GP EDUCATION · 2026

RECOGNISING RHEUMATOID ARTHRITIS

A practical guide for General Practitioners

Spot inflammatory arthritis early • confirm synovitis • investigate without delaying referral • pain management

EARLY RECOGNITION → EARLY RHEUMATOLOGY REFERRAL

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Dr. Ramani Rheumatology Clinic · www.drramani.co

HONORARIUMS

- AstraZeneca
- Johnson & Johnson
- Sandoz

1. THE GP'S FIRST QUESTION: INFLAMMATORY OR MECHANICAL?

I INFLAMMATORY PATTERN

- Morning stiffness >30 minutes
- Stiffness after rest / gelling
- Visible or palpable joint swelling
- Symptoms may improve with movement
- Fatigue or systemic inflammatory symptoms

M MECHANICAL PATTERN

- Pain predominantly with use
- Brief morning stiffness
- Bony enlargement / crepitus more typical
- Rest often relieves symptoms
- Usually no true soft, boggy synovitis

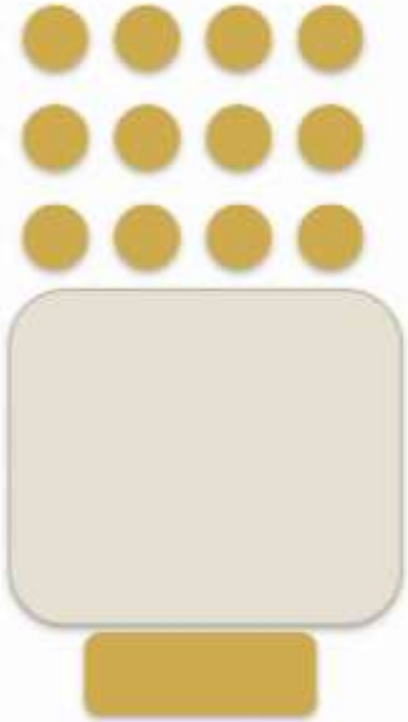
Clinical pearl: pain alone is not synovitis — look and feel for swelling.

2. RECOGNISE THE JOINT PATTERN

Typical early RA pattern

MCP	knuckles
PIP	middle finger joints
WRIST	often early
MTP	forefoot / squeeze pain

Think: small joints + synovitis



DIP-predominant disease should make you reconsider the diagnosis.

3. CONFIRM SYNOVITIS AT THE BEDSIDE

1	2	3	4
LOOK	**FEEL**	**MOVE**	**COMPARE**
Swelling, loss of contour, reduced function	Soft / boggy swelling; warmth may be present	Painful or restricted range of movement	Both sides; hands, wrists and feet

If persistent synovitis is suspected, referral is driven by the clinical finding — not by a positive blood test.

4. SERONEGATIVE DOES NOT MEAN 'NOT RA'

Tests can be negative

- RF negative
- anti-CCP negative
- CRP / ESR normal

BUT

Persistent clinical synovitis

still warrants specialist assessment.

NICE specifically advises urgent referral even with normal acute-phase response and negative RF / anti-CCP when key clinical criteria are present.

CLINICAL APPROACH TO INFLAMMATORY ARTHRITIS

A Practical Diagnostic Algorithm for Daily Clinical Practice

From Symptoms to Pattern Recognition

Dr. Ramani Rheumatology Clinic

PATIENT PRESENTS WITH
Joint Pain + Swelling + Morning Stiffness

DURATION OF MORNING STIFFNESS?

- **< 30 minutes** — More likely **Degenerative Arthritis** (Osteoarthritis)
- **> 30 minutes** — Consider **Inflammatory Arthritis**

STEP 1
COUNT THE NUMBER OF JOINTS INVOLVED

MONOARTHRITIS (1 joint)
- Septic Arthritis ⚠
- Gout
- CPPD (Pseudogout)

KEY TEST
Synovial Fluid Analysis

OLIGOARTHRITIS (2–4 joints)
- Reactive Arthritis
- Rheumatoid Arthritis
- Psoriatic Arthritis
- Early Spondyloarthritis

POLYARTHRITIS (≥5 joints)
- Rheumatoid Arthritis
- Psoriatic Arthritis
- SLE and other connective tissue diseases

STEP 2
DEFINE THE PATTERN

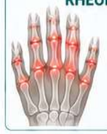
AXIAL PREDOMINANT
ANKYLOSING SPONDYLITIS

- Inflammatory Back Pain
- Sacroiliitis
- HLA-B27 Positive
- Recurrent Anterior Uveitis
- Young Male (onset < 45 years)

PERIPHERAL ARTHRITIS

SYMMETRICAL

RHEUMATOID ARTHRITIS



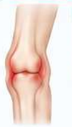
- Small Joint Predominance
- MCP & PIP Involvement
- Prolonged Morning Stiffness
- Extra-articular Manifestations

