Dr Abhishek Gupta's HYT

Week 1 · Topic 5 · Friday

Leprosy (Hansen's Disease)

Subject: Skin (Dermatology), with PSM (NLEP) and Microbiology overlap

Asked 42 times

Exam	PYQs
NEET PG	13
AIIMS PG	11
FMGE	8
UPSC CMS	6
INI-CET	4
Total	**42**

Years asked (15 years): 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026

Asked from 2021 onwards: 17

Decided by PYQs. Not by me. · Revise this free on HYT Revision, by Dr Abhishek Gupta.

2. PYQ Map: all 42 questions

#	Exam	Year	Angle tested
1	FMGE	2026	Adult MB-MDT regimen and doses
2	NEET PG	2026	Lepromin type, BI vs MI, foamy cells, ZN acid
3	FMGE	2025	NLEP mascot (Sapna) identification
4	NEET PG	2024	TT histology + lepromin positive
5	NEET PG	2024	NLEP logo identification
6	NEET PG	2024	Post-cure trophic plantar ulcer: offloading
7	NEET PG	2024	NLEP mascot Sapna identification
8	FMGE	2023	Diagnosis: anaesthetic patch, sensory order, ulnar
9	FMGE	2023	Leonine facies = lepromatous leprosy
10	UPSC CMS	2023	Role of ASHA under NLEP
11	FMGE	2022	M. leprae not cultivable on media
12	INI-CET	2022	G2D proportion = early detection indicator
13	INI-CET	2022	Smear-negative few lesions = PB
14	NEET PG	2022	Facial lesions: trigeminal nerve involved
15	FMGE	2021	Ulnar nerve: commonest deformity (claw hand)
16	INI-CET	2021	Indeterminate: spontaneous remission
17	INI-CET	2021	Image: annular punched-out lesions = BB
18	FMGE	2020	Image: lepromatous leprosy
19	FMGE	2019	Granuloma with AFB = leprosy
20	AIIMS PG	2018	Single-lesion leprosy: single-dose ROM
21	AIIMS PG	2018	Pure neuritic: radial cutaneous nerve biopsy
22	NEET PG	2018	Image: thickened greater auricular nerve
23	AIIMS PG	2017	ANCDR value and unit (2016)
24	AIIMS PG	2016	Clinical picture of BL
25	UPSC CMS	2016	Features of tuberculoid leprosy
26	AIIMS PG	2015	Image: BL with satellite lesions
27	AIIMS PG	2015	Image: MDT blister pack
28	AIIMS PG	2015	TT histology (anaesthetic patch + nerve)
29	UPSC CMS	2015	Features of tuberculoid leprosy
30	UPSC CMS	2015	PB-MDT: 6 doses within 9 months
31	NEET PG	2014	No basic PHC lab test for leprosy
32	NEET PG	2014	Dapsone: the unsupervised MDT drug

33	UPSC CMS	2014	TT: thickened peripheral nerve
34	AIIMS PG	2013	Ridley-Jopling basis: histopathology
35	NEET PG	2013	Indeterminate: no nerve involvement
36	NEET PG	2013	Claw hand = WHO disability grade 2
37	AIIMS PG	2012	BB: inverted-saucer lesion
38	AIIMS PG	2012	Elimination not eradication: long incubation
39	AIIMS PG	2012	Clinical picture of BB
40	NEET PG	2012	First sensation lost: temperature
41	NEET PG	2012	True statement on lepromatous leprosy
42	UPSC CMS	2012	MB-MDT doses for 10-14 years

What examiners keep asking

#	Recurring angle	PYQs
1	**Identify the type on the Ridley-Jopling spectrum** (TT / BT / BB / BL / LL / indeterminate): clinical picture, histology, lepromin, nerve involvement, natural history	16
2	**WHO classification (PB vs MB) and MDT**: regimens, doses (adult and child), supervised drug, completion window, single-lesion regimen, blister pack	7
3	**Nerves and sensation**: commonest nerve (ulnar), facial lesions (trigeminal), greater auricular, nerve for biopsy, first sensation lost	6
4	**NLEP identity**: logo, mascot Sapna (twice), role of ASHA	4
5	**Disability**: WHO grading (claw hand = grade 2), G2D as indicator of late detection, trophic ulcer care	3
6	**Epidemiology and programme facts**: ANCDR units, why elimination not eradication, no PHC lab test for leprosy	3
7	**Microbiology and lab**: not cultivable, granuloma with AFB, lepromin type IV, BI vs MI, 5% H_2SO_4	3

Reading the map: the spectrum (angle 1) carries 16 of 42 questions. Master the TT-to-LL table and you have answered more than a third of everything ever asked. Treatment, nerves and NLEP together make up most of the rest.

3. Full Concept Notes

3.1 Definition and basics

Leprosy (Hansen's disease) is a chronic granulomatous infection caused by *Mycobacterium leprae* (and rarely *M. lepromatosis*) that mainly affects the **skin and peripheral nerves**, and also the eyes, nasal mucosa, testes and bones. The disease itself is rarely fatal; its burden is **nerve damage leading to anaesthesia, deformity and disability**, and the stigma that follows.

- Bacillus discovered by **G. H. Armauer Hansen (1873)**, Norway: one of the first bacteria linked to a human disease.
- The form of disease a person develops is decided by the **host's cell-mediated immunity (CMI)**, not by the bacillus. This one idea explains the whole spectrum.
- Most people exposed to the bacillus never develop disease (natural resistance is high); leprosy is a disease of **low communicability**.

3.2 The agent: *Mycobacterium leprae*

Feature	Fact
Staining	Gram-positive, **acid-fast but weakly so**: modified Ziehl-Neelsen (Fite-Faraco) uses **5% H_2SO_4** as decolouriser (20-25% for *M. tuberculosis*) PYQ
Arrangement	Intracellular bundles ("cigar bundles") and large clumps called **globi** inside macrophages
Culture	**Never cultivated on artificial media** PYQ . Grown in the **mouse footpad** (Shepard, 1960) and the **nine-banded armadillo** (core temperature 30-35 °C: disseminated lepromatous disease)
Growth	Slowest of all pathogenic bacteria: **generation time about 12-14 days**; prefers **cooler temperature (about 27-30 °C)**, so it targets cool sites: skin, superficial nerves, nose, earlobes, testes
Habitat in host	Obligate intracellular: **Schwann cells** (nerve) and **macrophages** (skin). Phenolic glycolipid-1 (PGL-1) binds laminin-α2 of the Schwann cell basal lamina
Reservoir	Man is the main reservoir; armadillos (Americas) and red squirrels (UK) are known animal reservoirs

3.3 Epidemiology and transmission

- **Source:** untreated multibacillary (MB) patients; the nose is the main exit (an LL patient can shed millions of bacilli a day from nasal mucosa).
- **Route:** mainly **droplet infection** via the upper respiratory tract; prolonged close (household) contact; skin-to-skin contact is a minor route. Not hereditary.
- **Incubation period:** very long and variable: **average 3-5 years**, range from under a year to 20 years or more (tuberculoid shorter, lepromatous longer). This is **why leprosy is targeted for elimination, not eradication** PYQ .
- Age: any age, peak in young adults; **child cases among new cases** indicate ongoing recent transmission. Males more affected than females.
- One MDT dose (rifampicin) makes a patient practically non-infectious within days; treated patients need no isolation.

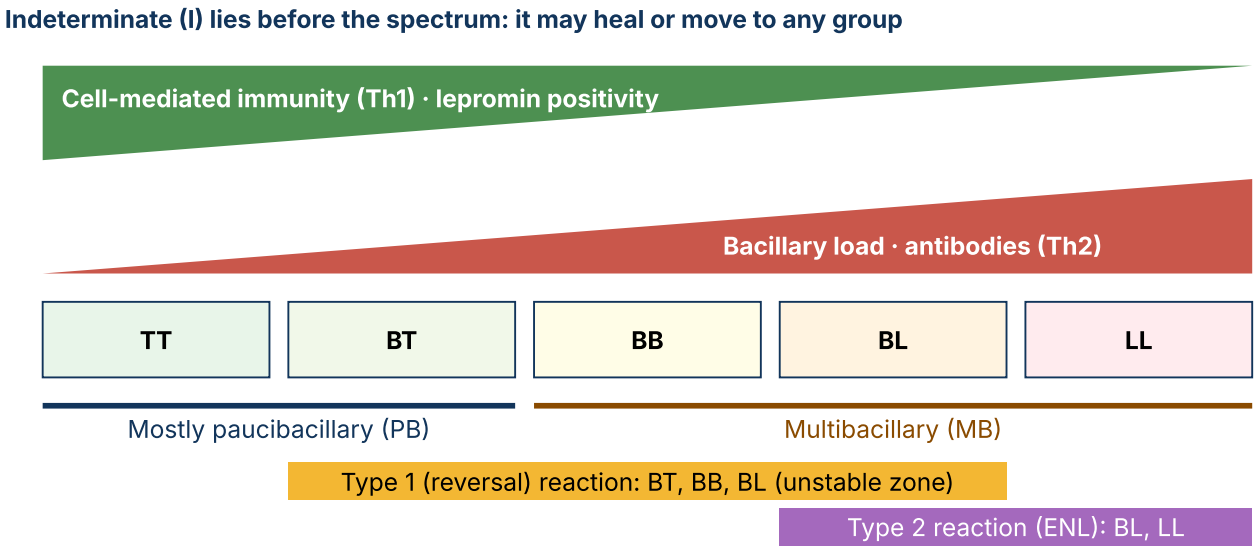
Must know: elimination vs eradication
Elimination of leprosy "as a public health problem" = **prevalence rate below 1 per 10,000 population**. India achieved this at national level in **December 2005**. Eradication is not possible because of the long incubation period PYQ .

3.4 Pathogenesis: the immune spectrum

After entry, bacilli reach Schwann cells and macrophages. What happens next depends on CMI:

- **Strong CMI (Th1: IFN-γ, IL-2)** → well-formed epithelioid granulomas that contain the bacilli but also destroy nerves → **tuberculoid (TT)**: few lesions, few bacilli, early severe nerve damage, lepromin positive.
- **Weak CMI (Th2: IL-4, IL-10)** with abundant (but useless) antibodies → bacilli multiply freely in macrophages that become **foamy macrophages (Virchow / lepra cells)** PYQ → **lepromatous (LL)**: innumerable lesions, huge bacillary load, lepromin negative.
- In between lies the **borderline** group (BT, BB, BL): immunologically **unstable**, so it can shift towards either pole and is where reactions occur.
- **Indeterminate leprosy** is the earliest stage before the immune response "decides"; many cases **heal spontaneously** PYQ .

Diagram (drawn fresh): the Ridley-Jopling spectrum



Original HYT diagram: as CMI falls from TT to LL, bacilli rise; borderline is unstable (type 1 reaction), lepromatous end gets ENL.

