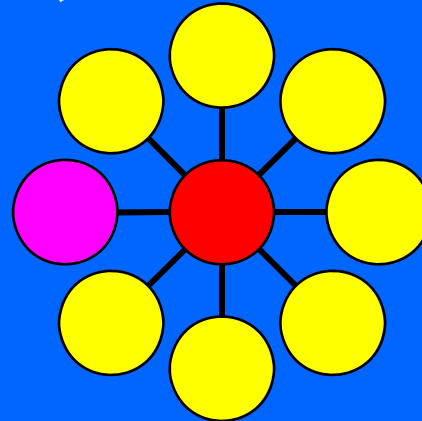
Sign	Type 1 reaction	Type 2 reaction
Inflammation of the skin	The leprosy patches are inflamed, but the rest of the skin is normal.	New, tender, red lumps, not associated with the leprosy patches.
General condition of the patient	Good, with little or no fever.	Poor, with fever and general malaise.
Timing of presentation and type of patient	Usually early on in the course of MDT; people with both PB and MB.	Usually later in the treatment; only people with MB.
Eye involvement	Weakness of eyelid closure may occur.	Internal eye disease (iritis) is possible.



# Reaction basic symptoms

---

Symptoms suggestive of new nerve damage: numbness, or muscle weakness in the hands or feet;



Referral to a specialist unit where there is appropriate monitoring and treatment



# Type 1: Loss of sensation





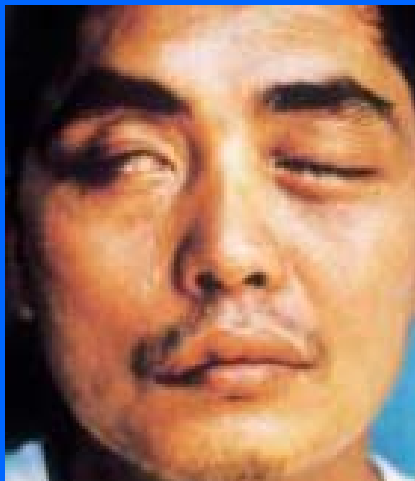
# Type 1: Loss of muscle weakness



**FEET**



**HANDS**



**EYES**



# Type 1: Pain / tenderness nerve(s)





# Type 1: Red, swollen patch on face





# Type 1: Red, swollen patch





# Type 1: Oedema of hands, feet or face

---





# Type 2: Pain / tenderness nerve(s)





# Type 2: ENL nodules (can ulcerate)





# Type 2: Pain / redness eyes

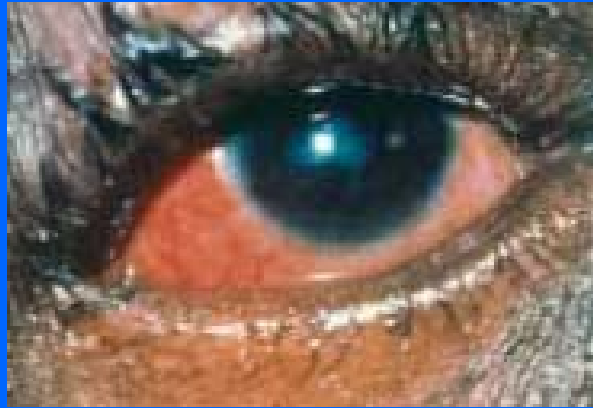


Figure 7: Acute iridocyclitis in Leprosy. The affected right eye shows smaller pupil and circumferential vascular dilation (photo by M. Brand)



# Type 2: Pain/swelling fingers (dactylitis)

---





# Reactions in HIV+ patients

---

**Reactions are increasingly reported as part of the Immune Reconstitution Syndrome in HIV+ patients receiving Anti-Retroviral-Therapy.**



# Treatment of reactions

Treatment of reactions with steroids of 3-6 months have an expected recovery rate for nerve function of 50-80 %





# Some facts

---

## Bangladesh (Richardus et al.):

- Early detection and treatment with MDT could prevent >75% of impairments
- Disability prevention during and after MDT could prevent 25% of impairments

**20-40% of MB patients develop new nerve function impairment during MDT.**



# High risk groups !!

---

**MB patients and those with existing nerve function impairments should be monitored for new nerve function loss, as they are the groups at greatest risk.**

**Assessment of nerve function during MDT is recommended.**

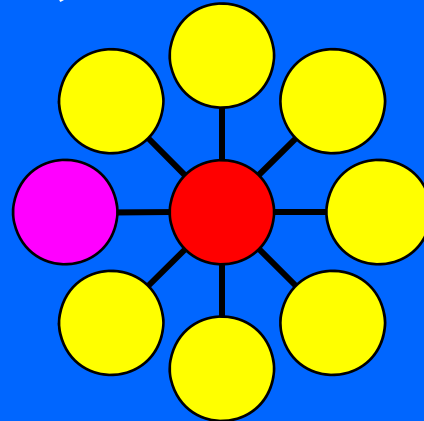




# Reaction basic symptoms

---

Symptoms suggestive of new nerve damage: numbness, or muscle weakness in the hands or feet;



Referral to a specialist unit where there is appropriate monitoring and treatment