PSORIATIC ARTHRITIS

- DIP Joint Involvement
- Nail Pitting
- Onycholysis
- Personal or Family History of Psoriasis

ASYMMETRICAL

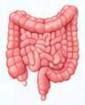
REACTIVE ARTHRITIS



- Lower Limb Predominance
- Weight-Bearing Joints
- Recent UTI or Diarrhoea

Common Triggers:
- Chlamydia
- Salmonella
- Shigella
- Campylobacter

ENTEROPATHIC ARTHRITIS



- Associated with IBD
- Crohn's Disease
- Ulcerative Colitis
- Peripheral Arthritis
- GI Symptoms

★ HIGH-YIELD CLINICAL PEARLS ★

- **Monoarthritis =** Septic Arthritis until proven otherwise
-  **Nail changes** → Think Psoriatic Arthritis
-  Back pain + Uveitis + Sacroiliitis → Ankylosing Spondylitis
-  **Recent diarrhoea/UTI +** Asymmetric arthritis → Reactive Arthritis
-  Synovial fluid analysis is mandatory in acute monoarthritis

RESTORE MOVEMENT. RESTORE LIFE.

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Scan for the full clinical approach chart

WHAT IS RHEUMATOID ARTHRITIS?

Autoimmune

The immune system drives persistent inflammation in the synovial lining of joints.

Systemic

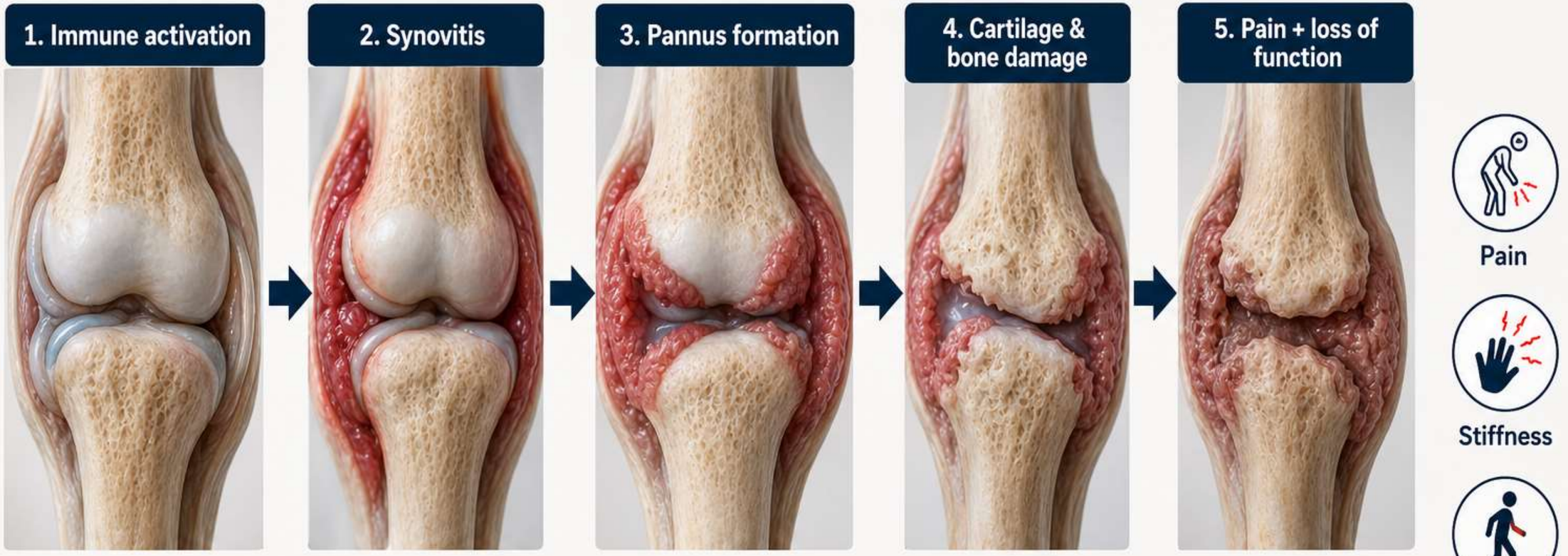
RA can affect more than joints, including lungs, eyes, skin, nerves and the cardiovascular system.

Potentially destructive

Untreated inflammation can cause erosions, deformity, disability and loss of function.

Early recognition and disease-modifying treatment can substantially improve outcomes.

WHAT HAPPENS INSIDE THE RHEUMATOID JOINT?



The immune system is activated, releasing inflammatory cytokines that target the synovium.

Synovial lining becomes inflamed and thickened (synovitis).

Pannus (abnormal granulation tissue) forms and grows over cartilage.