3.5 Classification

System	Groups	Exam point
Ridley-Jopling (1966)	TT, BT, BB, BL, LL (+ indeterminate outside the spectrum)	Based on **histopathology** (correlated with clinical, bacteriological, immunological) PYQ ; used in research and textbooks
Indian (IAL, 1955 / revised 1981)	Indeterminate, tuberculoid, borderline, lepromatous, **pure neuritic**	Only system with a pure neuritic group
Madrid (1953)	Indeterminate, tuberculoid, borderline (dimorphous), lepromatous	Historical
WHO operational (used by NLEP for treatment)	**PB** and **MB**	Decides the MDT regimen PYQ

NLEP operational classification (WHO-based)
Paucibacillary (PB): 1-5 skin lesions, no more than one nerve involved, and **slit-skin smear negative** PYQ .
Multibacillary (MB): 6 or more lesions, OR more than one nerve trunk involved, OR **slit-skin smear positive at any site** (a positive smear makes it MB whatever the number of lesions) PYQ .
When in doubt, classify and treat as MB. (WHO 2018 wording: any nerve involvement with neuritis or nerve function loss, or pure neural leprosy, counts as MB.)

3.6 Clinical features

Cardinal signs (diagnosis = any one)

1. A hypopigmented or reddish skin patch with **definite loss of sensation**.
2. A **thickened or enlarged peripheral nerve** with loss of sensation and/or weakness of muscles it supplies.
3. **Acid-fast bacilli in a slit-skin smear.**

Two of the three are clinical, which is why **leprosy has no routine laboratory test at the PHC** PYQ : it is diagnosed by examination.

Order of sensory loss over a patch: temperature first (cold, then heat) PYQ → light touch → pain → deep pressure (last). Thin fibres are damaged first. Anhidrosis and loss of hair over the patch are also seen.

The spectrum at a glance

Feature	TT	BT	BB	BL	LL
Number of lesions	1-3 PYQ	Few (up to ~10), satellites	Several to many	Many, satellites PYQ	Innumerable
Margin	Sharply defined, raised PYQ	Well defined	**Punched-out inner edge, sloping outer edge (inverted saucer)** PYQ	Less defined	Ill-defined, merging
Distribution	Asymmetrical	Asymmetrical	Tending to symmetry	Nearly symmetrical	Symmetrical
Sensation in lesion	Absent	Markedly reduced	Reduced PYQ	Slightly reduced	Normal early; glove-and-stocking late
Nerves	One nerve, **early, marked damage** PYQ	Several, asymmetrical	Several	Many, bilateral PYQ	Symmetrical thickening, late damage PYQ
Slit-skin smear (BI)	Negative	Negative or 1+	2+ to 3+ PYQ	3+ to 5+	5+ to 6+, globi
Lepromin	**Strongly positive** PYQ	Weakly positive	Negative / weak	Negative	**Negative** PYQ
Histology	Epithelioid granulomas, Langhans cells, dense lymphocytes, nerve destroyed, no bacilli PYQ	Granulomas, fewer lymphocytes	Epithelioid cells, few lymphocytes, bacilli present	Macrophages, some lymphocytes	**Foamy macrophages (Virchow cells), globi, grenz zone** PYQ
Reaction	Rare	Type 1	Type 1 (most unstable)	Type 1 and type 2	Type 2 (ENL)
Spontaneous healing	**Tendency to heal** PYQ	Unstable, may down- or up-grade			Progressive

Feature	Paucibacillary Leprosy	Multibacillary Leprosy
Bacterial Load	Low bacterial load; few to no acid-fast bacilli in smears	High bacterial load; acid-fast bacilli present in smears
Number of Skin Lesions	Typically 5 or fewer hypopigmented or erythematous lesions	More than 5 lesions, often numerous and widespread
Skin Smear	Negative for acid-fast bacilli	Positive for acid-fast bacilli
Sensory Loss	Commonly present in affected lesions	Sensory loss may be less pronounced or absent
Nerve Involvement	Often limited and localized	More extensive nerve involvement, sometimes leading to deformities
Type of Immunity	Stronger immune response; associated with tuberculoid form	Weaker immune response; associated with lepromatous form
WHO Classification	Classified as PB (Paucibacillary)	Classified as MB (Multibacillary)
Treatment Duration	Typically 6 months with multidrug therapy (MDT)	Typically 12 months with MDT

Paucibacillary leprosy: a few well-demarcated, slightly raised hypopigmented patches with sharp borders on the back (smear negative).



Borderline lepromatous (BL) leprosy: a large central plaque on the shin with smaller satellite lesions (AIIMS PG 2015 image).

Lepromatous leprosy: the late picture

- Diffuse infiltration of face → **leonine facies** PYQ ; thickened earlobes; **madarosis** (loss of lateral eyebrows first).
- Nasal stuffiness and epistaxis (earliest symptom of LL), septal perforation → **saddle nose**.
- Symmetrical **glove-and-stocking anaesthesia**; symmetrical thickened nerves PYQ .
- Testicular atrophy → **gynaecomastia** and infertility; ichthyosis of legs; oedema of hands and feet.
- Eye: corneal infiltration, iridocyclitis, "beaded" corneal nerves, lagophthalmos.



Lepromatous leprosy: widespread shiny hypopigmented and erythematous lesions, infiltrated facial skin and loss of eyebrows (madarosis) (FMGE 2020 image).

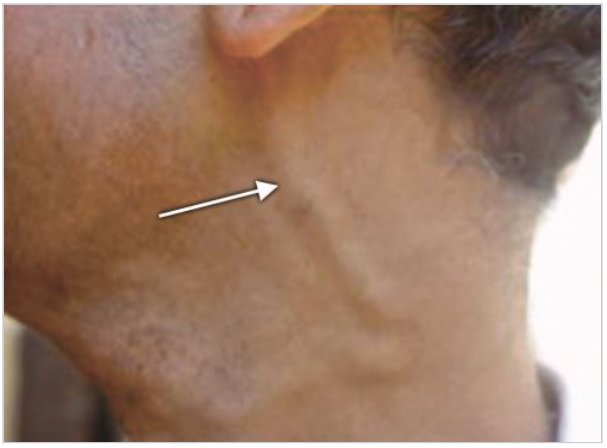
Special forms

Form	Key points
Indeterminate	Earliest; single ill-defined hypopigmented macule, minimal sensory loss, **no nerve thickening** PYQ ; many **heal spontaneously** (more than tuberculoid) PYQ
Pure neuritic	Nerve thickening and sensory/motor loss **without any skin patch**; diagnosed by **biopsy of a sensory cutaneous nerve: radial cutaneous nerve at the wrist** (or sural) PYQ
Histoid (Wade, 1960)	Variant of LL; shiny, firm, skin-coloured nodules on apparently normal skin; spindle-shaped histiocytes, very high BI; linked to dapsone monotherapy, relapse or resistance
Lucio leprosy	Diffuse non-nodular LL ("pretty leprosy", Mexico); **Lucio phenomenon** = necrotising vasculitis with ulcers

3.7 Nerve involvement

M. leprae favours **cool, superficial nerve segments** near joints. Nerves are thickened, may be tender (neuritis), and their damage causes anaesthesia, paralysis and autonomic loss (dry skin).

Nerve (site)	Result of damage
Ulnar (elbow, behind medial epicondyle)	Commonest nerve thickened and damaged PYQ ; **claw hand** (ring and little fingers) PYQ ; anaesthesia of medial hand
Median (wrist)	Ape thumb (loss of opposition); with ulnar = total claw hand
Radial (spiral groove)	Wrist drop (rare)
Radial cutaneous (wrist)	Sensory only: site of **nerve biopsy** in pure neuritic leprosy PYQ
Common peroneal / lateral popliteal (neck of fibula)	**Foot drop**; bilateral thickening in BL PYQ
Posterior tibial (medial malleolus)	Plantar anaesthesia → **trophic ulcer** PYQ , claw toes
Greater auricular (side of neck)	**Visibly thickened** cord crossing the sternocleidomastoid PYQ
Facial (zygomatic branch)	**Lagophthalmos** (cannot close eye) → exposure keratitis
Trigeminal (ophthalmic, maxillary)	Facial and corneal anaesthesia with lesions over forehead, nose, cheeks PYQ



Visibly thickened greater auricular nerve on the side of the neck in a leprosy patient.

WHO disability grading (eyes, hands, feet graded separately)

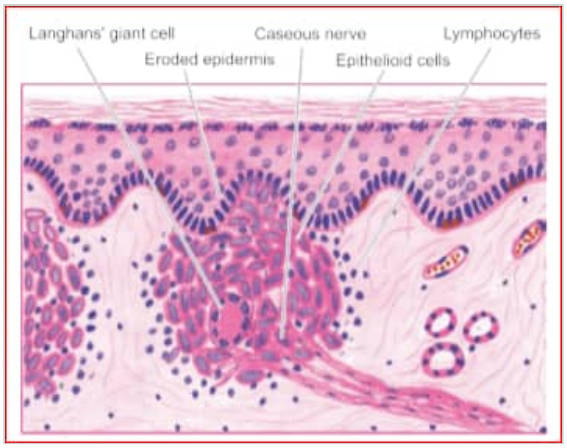
Grade	Hands and feet	Eyes
0	No anaesthesia, no visible deformity	No eye problem due to leprosy
1	**Anaesthesia present, no visible deformity**	Eye problem due to leprosy, vision not severely affected
2	**Visible deformity or damage**: claw hand PYQ , wrist drop, foot drop, ulcers, resorption	Lagophthalmos, iridocyclitis, corneal opacity, vision worse than 6/60 (cannot count fingers at 6 m)

Trap: there is **no grade 3**. Anaesthesia alone is grade 1; anything you can *see* is grade 2.

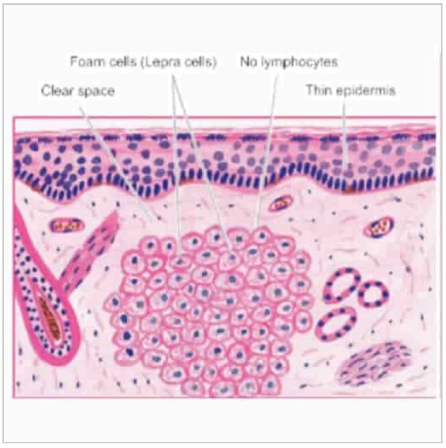
3.8 Investigations

- **Slit-skin smear** (earlobes, forehead/eyebrows, chin, edge of active lesion): modified ZN stain.

    - **Bacteriological index (BI)**: density of **all** bacilli (solid, fragmented, granular), **Ridley's logarithmic scale 0 to 6+** (6+ = over 1000 bacilli per oil-immersion field). Falls slowly (about 1 log per year) PYQ .
    - **Morphological index (MI)**: percentage of **uniformly solid-staining (viable)** bacilli; falls quickly with effective treatment PYQ .
- **Skin biopsy** (H&E + Fite-Faraco): basis of Ridley-Jopling; granuloma with AFB = leprosy PYQ .
- **Nerve biopsy**: radial cutaneous or sural, for pure neuritic leprosy PYQ .
- **Lepromin test** (intradermal lepromin): **type IV** delayed hypersensitivity PYQ . **Fernandez reaction** read at 48-72 hours; **Mitsuda reaction** (nodule) read at **21-28 days**. It is **not diagnostic** (positive in many healthy people); it shows host resistance: positive in TT, negative in LL PYQ . Used for classification and prognosis.
- Others: anti-PGL-1 antibody (high in MB), PCR for M. leprae DNA (also rifampicin-resistance mutations in *rpoB*), nerve ultrasound / conduction studies.



