Systemic Lupus Erythematosus

SLE · Hydroxychloroquine in everyone, and always check the kidney

HCQ ≤ 5 mg/kg
actual body weight

THE PRESENTATIONS THAT MATTER ON THE WARDS *lupus is a diagnosis of pattern, not of one test*

COMMON

Inflammatory arthritis (non-erosive), **malar or discoid rash**, photosensitivity, oral ulcers, alopecia, **serositis** — pleuritic pain or pericarditis, fever, fatigue, Raynaud phenomenon.

ORGAN-THREATENING

Lupus nephritis — often **silent** until advanced. **Neuropsychiatric lupus** — seizures, psychosis, stroke, myelitis. **Cytopenias** including autoimmune hemolysis and severe thrombocytopenia. **Alveolar hemorrhage**. These change the treatment entirely.

SEROLOGY

ANA is sensitive but not specific — a positive ANA alone is not lupus. **Anti-dsDNA** and **anti-Sm** are specific; **anti-dsDNA and low C3/C4 track disease activity**, particularly nephritis. Check **antiphospholipid antibodies in everyone**.

CHECK THE KIDNEY IN EVERY PATIENT, EVERY VISIT *nephritis is the commonest cause of serious morbidity*

Step	Detail
Screen relentlessly	**Urinalysis with microscopy, urine protein-to-creatinine ratio, creatinine, and blood pressure at every visit.** Lupus nephritis is frequently asymptomatic — by the time there is edema, damage has accrued.
Biopsy early	Indicated for **proteinuria, an active sediment, or unexplained renal impairment**. The **ISN/RPS class drives the immunosuppression**, so treating without histology means guessing. Class III and IV are proliferative and need aggressive therapy; class V is membranous.
Induction	**Glucocorticoids plus mycophenolate or low-dose cyclophosphamide** for proliferative disease. Modern practice increasingly **adds a second agent up front** — **belimumab** or the calcineurin inhibitor **voclosporin** — to improve renal response and reduce steroid exposure.
Maintenance	**Mycophenolate or azathioprine**, continued for years. **Add an ACE inhibitor or ARB** for proteinuria and blood pressure, and control cardiovascular risk factors aggressively.

THE THERAPEUTIC BACKBONE *one drug for everyone, then escalate by severity*

1. **Hydroxychloroquine for every patient with lupus**, unless contraindicated. It reduces flares, organ damage, thrombosis and mortality. Dose **≤ 5 mg/kg actual body weight** to limit retinopathy risk, with **baseline and annual ophthalmology screening** after five years, or earlier with risk factors.
2. **Glucocorticoids to control activity, then taper hard.** The goal is the **lowest possible dose, ideally off entirely** — cumulative steroid, not lupus itself, causes much of the long-term damage.
3. **Add a steroid-sparing immunosuppressant early** — methotrexate or azathioprine for moderate disease, mycophenolate for more severe or renal disease. Do not manage lupus with steroids alone.
4. **Biologics for refractory disease** — **belimumab** for persistently active disease including nephritis, and **rituximab** for severe refractory or cytopenic disease.
5. **Severe organ-threatening flare** — nephritis, CNS disease, alveolar hemorrhage — is treated with **pulse methylprednisolone plus cyclophosphamide or mycophenolate**, with plasma exchange reserved for specific catastrophic presentations.

THE THINGS THAT GET MISSED *usually more dangerous than the lupus*

INFECTION vs FLARE

The hardest call on the ward. **Infection is a leading cause of death** in lupus. Favoring flare: **rising anti-dsDNA, falling complement**, and typical organ features. Favoring infection: **very high CRP** — CRP is often only modestly raised in pure lupus flare, whereas ESR rises in both. **When genuinely unsure, culture and cover while you treat.**

THE LONG GAME

Accelerated atherosclerosis — young women with lupus have a markedly raised cardiovascular risk, so treat lipids and blood pressure early. **Antiphospholipid syndrome** co-exists and changes thrombosis and pregnancy management. Add **bone protection, vaccination before immunosuppression, sun protection**, and **pre-pregnancy counseling** — conception should be planned during quiescent disease on pregnancy-compatible drugs.

DRUG-INDUCED LUPUS *a different antibody, and it resolves*

Feature	Detail
The culprits	**Hydralazine, procainamide, isoniazid, minocycline, quinidine**, and **TNF inhibitors**. Ask specifically — the drug has often been taken for months to years before symptoms appear.
How it differs	**Anti-histone antibodies** are characteristic. **Renal and CNS involvement are rare**, and **complement is usually normal**. Arthralgia, serositis and constitutional symptoms dominate.
Treatment	**Stop the drug** — symptoms resolve over weeks to months. A short course of steroid or NSAIDs may be needed meanwhile. It does not require long-term immunosuppression, which is precisely why recognizing it matters.

PREGNANCY IN LUPUS *plan it, do not react to it*

BEFORE CONCEPTION

Conceive during at least 6 months of quiescent disease — active disease, especially nephritis, predicts poor outcomes. **Switch to pregnancy-compatible drugs**: continue **hydroxychloroquine**, and azathioprine is acceptable, but **stop mycophenolate, methotrexate and cyclophosphamide**, all of which are teratogenic. Check **antiphospholipid antibodies** and **anti-Ro/La**.

DURING PREGNANCY

Low-dose aspirin to reduce pre-eclampsia risk, and **LMWH if antiphospholipid-positive**. **Anti-Ro/La confer a risk of neonatal lupus and congenital heart block**, requiring fetal cardiac surveillance. Distinguishing a **lupus nephritis flare from pre-eclampsia** is a recurring diagnostic problem — falling complement and a rising anti-dsDNA favor lupus.

PEARLS & PITFALLS

- **A positive ANA is not a diagnosis.** It is common in healthy people; lupus is a clinical pattern supported by specific antibodies.
- **Check the urine at every visit.** Lupus nephritis is silent, and it is the commonest reason these patients lose organs.
- **Hydroxychloroquine is for everyone**, and stopping it is a well-recognized precipitant of flare.
- **A high CRP should make you think infection**, not simply a bigger flare.
- **Steroids cause much of the long-term damage.** Add a steroid-sparing agent early rather than settling at a maintenance dose of prednisolone.
- **Screen for antiphospholipid antibodies** at diagnosis — it changes anticoagulation and pregnancy care.

References: EULAR recommendations for the management of systemic lupus erythematosus · KDIGO and ACR guidance on lupus nephritis — BLISS-LN (belimumab) and AURORA (voclosporin) trials · AAO hydroxychloroquine screening recommendations.

Educational aid; verify doses against local protocol, renal function, and patient factors.