Pannus releases enzymes that damage cartilage and erode bone.

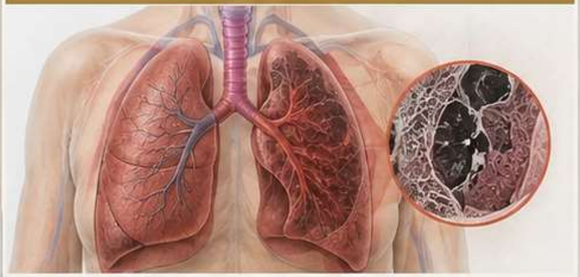
Joint destruction leads to pain, stiffness and loss of function.

RA IS MORE THAN A JOINT DISEASE

RHEUMATOID ARTHRITIS

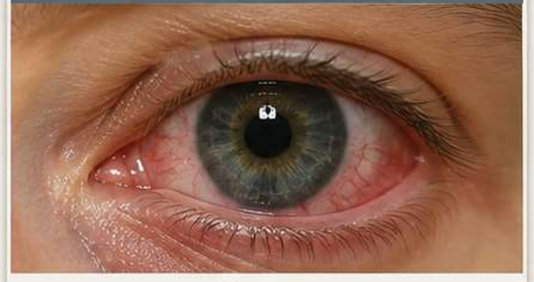
A Systemic Autoimmune Disease

LUNGS



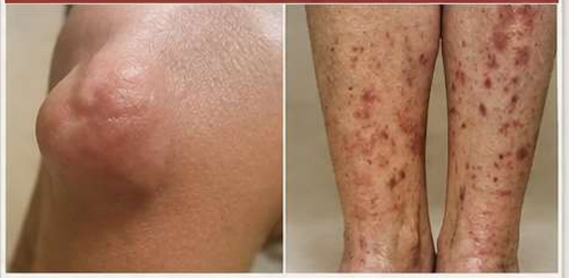
Interstitial lung disease,
pleuritis

EYES



Dry eye,
episcleritis / scleritis

SKIN



Rheumatoid nodules,
vasculitic changes

BLOOD

Anaemia; cytopenias
may also relate to treatment

HEART & VESSELS

Higher
cardiovascular risk

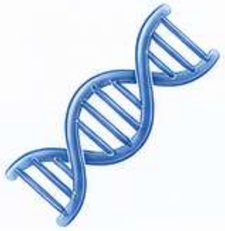
BONE

Osteoporosis risk from inflammation,
immobility and glucocorticoids

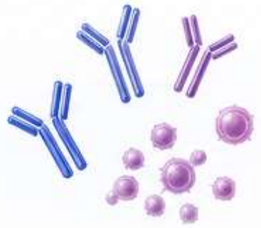
Longitudinal Course of Rheumatoid Arthritis

From risk to outcomes – updated 2026

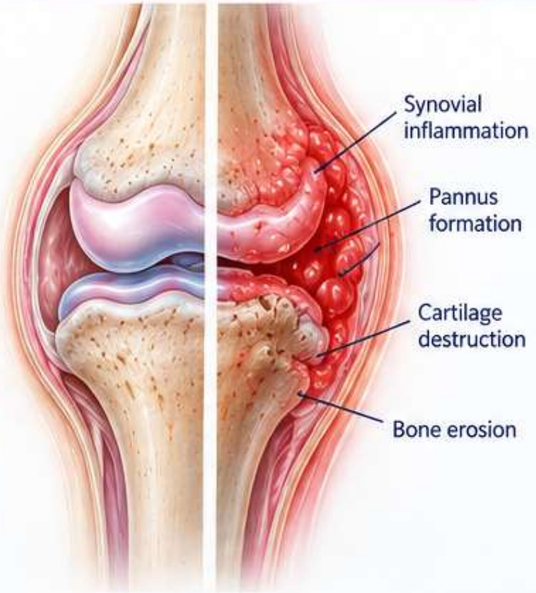
Genetic & environmental risk (pre-disease) → **Autoimmunity** (preclinical RA) → **Early symptomatic RA** (clinical synovitis) → **Established RA** (persistent inflammation) → **Long-term outcomes**

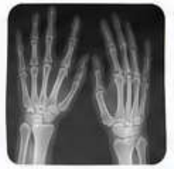


- Genetic susceptibility (HLA-DRB1 shared epitope and non-HLA)
- Environmental factors (smoking, air pollution, periodontitis)
- Lifestyle factors (obesity, microbiome, vitamin D)



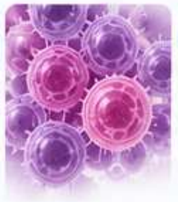
- Autoantibodies (ACPA, rheumatoid factor) can be detected years before symptoms
- Immune dysregulation and citrullination
- Systemic inflammation (low-grade)