Tuberculoid leprosy, skin biopsy: well-formed dermal epithelioid granulomas reaching the basal epidermis, with lymphocytes; bacilli not seen.



Lepromatous leprosy, skin biopsy: dermal sheets of foamy macrophages (lepra / Virchow cells) loaded with bacilli.

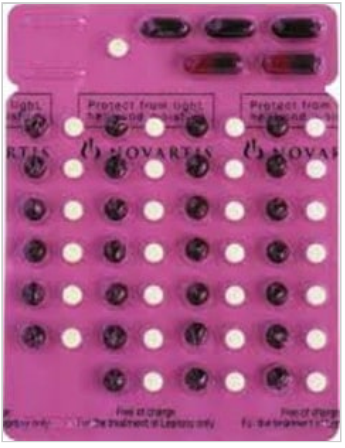
Trap pairs: BI = all bacilli, log scale; MI = % solid (live) bacilli. Lepromin = type IV and prognostic, not diagnostic. ZN for M. leprae uses 5% acid, not 20%.

3.9 Management: multidrug therapy (MDT)

MDT (rifampicin, clofazimine, dapsone) is supplied **free** under NLEP in colour-coded monthly **blister packs** PYQ . Multiple drugs are used to prevent resistance (dapsone monotherapy bred resistance).

Classic NLEP / WHO MDT regimens (the PYQ answers)

Group	Monthly, supervised (day 1)	Daily, self-administered	Duration (complete within)
MB adult PYQ	Rifampicin 600 mg + Clofazimine 300 mg	Dapsone 100 mg + Clofazimine 50 mg	**12 packs (18 months)**
MB child 10-14 y PYQ	Rifampicin 450 mg + Clofazimine 150 mg	Dapsone 50 mg daily + Clofazimine 50 mg **alternate days**	12 packs (18 months)
MB child under 10 y	Rifampicin 10 mg/kg + Clofazimine 100 mg	Dapsone 2 mg/kg daily + Clofazimine 50 mg twice a week	12 packs (18 months)
PB adult (classic)	Rifampicin 600 mg	Dapsone 100 mg	**6 packs (9 months)** PYQ
PB child 10-14 y (classic)	Rifampicin 450 mg	Dapsone 50 mg	6 packs (9 months)
Single lesion (historical)	One supervised dose of **ROM**: Rifampicin 600 + Ofloxacin 400 + Minocycline 100 mg PYQ		Single dose (now withdrawn)



Multibacillary MDT blister pack: monthly supervised rifampicin (red) and clofazimine (brown) with daily dapsone and clofazimine (AIIMS PG 2015 image).

Must know

• **Dapsone is the only drug not given under supervision** PYQ ; rifampicin is always given monthly under supervision.

• Rifampicin is the key **bactericidal** drug: one 600 mg dose kills over 99.9% of viable bacilli. Clofazimine: weakly bactericidal + anti-inflammatory. Dapsone: bacteriostatic (folate synthesis).

• PB: 6 doses in 9 months. MB: 12 doses in 18 months PYQ .

Current guideline update (WHO 2018; adopted by NLEP)

- **WHO (2018)** recommends the **same three drugs (rifampicin + clofazimine + dapsone) for both PB and MB**: PB for **6 months**, MB for **12 months**. India's NLEP has moved PB patients to this three-drug regimen (check the exact NLEP circular before recording).
- **Single-dose rifampicin (SDR) post-exposure prophylaxis** for eligible contacts (household and close contacts, age 2 years and above, after excluding active leprosy and TB) is part of NLEP and WHO guidance.
- **Rifampicin-resistant leprosy:** at least two second-line drugs (clarithromycin, minocycline or a quinolone such as ofloxacin/levofloxacin/moxifloxacin) plus clofazimine, for 6 months, then clofazimine + one of these for 18 months.

Drug	Key adverse effects
Rifampicin	Red-orange urine and secretions, hepatitis, flu-like syndrome (intermittent dosing), enzyme induction (OCP failure)
Clofazimine	**Reddish-brown/black skin pigmentation**, ichthyosis (dry skin), GI upset (crystal deposition in gut wall at high doses)
Dapsone	**Haemolysis** (worse in G6PD deficiency), methaemoglobinaemia, **dapsone hypersensitivity syndrome** (fever, rash, hepatitis, lymphadenopathy; linked to HLA-B*13:01), agranulocytosis

Simple MDT decision flow (drawn fresh)

Diagnosed leprosy (one cardinal sign)	
↓ Count lesions, examine nerves, smear if available	
1-5 lesions, ≤1 nerve, smear negative → PB	**6+ lesions OR >1 nerve OR smear positive** → MB
6 monthly packs (finish within 9 months)	12 monthly packs (finish within 18 months)
↓ Release from treatment (RFT) → watch for reactions and nerve damage; teach self-care; SDR prophylaxis for contacts	

3.10 Complications: lepra reactions

Reactions are acute immune episodes that can occur before, during or after MDT. They are the main cause of **sudden nerve damage** and are emergencies. **Do not stop MDT** during a reaction.

Feature	Type 1 (reversal reaction)	Type 2 (erythema nodosum leprosum, ENL)
Mechanism	**Type IV** hypersensitivity (sudden rise in CMI)	**Type III**, immune-complex (with neutrophils, TNF-α)
Who	Borderline: BT, BB, BL (tuberculoid side)	BL and LL only PYQ (never TT)
Skin	**Existing lesions** become red, swollen, tender; new lesions may appear	**New crops** of tender red evanescent nodules on normal-looking skin
Systemic	Usually mild	Fever, malaise, neuritis, **iridocyclitis, orchitis**, arthritis, lymphadenitis, nephritis
Nerves	Acute neuritis: major cause of sudden paralysis	Neuritis common
Treatment	**Prednisolone** (about 40 mg/day, tapered over about 20 weeks), rest and splint for neuritis	Mild: NSAIDs. Severe: **prednisolone**; recurrent / steroid-dependent: **thalidomide** (not in women who may become pregnant) or **high-dose clofazimine**



Erythema nodosum leprosum (type 2 reaction) in lepromatous leprosy: tender erythematous subcutaneous nodules.

Reaction vs relapse: reaction is sudden (days), in old lesions, during or soon after MDT, responds to steroids; **relapse** is slow (months), new lesions, usually years after RFT, BI rises, needs repeat MDT.

Disability: trophic ulcers and deformity

- Loss of protective sensation (mainly posterior tibial) lets repeated pressure break skin over weight-bearing points → **painless, punched-out plantar (trophic) ulcer**.
- Management: **rest and offloading** (no weight bearing), cleaning, plaster cast if needed, then **microcellular rubber (MCR) footwear** PYQ . MDT is **not** restarted after cure.
- Self-care: daily soaking, oiling, inspection of hands and feet; eye protection. Reconstructive surgery (RCS) at designated centres for correctable deformity.

3.11 Prevention and control: NLEP (India)

Item	Fact
History	National Leprosy Control Programme **1955** (dapsone) → **National Leprosy Eradication Programme (NLEP) 1983**, MDT introduced. Elimination as a public health problem achieved nationally in **December 2005**. Centrally sponsored, under the National Health Mission
Strategy	Integrated with general health services (PHC); **National Strategic Plan and Roadmap for Leprosy 2023-2027** aims to **interrupt transmission (zero new indigenous cases) by 2027**, ahead of the SDG target of 2030; WHO **Global Leprosy Strategy 2021-2030: "Towards zero leprosy"**
Case finding	Leprosy Case Detection Campaign (LCDC) house-to-house; active case detection; contact screening. ASHAs **find and refer suspects to the PHC** and **follow up for treatment completion**, with incentives PYQ
Diagnosis at PHC	Clinical (cardinal signs); no routine lab test PYQ
Prophylaxis	SDR-PEP for contacts; BCG gives partial protection; *Mycobacterium indicus pranii* (MIP) vaccine developed in India and used in pilot projects
Disability prevention and medical rehabilitation (DPMR)	Reaction management, MCR footwear, self-care kits, splints, reconstructive surgery with welfare allowance paid to the patient
Awareness	**Sparsh Leprosy Awareness Campaign** (from 30 January, Anti-Leprosy Day in India, Gandhiji's death anniversary); World Leprosy Day: last Sunday of January. **Mascot: Sapna** PYQ . **Logo: two cupped hands holding a plant with three leaves** PYQ



NLEP logo: two cupped hands holding a three-leaved plant; the central leaf is the person affected by leprosy, supported by family and society (NEET PG 2024 image).

Programme indicators (know the units)

Indicator	Unit	What it tells
Prevalence rate (PR)	per **10,000**	Cases on treatment; elimination = below 1/10,000
Annual new case detection rate (ANCDR)	per **1,00,000** PYQ	New cases detected in the year (9.7/lakh as on 31 March 2016)
Proportion of new cases with grade 2 disability	%	**Late detection**: the indicator of how well the health system finds cases early PYQ
G2D rate in new cases	per **10,00,000** (million)	Same idea, population based (WHO key target indicator)
Proportion of child cases	%	**Recent, ongoing transmission**
Proportion of MB cases / females	%	Severity of case mix; women's access to services
Treatment completion rate	%	Quality of case holding

3.12 Special exam points

• Diagnosis: anaesthetic patch + thickened nerve (+ smear); temperature sense lost first PYQ .
• Commonest nerve: ulnar → claw hand PYQ ; visible nerve: greater auricular PYQ ; biopsy nerve: radial cutaneous PYQ .
• TT: lepromin +, few sharp lesions, early nerve damage, self-heals PYQ . LL: lepromin -, leonine facies, foamy cells, ENL PYQ . BB: inverted saucer / punched-out PYQ .
• Ridley-Jopling = histopathological PYQ . Indeterminate = no nerve involvement PYQ .
• Not cultivable; mouse footpad, armadillo PYQ .
• Elimination (PR <1/10,000), not eradication: long incubation PYQ .

Common traps: (1) Lepromin is type IV, not III. (2) ENL is type III and never in TT. (3) A positive smear = MB even with one lesion. (4) Dapsone, not clofazimine, is the unsupervised drug (but clofazimine 50 mg daily is also self-taken). (5) Claw hand is grade 2, not 3. (6) Leprosy needs no PHC lab test.

4. High Yield Notes

Ordered by how often examiners ask

Type	Lesions	Nerves	Smear	Lepromin	Histology	Reaction
Indeterminate	1 ill-defined macule	**None**	-	Variable	Non-specific	-
TT	1-3, sharp, raised, anaesthetic	**Early, marked**	-	**+++**	Epithelioid granuloma, no AFB	Rare
BT	Few, satellites	Several, asymmetrical	- / 1+	+	Granuloma	Type 1
BB	Several, **inverted saucer / punched out**	Several	2-3+	±	Epithelioid, AFB present	Type 1
BL	Many, satellites	**Many, bilateral**	3-5+	-	Macrophages	Type 1 and 2
LL	Innumerable, symmetrical; leonine facies, madarosis	Symmetrical, late	5-6+, globi	**-**	**Foamy (Virchow) cells, grenz zone**	**Type 2 (ENL)**

1. **PB** = 1-5 lesions, smear negative; **MB** = 6+ lesions or >1 nerve or **smear positive**.
2. **MB adult:** R 600 + C 300 monthly (supervised); D 100 + C 50 daily; 12 months (within 18).
3. **MB child 10-14:** R 450 + C 150 monthly; D 50 daily; C 50 alternate days.
4. **PB:** 6 doses within **9 months**. **Dapsone** = unsupervised drug. Single lesion (old) = single-dose **ROM**.
5. **Ulnar** = commonest nerve, **claw hand**; **trigeminal** for facial lesions; **greater auricular** visible; **radial cutaneous** for biopsy.
6. **Temperature** is the first sensation lost.
7. Claw hand = **WHO grade 2**; grade 1 = anaesthesia only; no grade 3.
8. **% of new cases with G2D** = indicator of early detection (high = late).
9. NLEP: logo = **cupped hands with three-leaf plant**; mascot = **Sapna**; ASHA = **find and refer, follow up to completion**.
10. **Ridley-Jopling** = histopathological. **Lepromin** = type IV, prognostic (Mitsuda 21-28 d, Fernandez 48-72 h).
11. Not cultured; **mouse footpad, armadillo**; generation time ~12-14 days; ZN with **5% H_2SO_4**. BI = all bacilli (log 0-6+); MI = % solid.
12. **Elimination** (PR <1/10,000; India Dec 2005), not eradication, because of **long incubation**. ANCDR per **1,00,000**.
13. **Trophic ulcer** after cure → offload / rest, MCR footwear; do not restart MDT.
14. Type 1 reaction = type IV, borderline, old lesions flare → prednisolone. Type 2 (ENL) = type III, BL/LL → prednisolone, thalidomide, clofazimine.

If you remember one thing: leprosy is a spectrum decided by the patient's cell-mediated immunity. Strong immunity (TT) = few bacilli, lepromin positive, early nerve damage. Weak immunity (LL) = innumerable bacilli in foamy cells, lepromin negative, ENL. Every clinical, histology and treatment question follows from where the patient sits on that line.

5. All 42 PYQs (newest first)

1. FMGE 2026

A 35-year-old man presents with multiple hypopigmented anesthetic patches, thickened peripheral nerves, and a positive slit-skin smear. He is diagnosed with multibacillary leprosy. Which of the following is the correct WHO multidrug therapy (MDT) regimen for an adult?

A. Rifampicin 600 mg once monthly and dapsone 100 mg daily for 6 months
B. Rifampicin 600 mg once monthly (supervised), clofazimine 300 mg once monthly (supervised), clofazimine 50 mg daily, and dapsone 100 mg daily for 12 months
C. Rifampicin 600 mg daily, clofazimine 100 mg daily, and dapsone 100 mg daily for 12 months
D. Dapsone 100 mg daily and clofazimine 50 mg daily for 12 months

Answer: B. Rifampicin 600 mg once monthly (supervised), clofazimine 300 mg once monthly (supervised), clofazimine 50 mg daily, and dapsone 100 mg daily for 12 months

Adult MB-MDT = 12 monthly blister packs: **rifampicin 600 mg + clofazimine 300 mg once a month (supervised)** plus **clofazimine 50 mg + dapsone 100 mg daily (self-administered)**.
A positive slit-skin smear makes the case MB whatever the lesion count.
A (R + D for 6 months) is the classic PB regimen; C gives rifampicin daily (wrong: it is monthly); D omits rifampicin, the only strongly bactericidal drug.

2. NEET PG 2026

Which of the following statements regarding leprosy is correct?

A. Lepromin test produces a type III hypersensitivity reaction.
B. Bacteriological index is the ratio of solid-staining bacilli to the total number of bacilli.
C. Mycobacterium leprae can be seen within foamy macrophages.
D. Ziehl–Neelsen staining for M. leprae requires decolorization with 20% sulfuric acid.

Answer: C. Mycobacterium leprae can be seen within foamy macrophages.

M. leprae multiplies inside dermal macrophages that become lipid-laden **foamy macrophages (Virchow / lepra cells)** in lepromatous leprosy: C is true.
A: lepromin is a **type IV** (delayed, cell-mediated) reaction, not type III.
B: that ratio (solid-staining / total bacilli) is the **morphological index**; the bacteriological index is the density of all bacilli on Ridley's log scale 0 to 6+.
D: M. leprae is weakly acid-fast, so the modified ZN stain uses **5%** sulphuric acid (20% is for M. tuberculosis).

3. FMGE 2025

Identify the related national health programme based on the mascot shown below.



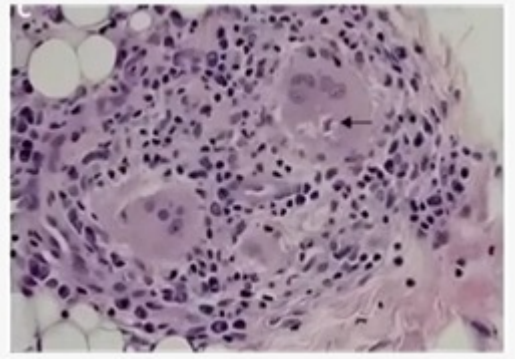
A. National Leprosy Eradication Programme
B. National Tuberculosis Elimination Programme
C. National Anti-Malaria Programme
D. National Polio Surveillance Program

Answer: A. National Leprosy Eradication Programme

Sapna, a young village girl, is the mascot used by the National Leprosy Eradication Programme (NLEP) in its awareness and anti-stigma campaigns (e.g. Sparsh Leprosy Awareness Campaign).
She encourages early reporting of a pale, numb patch and completion of free MDT.

4. NEET PG 2024

A patient presents with loss of sensation along the ulnar nerve path. The histology is shown in the image, and a Lepromin test was performed. What is the expected outcome?



A. Tuberculoid leprosy with lepromin positive
B. Borderline leprosy with lepromin positive
C. Lepromatous leprosy with lepromin positive
D. Scrofuloderma

Answer: A. Tuberculoid leprosy with lepromin positive

Ulnar sensory loss + biopsy with well-formed epithelioid granulomas, lymphocyte rim, nerve destruction and no visible bacilli = **tuberculoid leprosy**.
Strong cell-mediated immunity at the TT pole makes the **lepromin (Mitsuda) test positive**.
Lepromatous leprosy is lepromin negative; borderline is weakly positive or negative; scrofuloderma is cutaneous TB over a lymph node.

5. NEET PG 2024

Identify the logo?



A. Leprosy
B. TB
C. Malaria
D. HIV

Answer: A. Leprosy

The NLEP emblem shows **two cupped hands holding a plant with three leaves**, the central leaf being the person affected by leprosy, supported by family and society.
Message: care, dignity and an end to stigma.

6. NEET PG 2024

A 60-year-old person who completed treatment for leprosy many years ago now presents with a punched-out, painless ulcer on the sole of his foot. What is the most appropriate management?

A. Ask him to bear less weight on that leg
B. Restart MDT
C. Amputation
D. Intense debridement and intravenous antibiotics

Answer: A. Ask him to bear less weight on that leg

A painless punched-out plantar ulcer years after cure is a **trophic (neuropathic) ulcer** on an anaesthetic foot (posterior tibial nerve damage), not active infection.
Key treatment is **offloading / rest** (no weight bearing, plaster or MCR footwear later) plus wound care; it heals once pressure is removed.
Restarting MDT is wrong (infection is cured); amputation and IV antibiotics are only for complicated, infected or malignant ulcers.

7. NEET PG 2024

Identify the image given?



A. Arohi from HIV
B. Sapna Leprosy
C. Meena Unicef
D. None of the above

Answer: B. Sapna Leprosy

Sapna is the NLEP leprosy-awareness mascot.
Arohi is not a leprosy mascot; Meena is the UNICEF South Asia girl-child communication character.

8. FMGE 2023

A 30-year-old patient presenting with hypopigmented patches, loss of cold sensation followed by hot, touch, and pain, along with a palpable ulnar nerve. What is the likely diagnosis?

A. Tuberculosis (TB)
B. Leprosy
C. Human Immunodeficiency Virus (HIV)
D. Candida

Answer: B. Leprosy

Hypopigmented patch with sensory loss in order **temperature (cold, then hot) → touch → pain**, plus a palpable thickened ulnar nerve = **leprosy**.
Thin fibres carrying temperature are damaged first; the ulnar nerve at the elbow is the commonest thickened nerve.

9. FMGE 2023

A 45-year-old patient comes to the clinic with distinctive facial changes, including thickened, coarse, and deeply furrowed skin primarily affecting the cheeks, forehead, and nose. Alongside these dermatological findings, the patient reports experiencing numbness and weakness in their extremities. On examination, hypopigmented and erythematous patches are noted on the skin, with areas showing loss of sensation. What is the medical condition characterized by the term “Leonine facies”?

A. Acromegaly
B. Myasthenia gravis
C. Lepromatous Leprosy
D. Bells palsy

Answer: C. Lepromatous Leprosy

Leonine facies (diffuse infiltration and thickening of the face, with deep furrows, often with madarosis and nasal changes) is a late sign of **lepromatous leprosy**, the low-immunity, multibacillary pole.
Acromegaly gives coarse features but no anaesthetic patches or nerve thickening.

10. UPSC CMS 2023

Under the National Leprosy Eradication Programme, ASHAs have been entrusted to carry out which of the following activities?

1. ASHAs are to search for suspected cases of leprosy in their villages and take them to the PHCs for diagnosis and treatment.
2. ASHAs arrange an amount of ₹5,000 as an incentive to each leprosy-affected person in their village for undergoing reconstructive surgery.
3. ASHAs ensure that each leprosy-affected person in their village receives micro-cellular rubber footwear for protection of insensitive feet.
4. ASHAs follow up all confirmed cases of leprosy in their village to ensure their treatment completion.

Select the correct answer using the code given below:

- **A.** 1 and 2 only
- **B.** 2 and 3 only
- **C.** 1 and 4 only
- **D.** 3 and 4 only

Answer: C. 1 and 4 only

Under NLEP, ASHAs (1) **search for suspected cases and bring them to the PHC** and (4) **follow up confirmed cases till treatment is complete**; they receive incentives for these.
Statement 2 is wrong: the reconstructive-surgery welfare allowance is paid by the programme to the patient, not arranged by the ASHA. Statement 3 (MCR footwear) is supplied by the programme, not an ASHA duty.

11. FMGE 2022

Which of the following organisms is unable to be cultivated using artificial culture media?

- **A.** Mycobacterium leprae
- **B.** Staphylococcus aureus
- **C.** Mycobacterium tuberculosis
- **D.** Streptococcus pneumoniae

Answer: A. Mycobacterium leprae

M. leprae has never been grown on artificial (cell-free) media. It is grown only in the **mouse footpad** and the **nine-banded armadillo**.
It is obligate intracellular with a very long generation time (about 12-14 days). S. aureus, M. tuberculosis and S. pneumoniae all grow on artificial media.

12. INI-CET 2022

Which of the following indicators can aid in determining the significance of the health system in identifying leprosy within the community?

A. Treatment completion rate
B. Annual new case detection rate per lac
C. Treatment initiation rate
D. Proportion of newly diagnosed patients with grade 2 disability

Answer: D. Proportion of newly diagnosed patients with grade 2 disability

Proportion of new cases with grade 2 disability (G2D) shows how late cases are detected: visible deformity at diagnosis means the patient was missed for a long time.
So it measures how well the health system finds cases early. ANCDR reflects case load and detection activity; treatment completion reflects quality of care.

13. INI-CET 2022

A 30-year-old patient presents to the clinic with hypopigmented patches on the skin. On examination, there are a few well-demarcated, slightly raised lesions with a loss of sensation. Skin smears reveal no acid-fast bacilli. Which of the following is the most likely diagnosis?

A. Multibacillary leprosy
B. Psoriasis
C. Tinea versicolor
D. Paucibacillary leprosy

Answer: D. Paucibacillary leprosy

Few well-defined, raised, hypopigmented anaesthetic plaques with a **negative slit-skin smear** = **paucibacillary leprosy** (WHO: 1-5 lesions, smear negative).
Psoriasis and tinea versicolor do not cause sensory loss; a positive smear or more than 5 lesions would make it MB.

14. NEET PG 2022

A patient undergoing treatment of borderline tuberculoid leprosy presents with lesions on forehead, nose & extending to bilateral cheeks. Which is the most common nerve affected in this patient

A. Trochlear nerve
B. Abducent nerve
C. Ulnar nerve
D. Trigeminal nerve

Answer: D. Trigeminal nerve

Lesions on forehead, nose and cheeks lie in the sensory territory of the **trigeminal nerve**, which is therefore the nerve affected (corneal and facial anaesthesia).
Leprosy affects cooler superficial nerves; trochlear and abducent are deep cranial motor nerves; the ulnar does not supply the face. (Facial nerve involvement causes lagophthalmos.)

15. FMGE 2021

Which nerve injury is most commonly responsible for the deformity seen in a patient with leprosy?

A. Ulnar nerve
B. Radial nerve
C. Median nerve
D. Posterior interosseous nerve

Answer: A. Ulnar nerve

The **ulnar nerve** (superficial and cool at the elbow) is the commonest nerve damaged in leprosy and gives the commonest deformity: **claw hand** (ring and little fingers, intrinsic minus hand).
Median adds the 'ape thumb'; radial nerve palsy (wrist drop) is rare.

16. INI-CET 2021

What is the correct outcome of leprosy's healing if it is not treated?

A. No spontaneous remission is seen
B. Half of the cases resolve spontaneously after bacilli exposure
C. Spontaneous remission is more common in children than in adults
D. Indeterminate leprosy has more remission than tuberculoid

Answer: D. Indeterminate leprosy has more remission than tuberculoid

Indeterminate leprosy, the earliest and immunologically undecided stage, often heals on its own, so it remits spontaneously more often than tuberculoid leprosy.
Spontaneous healing does occur (A wrong); the "half of all exposed" figure has no basis (B).

17. INI-CET 2021

The lesions shown in the image are characteristically seen in which type of leprosy?



A. Borderline lepromatous leprosy
B. Lepromatous leprosy
C. Borderline leprosy
D. Histoid leprosy

Answer: C. Borderline leprosy

Annular plaques with a **sharply punched-out inner margin** and a sloping, ill-defined outer edge (Swiss-cheese / inverted-saucer look), in moderate numbers, are typical of **mid-borderline (BB) leprosy**.
BL lesions are more numerous and less well defined; LL lesions are innumerable, symmetrical and ill-defined; histoid lesions are shiny nodules on normal skin.

18. FMGE 2020

Identify the condition in the image given below:



A. Tuberculoid leprosy
B. Leishmaniasis
C. Borderline tuberculoid leprosy
D. Lepromatous leprosy

Answer: D. Lepromatous leprosy

Widespread, ill-defined, shiny macules, papules and nodules with facial infiltration and loss of eyebrows (madarosis) = **lepromatous leprosy**.
TT and BT give few well-defined anaesthetic plaques; post-kala-azar dermal leishmaniasis gives nodules but no nerve thickening or madarosis.

19. FMGE 2019

What is the most probable cause in a case of granuloma with acid-fast bacilli positivity?

A. Cat scratch disease
B. Trench fever
C. Leprosy
D. Syphilis

Answer: C. Leprosy

A granuloma containing **acid-fast bacilli** points to a mycobacterium; among the options only **leprosy** fits. Cat-scratch disease (Bartonella) gives stellate necrotising granulomas; trench fever (Bartonella quintana) is not granulomatous; syphilis (spirochaete) is not acid-fast.

20. AIIMS PG 2018

Under leprosy eradication programme the managment of single lesion is -

A. Single dose of Rifampicin and Dapsone
B. Rifampicin and Dapsone for 6 months
C. Rifampicin, ofloxacin and minocycline single dose
D. Rifampicin and minocycline for 6 months

Answer: C. Rifampicin, ofloxacin and minocycline single dose

For a **single skin lesion** (no nerve trunk involved) the programme answer is a **single supervised dose of ROM: rifampicin 600 mg + ofloxacin 400 mg + minocycline 100 mg**.
B (R + D for 6 months) was PB-MDT for 2-5 lesions.
Exam answer stays ROM, but note that single-lesion ROM is no longer part of current WHO / NLEP treatment (single lesions now receive standard PB-MDT).
Note for Dr Gupta: check answer — stored answer C (single-dose ROM) is the classic exam answer, but ROM for single lesions has been withdrawn; current WHO/NLEP treat single lesions with PB-MDT. Keep as historical PYQ; avoid teaching ROM as current practice.

21. AIIMS PG 2018

Which Nerve biopsy is taken to diagnose neuritic leprosy?

A. Median Nerve
B. Ulner Nerve
C. Radial Cutaneous Nerve
D. Sural nerve

Answer: C. Radial Cutaneous Nerve

Pure neuritic leprosy has no skin patch, so the diagnosis is made by **biopsy of a thickened, purely sensory cutaneous nerve**: the **radial cutaneous nerve at the wrist** is the standard choice (the sural nerve is the alternative).
Mixed nerve trunks (median, ulnar) are never biopsied because of motor loss.

22. NEET PG 2018

Which nerve is thickened in the image shown?



A. Facial Nerve
B. Greater auricular nerve
C. Vagus Nerve
D. Glossopharyngeal Nerve

Answer: B. Greater auricular nerve

A visible, cord-like nerve crossing the sternocleidomastoid towards the ear is the **greater auricular nerve**: classic visible nerve thickening in leprosy (palpate it with the head turned to the opposite side).
Facial, vagus and glossopharyngeal nerves are deep and never seen like this.

23. AIIMS PG 2017

Annual new case detection rate of leprosy as on 31st March, 2016 is:

A. 0.66 /10,000 population
B. 0.66/1,00,000 population
C. 9.7/10,000 population
D. 9.7/1,00,000 population

Answer: D. 9.7/1,00,000 population

NLEP figures as on 31 March 2016: **ANCDR 9.7 per 1,00,000** population (prevalence rate 0.66 per 10,000).
Learn the units: **prevalence per 10,000**, **ANCDR per 1,00,000**, **G2D rate per 10,00,000 (million)**.
Note for Dr Gupta: data-point question (NLEP 2015-16 figures). Answer D is correct for that date; do not present 9.7 per lakh as a current figure.

24. AIIMS PG 2016

A 45 year old male had multiple hypoaesthetic mildly erythematous large plaques with elevated margins on trunk and extremities. His ulnar and lateral popliteal nerves on both sides were enlarged. The most probable diagnosis is:

A. Lepromatous leprosy
B. Borderline leprosy
C. Borderline tuberculoid leprosy
D. Borderline lepromatous leprosy

Answer: D. Borderline lepromatous leprosy

Multiple large hypoaesthetic plaques with elevated margins, plus **bilateral (roughly symmetrical) thickening of several nerves** (ulnar and lateral popliteal on both sides) = **borderline lepromatous (BL)**.
LL has diffuse infiltration with less marked anaesthesia early; BT/BB have fewer, asymmetrical lesions and asymmetrical nerve involvement.

25. UPSC CMS 2016

Which of the following features are characteristic of tuberculoid leprosy?

1. Type 2 lepra reaction
2. A few lesions with well-demarcated edges
3. Early and marked nerve damage
4. Tendency to heal spontaneously Select the correct answer using the code below:

A. 1, 2 and 3
B. 2, 3 and 4
C. 1 and 4
D. 2 and 3 only

Answer: B. 2, 3 and 4

Tuberculoid leprosy: **few well-demarcated lesions (2), early and marked nerve damage (3), tendency to heal spontaneously (4)** = option B.
Type 2 lepra reaction (ENL) belongs to BL/LL; TT/BT get the type 1 (reversal) reaction.

26. AIIMS PG 2015

A man with leprosy came with the following lesion on the shin. What is the correct classification?



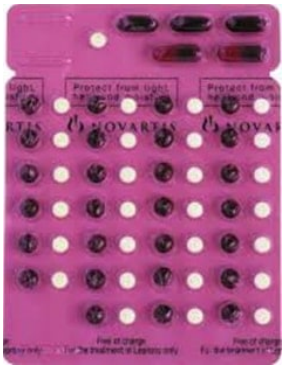
A. LL
B. BL
C. BT
D. BB

Answer: B. BL

A large central plaque with surrounding **satellite lesions**, asymmetrical, ill-defined margins = **borderline lepromatous (BL)**.
Satellite lesions are classically described in borderline disease towards the lepromatous side; LL lesions are innumerable and symmetrical.

27. AIIMS PG 2015

Identify the disease in which the following treatment is used?



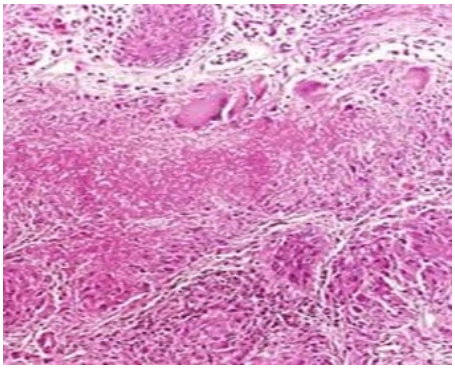
A. Influenza
B. Kala-Azar
C. Tuberculosis
D. Leprosy

Answer: D. Leprosy

The colour-coded blister pack (red rifampicin, brown clofazimine, white dapsone) is the WHO **multidrug therapy (MDT) pack for leprosy**, supplied free.
MB pack: monthly rifampicin 600 + clofazimine 300 (supervised); daily dapsone 100 + clofazimine 50.

28. AIIMS PG 2015

A young male presented with an anesthetic patch on the right forearm. A thickened nerve was palpable on examination. Skin biopsy shows the following picture. What is the diagnosis?



A. TT
B. Lepromatous Leprosy
C. Histiocytosis
D. Lymphoma

Answer: A. TT

Single anaesthetic patch + thickened nerve + biopsy with well-formed epithelioid granulomas and Langhans giant cells (no bacilli) = **tuberculoid leprosy (TT)**.
LL would show foamy macrophages full of bacilli with a grenz zone; histiocytosis and lymphoma do not cause anaesthetic patches.

29. UPSC CMS 2015

Which of the following are characteristic features of tuberculoid leprosy?

1. Type 2 lepra reaction
2. A few lesions with well-demarcated edges
3. Early and marked nerve damage
4. Tendency to heal spontaneously Select the correct answer using the code below:

A. 1, 2 and 3
B. 2, 3 and 4
C. 1 and 4
D. 2 and 3 only

Answer: B. 2, 3 and 4

Same as UPSC CMS 2016: TT shows **few well-defined lesions, early marked nerve damage, tendency to self-heal** (2, 3, 4).
Type 2 reaction (ENL) is a lepromatous-pole event.

30. UPSC CMS 2015

In a patient with paucibacillary leprosy, treatment is considered adequate if the six monthly doses of multidrug therapy (MDT) are completed within what maximum time frame?

A. 6 months
B. 9 months
C. 12 months
D. 15 months

Answer: B. 9 months

PB-MDT is **6 monthly doses**, to be completed within a maximum of **9 months**.
MB-MDT is **12 monthly doses** within **18 months**. The extra time allows for missed doses.

31. NEET PG 2014

"Basic laboratory service is not available at PHC for which disease -"

A. TB
B. Malaria
C. Syphilis
D. Leprosy

Answer: D. Leprosy

Leprosy is diagnosed **clinically by the cardinal signs** (anaesthetic patch, thickened nerve); slit-skin smear is not a routine PHC test.
PHC labs routinely do sputum smear (TB), blood smear / RDT (malaria) and VDRL/RPR (syphilis).

32. NEET PG 2014

"Which of the following anti-leprotic drug is not given under supervision -"

A. Rifampicin
B. Clofazimine
C. Dapsone
D. All are given supervised

Answer: C. Dapsone

Dapsone is taken daily at home, so it is the drug **not given under supervision**.
Rifampicin (600 mg) and clofazimine (300 mg) are given monthly under supervision; clofazimine 50 mg daily is also self-administered.

33. UPSC CMS 2014

Which of the following features is most likely seen in tuberculoid leprosy?

A. Leonine facies
B. Negative lepromin test
C. Thickened peripheral nerve
D. Abundant lepra bacilli in the skin lesion

Answer: C. Thickened peripheral nerve

Tuberculoid leprosy: strong cell-mediated immunity attacks nerves early, giving **thickened peripheral nerves**.
Leonine facies, negative lepromin and abundant bacilli are all lepromatous features.

34. AIIMS PG 2013

"The Ridley -Jopling classification for leprosy is based on which of the following parameters?"

A. Clinical
B. bacteriological
C. immunological
D. Histopathological

Answer: D. Histopathological

Ridley-Jopling (1966) classifies leprosy into TT, BT, BB, BL, LL. The groups were defined on **histopathology** (granuloma type, lymphocytes, bacillary load), correlated with clinical, bacteriological and immunological findings.
Standard exam answer: histopathological.

35. NEET PG 2013

Nerves are not involved in -

A. Tuberculoid leprosy
B. Lepromatous leprosy
C. Indeterminate leprosy
D. Borderline tuberculoid leprosy

Answer: C. Indeterminate leprosy

Indeterminate leprosy is the earliest stage: a single ill-defined hypopigmented macule with little or no sensory loss and **no nerve thickening**.
All determinate forms (TT, BT, BB, BL, LL) involve nerves.

36. NEET PG 2013

If a claw hand develops in a patient with Leprosy, th deformity is -

A. Grade 0
B. Grade I
C. Grade II
D. Grade III

Answer: C. Grade II

WHO disability grading of hands and feet: **grade 0** = no anaesthesia, no visible deformity; **grade 1** = anaesthesia, no visible deformity; **grade 2** = visible deformity or damage.
Claw hand is a visible deformity = **grade 2**. There is no grade 3.

37. AIIMS PG 2012

Which of the following is a characteristic feature of Borderline leprosy?

A. Inverted saucer appearance
B. Erythema Nodosum Leprosum
C. Presence of hypopigmented plaques all over the body
D. Glove and Stocking sensory symptoms

Answer: A. Inverted saucer appearance

Borderline leprosy shows the **inverted-saucer** (dome-shaped, punched-out) plaque: sharply defined inner edge, sloping outer edge.
ENL belongs to BL/LL; hypopigmented plaques all over the body and glove-and-stocking anaesthesia are lepromatous features.

38. AIIMS PG 2012

"Leprosy is not targeted for global eradication because"

A. No effective vaccine
B. Highly infectious but low pathogenicity
C. Only humans are reservoir
D. Long incubation period

Answer: D. Long incubation period

Leprosy has a **very long, variable incubation period** (average 3-5 years, up to 20 years or more), so new cases keep appearing for years after transmission stops; zero incidence cannot be certified.
Hence the target is **elimination** (prevalence below 1 per 10,000), not eradication.
No vaccine (A) and infectivity (B) are not the deciding reason; a human-only reservoir (C) would actually favour eradication.

39. AIIMS PG 2012

A 28-year-old male from rural India presents with multiple (5–7) hypopigmented skin patches of varying sizes over the trunk and upper limbs. The patches have poorly defined edges and show reduced but not absent sensation to light touch. Slit-skin smear shows a bacterial index (BI) of 2+. Nerve thickening is detected in two peripheral nerves. What is the most likely classification of this leprosy?

A. Tuberculoid leprosy
B. Lepromatous leprosy
C. Indeterminate leprosy
D. Borderline leprosy

Answer: D. Borderline leprosy

5-7 lesions with poorly defined edges, reduced (not absent) sensation, BI 2+ and two thickened nerves = **borderline (BB) leprosy**: in between the poles in lesion number, definition, sensory loss and bacillary load. TT: few, well-defined, anaesthetic, smear negative. LL: innumerable, symmetrical, BI high. Indeterminate: single macule, no nerve thickening.

40. NEET PG 2012

First symptom of leprosy

A. Decreased vibration & position sense
B. Decreased pain
C. Decreased temperature
D. Decreased light touch

Answer: C. Decreased temperature

The first sensation lost over a leprosy patch is **temperature** (thinnest fibres), followed by light touch, then pain; deep pressure and vibration are preserved longest.

41. NEET PG 2012

True about lepromatous leprosy

A. Only 3 cutaneous lesions
B. Lepromin test highly positive
C. Thickened nerve roots
D. ENL in > 50% cases

Answer: C. Thickened nerve roots

In lepromatous leprosy nerves are diffusely infiltrated, giving **symmetrical thickening of peripheral nerve trunks** (option C; 'nerve roots' in the stem means nerve trunks).
A: few lesions = tuberculoid. B: lepromin is **negative** in LL. D: ENL is common in LL but is not quoted as more than half of patients.
Note for Dr Gupta: check answer — C is accepted, but 'thickened nerve roots' is loose wording (it is nerve trunks); D (ENL in more than 50%) is close, since standard texts quote ENL in up to about half of LL patients. Stored explanation's '20-30%' figure was removed.

42. UPSC CMS 2012

Which of the following regimens is recommended for multibacillary leprosy in children 10–14 years of age?

A. Rifampicin 450 mg once a month (under supervision) + Dapsone 50 mg daily (self administered) + Clofazimine 150 mg once a month (under supervision) and 50 mg every alternate day

B. Rifampicin 600 mg once a month (under supervision) + Dapsone 100 mg daily (self administered) + Clofazimine 50 mg once a month (under supervision) and 25 mg every alternate day

C. Rifampicin 450 mg once a month (under supervision) + Dapsone 50 mg daily (self administered)

D. Rifampicin 600 mg once a month, (under supervision) + Dapsone 50 mg daily (self administered)

Answer: A. Rifampicin 450 mg once a month (under supervision) + Dapsone 50 mg daily (self administered) + Clofazimine 150 mg once a month (under supervision) and 50 mg every alternate day

MB-MDT for children **10-14 years** (12 months): **rifampicin 450 mg monthly (supervised) + clofazimine 150 mg monthly (supervised) and 50 mg on alternate days + dapsone 50 mg daily**.
Below 10 years: doses by body weight (rifampicin 10 mg/kg monthly, clofazimine 100 mg monthly + 50 mg twice weekly, dapsone 2 mg/kg daily).

6. Recording Kit

6a. HYT Concept Video (spec 4.2)

Title: Leprosy in 4 Minutes | Asked 42 Times | Dr Abhishek Gupta's HYT · **Thumbnail badge:** Asked 42 times

0:00-0:15 Hook (face, full screen)
"Leprosy. Asked 42 times in 15 years. In four minutes, everything the examiners want."

0:15-0:45 PYQ map slide
NEET PG 13 · AIIMS PG 11 · FMGE 8 · UPSC CMS 6 · INI-CET 4. Asked every year from 2012 to 2026; 17 times from 2021 onwards.
Angles: Spectrum / type identification (16) · PB-MB and MDT (7) · Nerves and sensation (6) · NLEP logo, mascot, ASHA (4) · Disability (3) · Epidemiology (3) · Microbiology and lab (3).

0:45-3:30 Block 1: the core idea

- Leprosy = M. leprae in skin and nerves; the bacillus is the same in everyone, the **patient's CMI** decides the disease.
- Draw the line TT → BT → BB → BL → LL. Immunity falls, bacilli rise.
- TT: 1-3 sharp anaesthetic plaques, early nerve damage, granuloma without bacilli, lepromin positive, can self-heal.
- LL: innumerable symmetrical lesions, leonine facies, madarosis, foamy Virchow cells and globi, lepromin negative.
- BB: the unstable middle, inverted-saucer / punched-out lesions.

Block 2: what examiners ask

- PB vs MB: 1-5 lesions and smear negative = PB; any positive smear = MB.
- MB MDT: rifampicin 600 + clofazimine 300 monthly, supervised; dapsone 100 + clofazimine 50 daily; 12 months. PB: 6 doses within 9 months. Dapsone is the unsupervised drug.
- Nerves: ulnar commonest (claw hand); temperature lost first; greater auricular is visible; radial cutaneous is biopsied.
- NLEP: logo of cupped hands with a plant, mascot Sapna, ASHA finds and follows up; G2D among new cases tells you detection is late.

Block 3: the common trap

- Lepromin is **type IV** and **prognostic, not diagnostic**; ENL is **type III** and never in TT. Students swap these.
- Claw hand is grade 2 (no grade 3). BI is all bacilli on a log scale; MI is the percentage of solid bacilli.

3:30-4:10 Rapid recall (ask, pause 2 s, answer)

1. First sensation lost over a leprosy patch? **Temperature.**
2. Lepromin test is which type of hypersensitivity? **Type IV.**
3. Which drug in MDT is not supervised? **Dapsone.**
4. Claw hand in leprosy is which WHO grade? **Grade 2.**
5. Ridley-Jopling classification is based on? **Histopathology.**

4:10-4:20 App drive

"These five questions and the full card set on Leprosy are on HYT Revision. Free. That's Dr Abhishek Gupta's HYT. Revise this free on HYT Revision, by Dr Abhishek Gupta."

6b. Four PYQ MCQ Videos (spec 4.1)

MCQ Video 1: FMGE 2026 · Title: Leprosy | FMGE 2026 PYQ | Dr Abhishek Gupta's HYT
0:00-0:10 Hook: *"This was asked in FMGE, 2026. Pause and try it."*
0:10-0:40 Question slide FMGE 2026
A 35-year-old man presents with multiple hypopigmented anesthetic patches, thickened peripheral nerves, and a positive slit-skin smear. He is diagnosed with multibacillary leprosy. Which of the following is the correct WHO multidrug therapy (MDT) regimen for an adult?
A. Rifampicin 600 mg once monthly and dapsone 100 mg daily for 6 months
B. Rifampicin 600 mg once monthly (supervised), clofazimine 300 mg once monthly (supervised), clofazimine 50 mg daily, and dapsone 100 mg daily for 12 months
C. Rifampicin 600 mg daily, clofazimine 100 mg daily, and dapsone 100 mg daily for 12 months
D. Dapsone 100 mg daily and clofazimine 50 mg daily for 12 months
0:40-3:00 Teaching notes (hidden reference slide):
MB vs PB by WHO/NLEP criteria; a positive smear alone makes MB.
Three drugs, two rhythms: **monthly supervised** rifampicin 600 + clofazimine 300; **daily self-taken** dapsone 100 + clofazimine 50.
Duration: MB 12 packs within 18 months; PB 6 packs within 9 months.
Why each drug: rifampicin bactericidal (one dose kills over 99.9% of live bacilli); clofazimine weakly bactericidal and anti-inflammatory (helps ENL); dapsone bacteriostatic.
Side effects: red urine (R), brown-black pigmentation and ichthyosis (C), haemolysis in G6PD deficiency and DHS (D).
Current WHO (2018): PB also gets the three drugs, for 6 months.
3:00-3:40 Why the wrong options are wrong:

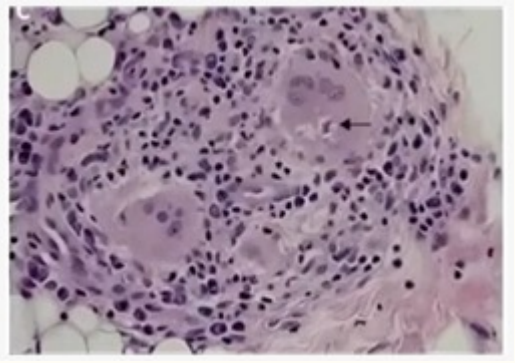
- **A:** Rifampicin + dapsone for 6 months is the classic PB regimen; this patient is MB (positive smear).
- **C:** Rifampicin is given once a month, not daily; clofazimine 100 mg daily is not the dose.
- **D:** No rifampicin: the main bactericidal drug is missing.

Correct answer: B. Rifampicin 600 mg once monthly (supervised), clofazimine 300 mg once monthly (supervised), clofazimine 50 mg daily, and dapsone 100 mg daily for 12 months
3:40-4:10 How else can the examiner ask this?

- Which drug in MDT is not given under supervision? (Dapsone: NEET PG 2014)
- MB regimen for a child of 10-14 years? (R 450 + C 150 monthly, D 50 daily, C 50 alternate days: UPSC CMS 2012)
- Within how many months must 6 PB doses be completed? (9 months: UPSC CMS 2015)

4:10-4:20 App drive: *"Ten more questions on Leprosy are on HYT Revision. Free. Revise this free on HYT Revision, by Dr Abhishek Gupta."*

MCQ Video 2: NEET PG 2024 · Title: Leprosy | NEET PG 2024 PYQ | Dr Abhishek Gupta's HYT
0:00-0:10 Hook: *"This was asked in NEET PG, 2024. Pause and try it."*
0:10-0:40 Question slide NEET PG 2024
A patient presents with loss of sensation along the ulnar nerve path. The histology is shown in the image, and a Lepromin test was performed. What is the expected outcome?



A. Tuberculoid leprosy with lepromin positive
B. Borderline leprosy with lepromin positive
C. Lepromatous leprosy with lepromin positive
D. Scrofuloderma
0:40-3:00 Teaching notes (hidden reference slide):
Read the slide: ulnar sensory loss + biopsy showing well-formed epithelioid granulomas, lymphocyte cuff, nerve destruction, no bacilli = tuberculoid.
The spectrum line: CMI strong at TT, weak at LL. Lepromin positivity follows CMI.
Lepromin test: intradermal, type IV; Fernandez at 48-72 h, Mitsuda nodule at 21-28 days; prognostic not diagnostic.
Contrast LL histology: foamy Virchow cells, globi, grenz zone.
TT clinically: 1-3 sharp anaesthetic plaques, one thick nerve, early damage.
3:00-3:40 Why the wrong options are wrong:

- **B:** Borderline shows fewer lymphocytes and some bacilli; lepromin is weak or negative.
- **C:** Lepromatous leprosy is lepromin **negative** and shows foamy macrophages, not epithelioid granulomas.
- **D:** Scrofuloderma is tuberculosis of skin over a lymph node with caseation and sinuses; it does not give ulnar sensory loss.

Correct answer: A. Tuberculoid leprosy with lepromin positive
3:40-4:10 How else can the examiner ask this?

- Lepromin test is which type of hypersensitivity? (Type IV: NEET PG 2026)
- Histology with foamy macrophages full of AFB: which type? (Lepromatous)
- Which feature is typical of tuberculoid leprosy: leonine facies, negative lepromin, thickened nerve, abundant bacilli? (Thickened nerve: UPSC CMS 2014)

4:10-4:20 App drive: *"Ten more questions on Leprosy are on HYT Revision. Free. Revise this free on HYT Revision, by Dr Abhishek Gupta."*

MCQ Video 3: UPSC CMS 2023 · Title: Leprosy | UPSC CMS 2023 PYQ | Dr Abhishek Gupta's HYT

0:00-0:10 Hook: *"This was asked in UPSC CMS, 2023. Pause and try it."*

0:10-0:40 Question slide UPSC CMS 2023

Under the National Leprosy Eradication Programme, ASHAs have been entrusted to carry out which of the following activities?

1. ASHAs are to search for suspected cases of leprosy in their villages and take them to the PHCs for diagnosis and treatment.
2. ASHAs arrange an amount of ₹5,000 as an incentive to each leprosy-affected person in their village for undergoing reconstructive surgery.
3. ASHAs ensure that each leprosy-affected person in their village receives micro-cellular rubber footwear for protection of insensitive feet.
4. ASHAs follow up all confirmed cases of leprosy in their village to ensure their treatment completion.

Select the correct answer using the code given below:

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 4 only
D. 3 and 4 only

0:40-3:00 Teaching notes (hidden reference slide):

NLEP basics: started 1983; MDT free; integrated with general health services; elimination (PR <1/10,000) achieved December 2005.
ASHA role: (1) house-to-house search for suspects and referral to PHC; (2) follow-up of confirmed cases till treatment is complete; incentives for both.
DPMR: MCR footwear, self-care kits, reconstructive surgery with welfare allowance paid to the patient by the programme.
Diagnosis at PHC is clinical (cardinal signs).
Programme identity: logo of cupped hands holding a three-leaf plant; mascot Sapna; Sparsh campaign from 30 January.

3:00-3:40 Why the wrong options are wrong:

- **A:** Statement 2 is wrong: the RCS welfare allowance is paid to the patient by the programme; it is not arranged by the ASHA.
- **B:** Both 2 and 3 are programme benefits, not ASHA tasks.
- **D:** Statement 3 is wrong: MCR footwear is supplied through the programme (DPMR), not an ASHA duty.

Correct answer: C. 1 and 4 only

3:40-4:10 How else can the examiner ask this?

- Identify the mascot of NLEP. (Sapna: NEET PG 2024, FMGE 2025)
- Identify the NLEP logo. (Two cupped hands holding a plant: NEET PG 2024)
- For which disease is a basic lab service not available at the PHC? (Leprosy: NEET PG 2014)

4:10-4:20 App drive: *"Ten more questions on Leprosy are on HYT Revision. Free. Revise this free on HYT Revision, by Dr Abhishek Gupta."*

MCQ Video 4: INI-CET 2022 · Title: Leprosy | INI-CET 2022 PYQ | Dr Abhishek Gupta's HYT
0:00-0:10 Hook: *"This was asked in INI-CET, 2022. Pause and try it."*
0:10-0:40 Question slide INI-CET 2022
Which of the following indicators can aid in determining the significance of the health system in identifying leprosy within the community?
A. Treatment completion rate
B. Annual new case detection rate per lac
C. Treatment initiation rate
D. Proportion of newly diagnosed patients with grade 2 disability
0:40-3:00 Teaching notes (hidden reference slide):
WHO disability grades 0-1-2 (hands, feet, eyes). Grade 2 = visible deformity.
Deformity takes time to develop, so a new patient who already has grade 2 was missed for a long time.
So **% of new cases with G2D** = indicator of **late detection**, i.e. how good the system is at finding cases early.
Other indicators: PR per 10,000 (elimination <1), ANCDR per 1,00,000, % child cases (recent transmission), % MB, % female.
WHO Global Leprosy Strategy 2021-2030 also tracks the G2D rate per million population.
3:00-3:40 Why the wrong options are wrong:

- **A:** Treatment completion rate measures case holding (quality of treatment), not detection.
- **B:** ANCDR measures the number of new cases found; it rises and falls with case-finding effort and does not tell you whether they were found early.
- **C:** Treatment initiation rate measures whether diagnosed cases are started on MDT, not how early they were found.

Correct answer: D. Proportion of newly diagnosed patients with grade 2 disability
3:40-4:10 How else can the examiner ask this?

- Claw hand in leprosy is which disability grade? (Grade 2: NEET PG 2013)
- Which indicator points to ongoing recent transmission? (Proportion of child cases among new cases)
- ANCDR is expressed per? (1,00,000 population: AIIMS PG 2017)

4:10-4:20 App drive: *"Ten more questions on Leprosy are on HYT Revision. Free. Revise this free on HYT Revision, by Dr Abhishek Gupta."*

6c. Reels (spec 2)

Reel 1: Important Concept (about 140 words)
Hook (0-2 s): *"Why does the leprosy patient with the fewest bacteria have the worst nerves?"*
Body: *"Beat one: the bacillus is the same in everyone. What changes is your cell-mediated immunity. Beat two: strong immunity, tuberculoid leprosy. Your body walls the bacilli inside granulomas, so the smear is negative and the lepromin test is positive. But that same fierce granuloma sits inside the nerve and destroys it early. One or two sharp, numb patches, a thick nerve, early damage. Beat three: weak immunity, lepromatous leprosy. Nothing stops the bacilli. They pack into foamy macrophages, the skin fills up, leonine facies, lepromin negative. Nerves are damaged too, but slowly and symmetrically. If you remember one thing, remember this: in leprosy the immune response, not the bacillus, decides the disease."*
Close: *"The revision cards for Leprosy are on HYT Revision. Free. By Dr Abhishek Gupta."*

Reel 2: Exam Analysis

Hook (0-2 s): *"Leprosy has been asked 42 times in 15 years."*
Body: *"Every single year from 2012 to 2026. NEET PG 13 times, AIIMS PG 11, FMGE 8, UPSC CMS 6, INI-CET 4. And 17 of those from 2021 onwards. What do they ask? Sixteen times: identify the type, tuberculoid, borderline or lepromatous. Seven times: PB or MB and the exact MDT regimen. Six times: which nerve, and which sensation goes first. Four times: the NLEP logo, the mascot Sapna and the role of the ASHA. Then disability grading, the grade 2 disability indicator, and why M. leprae cannot be cultured. So what next? The spectrum table and the MDT doses keep coming back. Learn those two and you are covered for most of what is asked."*
Fixed line: *"I didn't choose this topic. The examiners did."*
Close: *"The ten-question quiz on Leprosy is on HYT Revision. Free. By Dr Abhishek Gupta."*

Reel 3: 5 Most Important Points

Hook (0-2 s): *"5 things examiners keep asking about leprosy."*
Body (one point every ~8 s):

1. Tuberculoid: few sharp anaesthetic patches, lepromin positive. Lepromatous: innumerable lesions, foamy cells, lepromin negative.
2. Any positive slit-skin smear = multibacillary.
3. MB adult: rifampicin 600 + clofazimine 300 monthly; dapsone 100 + clofazimine 50 daily; 12 months. Dapsone is the unsupervised drug.
4. Ulnar nerve is commonest; temperature sensation is lost first.
5. Claw hand = WHO grade 2 disability; grade 2 among new cases means late detection.

Final screen: all five together (screenshot screen).
Close: *"All five, and the revision cards on Leprosy, are on HYT Revision. Free. By Dr Abhishek Gupta."*

Reel 4: Mnemonic / Memory Tip (memory hook)

Hook (0-2 s): *"Everyone mixes up the MDT doses. Remember two numbers: 900 and 150."*
On screen: MONTHLY 900 = Rifampicin 600 + Clofazimine 300 (supervised, red + brown) · DAILY 150 = Dapsone 100 + Clofazimine 50 (at home)
Walk-through: *"Once a month, under supervision, 900 milligrams: rifampicin 600, clofazimine 300. Every day, at home, 150 milligrams: dapsone 100, clofazimine 50. That is MB, for 12 months. For PB, drop the clofazimine in the classic regimen and stop at 6 months. And since dapsone only lives in the daily row, dapsone is the one drug never supervised. Now look away and say it: monthly 900, daily 150."*
Close: *"The revision cards for Leprosy are on HYT Revision. Free. By Dr Abhishek Gupta."*

Reel 5: My POV prompt idea (Hinglish, face only)

Hook idea: *"Leprosy ka sabse bada symptom skin pe nahi, samaj mein hai."*
Prompt: one story or opinion on stigma: a patient who hid a numb patch for years out of fear, came with a claw hand, and what that taught you about why early detection matters more than any drug. Link it to the student: the PYQ about grade 2 disability exists because late detection is the real failure. No slides, no badge.
Close: standard end card + *"Leprosy ke revision cards HYT Revision par hain. Free. By Dr Abhishek Gupta."*

6d. HYT Quiz: Leprosy (spec N1)

Q1. FMGE 2021

Which nerve injury is most commonly responsible for the deformity seen in a patient with leprosy?

A. Ulnar nerve
B. Radial nerve
C. Median nerve
D. Posterior interosseous nerve

Answer: A. Ulnar nerve

Ulnar nerve at the elbow is the commonest damaged nerve; its palsy gives claw hand.

Q2. New

Type 2 lepra reaction (erythema nodosum leprosum) is which type of hypersensitivity?

A. Type I
B. Type II
C. Type III
D. Type IV

Answer: C. Type III

ENL is an immune-complex (type III) reaction of BL/LL; type 1 (reversal) reaction is type IV.

Q3. NEET PG 2014

"Which of the following anti-leprotic drug is not given under supervision -"

A. Rifampicin
B. Clofazimine
C. Dapsone
D. All are given supervised

Answer: C. Dapsone

Dapsone is taken daily at home; rifampicin and clofazimine 300 mg are monthly supervised.

Q4. New

A patient on MB-MDT develops reddish-brown to black discolouration of skin and dry, scaly legs. The drug responsible is:

A. Rifampicin
B. Clofazimine
C. Dapsone
D. Ofloxacin

Answer: B. Clofazimine

Clofazimine causes red-brown pigmentation and ichthyosis.

Q5. UPSC CMS 2015

In a patient with paucibacillary leprosy, treatment is considered adequate if the six monthly doses of multidrug therapy (MDT) are completed within what maximum time frame?

A. 6 months
B. 9 months
C. 12 months
D. 15 months

Answer: B. 9 months

Six PB doses must be completed within 9 months (MB: 12 within 18).

Q6. New

A leprosy patient cannot close his eye fully. The nerve involved is:

A. Trigeminal
B. Oculomotor
C. Facial (zygomatic branch)
D. Abducent

Answer: C. Facial (zygomatic branch)

Facial nerve palsy causes lagophthalmos; trigeminal damage causes corneal anaesthesia.

Q7. NEET PG 2012

First symptom of leprosy

A. Decreased vibration & position sense
B. Decreased pain
C. Decreased temperature
D. Decreased light touch

Answer: C. Decreased temperature

Thin temperature fibres fail first, then touch, then pain.

Q8. New

Under NLEP, the recommended chemoprophylaxis for eligible contacts of a newly diagnosed leprosy patient is:

A. Dapsone daily for 6 months
B. Single dose rifampicin
C. BCG revaccination
D. Clofazimine monthly for 12 months

Answer: B. Single dose rifampicin

Single-dose rifampicin post-exposure prophylaxis (SDR-PEP) for contacts aged 2 years and above, after excluding leprosy and TB.

Q9. AIIMS PG 2013

"The Ridley -Jopling classification for leprosy is based on which of the following parameters?"

A. Clinical
B. bacteriological
C. immunological
D. Histopathological

Answer: D. Histopathological

Ridley-Jopling groups are defined on skin-biopsy histopathology.

Q10. New

Skin biopsy shows a clear subepidermal zone with dermal sheets of foamy macrophages packed with acid-fast bacilli in clumps. The diagnosis is:

A. Tuberculoid leprosy
B. Indeterminate leprosy
C. Lepromatous leprosy
D. Borderline tuberculoid leprosy

Answer: C. Lepromatous leprosy

Grenz zone, foamy (Virchow) cells and globi are the histology of lepromatous leprosy.

Summary Note: Leprosy

Point	Fact
Spectrum	TT (CMI strong, lepromin +, few sharp lesions) → BB (inverted saucer) → LL (CMI weak, lepromin -, foamy cells, leonine facies)
PB / MB	PB 1-5 lesions, smear -; MB 6+ lesions, >1 nerve or any smear +
MB adult MDT	R 600 + C 300 monthly (supervised); D 100 + C 50 daily; 12 months (within 18)
PB	6 doses within 9 months; dapsone = unsupervised
Nerves	Ulnar commonest (claw hand); temperature lost first; greater auricular visible; radial cutaneous for biopsy
Disability	Grade 2 = visible deformity; % G2D in new cases = late detection
Reactions	Type 1 = type IV, borderline, steroids; Type 2 (ENL) = type III, BL/LL, steroids / thalidomide / clofazimine
Lab	Not cultured (mouse footpad, armadillo); ZN 5% acid; BI log 0-6+; Ridley-Jopling = histopathology
NLEP	Logo cupped hands + plant; mascot Sapna; elimination PR <1/10,000 (long incubation, so not eradication)

Dr Abhishek Gupta's HYT

After the score: links to the Leprosy concept video and the four PYQ videos, and **"The revision cards for Leprosy are on HYT Revision. Free. By Dr Abhishek Gupta."**

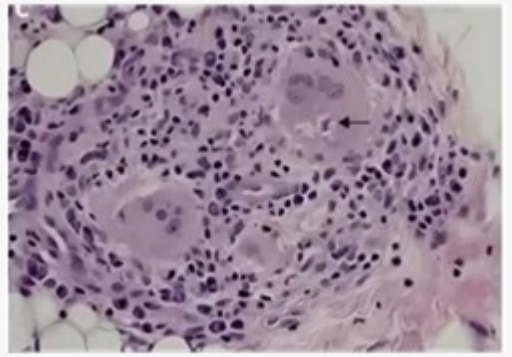
6e. MCQ Polls (spec N3)

Poll 1. FMGE 2026 *(question card with his name and photo)*
A 35-year-old man presents with multiple hypopigmented anesthetic patches, thickened peripheral nerves, and a positive slit-skin smear. He is diagnosed with multibacillary leprosy. Which of the following is the correct WHO multidrug therapy (MDT) regimen for an adult?

A. Rifampicin 600 mg once monthly and dapsone 100 mg daily for 6 months
B. Rifampicin 600 mg once monthly (supervised), clofazimine 300 mg once monthly (supervised), clofazimine 50 mg daily, and dapsone 100 mg daily for 12 months
C. Rifampicin 600 mg daily, clofazimine 100 mg daily, and dapsone 100 mg daily for 12 months
D. Dapsone 100 mg daily and clofazimine 50 mg daily for 12 months

Answer: B. MB adult: rifampicin 600 + clofazimine 300 monthly supervised, dapsone 100 + clofazimine 50 daily, 12 months.
Then: link to MCQ Video 1 + link to the Leprosy quiz. "Ten more questions on Leprosy are on HYT Revision. Free."

Poll 2. NEET PG 2024 *(question card with his name and photo)*
A patient presents with loss of sensation along the ulnar nerve path. The histology is shown in the image, and a Lepromin test was performed. What is the expected outcome?



A. Tuberculoid leprosy with lepromin positive
B. Borderline leprosy with lepromin positive
C. Lepromatous leprosy with lepromin positive
D. Scrofuloderma

Answer: A. Epithelioid granulomas without bacilli = tuberculoid; strong CMI makes lepromin positive.
Then: link to MCQ Video 2 + link to the Leprosy quiz. "Ten more questions on Leprosy are on HYT Revision. Free."

Poll 3. UPSC CMS 2023 *(question card with his name and photo)*
Under the National Leprosy Eradication Programme, ASHAs have been entrusted to carry out which of the following activities?
1. ASHAs are to search for suspected cases of leprosy in their villages and take them to the PHCs for diagnosis and treatment.
2. ASHAs arrange an amount of ₹5,000 as an incentive to each leprosy-affected person in their village for undergoing reconstructive surgery.
3. ASHAs ensure that each leprosy-affected person in their village receives micro-cellular rubber footwear for protection of insensitive feet.
4. ASHAs follow up all confirmed cases of leprosy in their village to ensure their treatment completion.
Select the correct answer using the code given below:

A. 1 and 2 only
B. 2 and 3 only
C. 1 and 4 only
D. 3 and 4 only

Answer: C. ASHAs find and refer suspects, and follow up cases till MDT is complete.
Then: link to MCQ Video 3 + link to the Leprosy quiz. "Ten more questions on Leprosy are on HYT Revision. Free."

Poll 4. INI-CET 2022 *(question card with his name and photo)*
Which of the following indicators can aid in determining the significance of the health system in identifying leprosy within the community?

A. Treatment completion rate
B. Annual new case detection rate per lac
C. Treatment initiation rate
D. Proportion of newly diagnosed patients with grade 2 disability

Answer: D. Visible deformity at diagnosis means the case was found late, so % G2D in new cases measures early detection.
Then: link to MCQ Video 4 + link to the Leprosy quiz. "Ten more questions on Leprosy are on HYT Revision. Free."