Structural damage
- Bone erosions
- Joint space narrowing
- Loss of function

Extra-articular disease
- Interstitial lung disease
- Cardiovascular disease
- Lymphoma
- Osteoporosis
- Infections



Persistent immune activation
- Cytokine networks (TNF, IL-6, IL-17, GM-CSF)
- B cells and plasma cells
- Synovial stromal activation

Remission or low disease activity
Preserve function and quality of life

Functional disability
Reduced quality of life

Comorbidities
Cardiovascular, lung, malignancy, osteoporosis

Increased mortality
Partially reduced with early and effective therapy

Preclinical phase (years) → **Symptom onset** → **Window of opportunity** (early RA, ≤12 months) → **Treat to target and adjust therapy** → **Long-term follow-up** (lifelong)

Early identification (2026)
- ACPA/RF testing in at-risk individuals
- Risk stratification models
- Lifestyle modification (smoking cessation, weight control)
- Consider preventive strategies (in clinical trials)

Early intervention (2026)
- Start csDMARD (methotrexate) within 12 weeks of diagnosis
- Combine with short-term gluccoorticoids
- Consider 'triple therapy" or b/tsDMARD for poor prognostic factors
- Shared decision-making

Treatment goals (EULAR 2023/2024–2026)
- Target remission or low disease activity
- Adjust therapy every 3 months
- Use treat-to-target strategy
- Consider tapering after sustained remission
- Monitor for comorbidities and safety

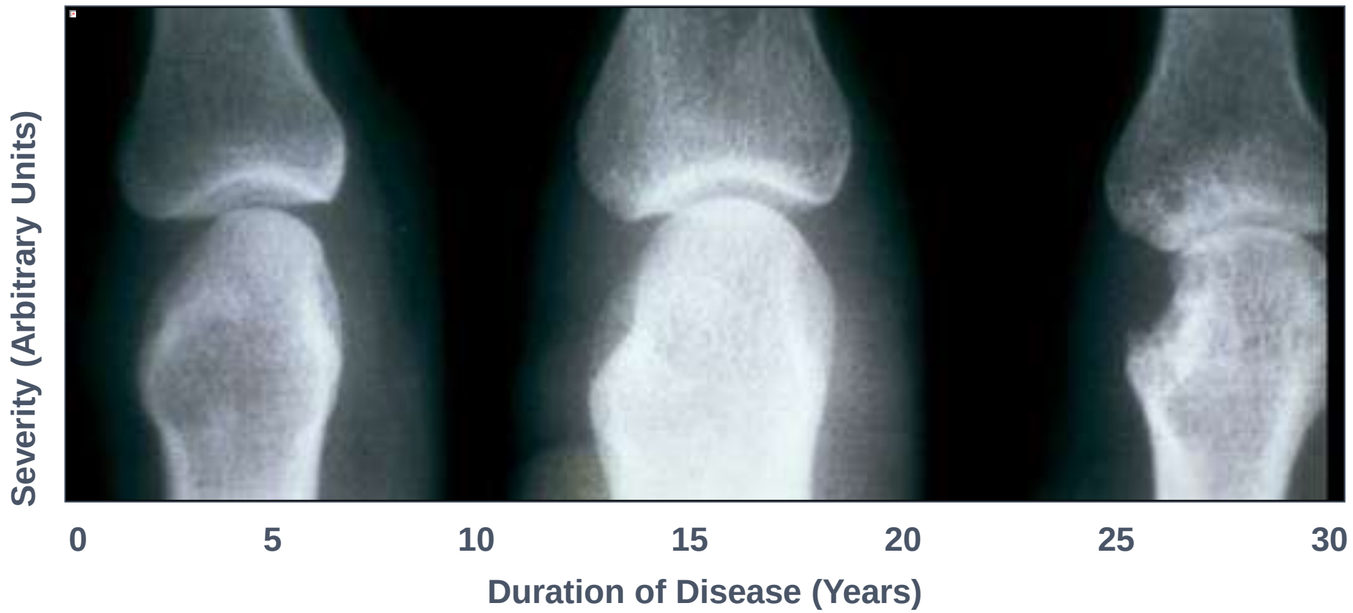
Long-term care (2026)
- Maintain remission
- Prevent flares and structural damage
- Manage comorbidities
- Optimise vaccination and infection prevention
- Holistic care (physical function, mental health, social participation)

Early detection. Early treatment. Better outcomes.

THE BURDEN OF RA

- Pain and destruction of the joints
- Loss of function
- Systemic disease
- Chronic disease
- Work disability
- Economic losses

Callahan. Chapter 1. In: Klippel, eds. Primer on the Rheumatic Diseases. 12th ed. Arthritis Foundation;2001.p.1-4.



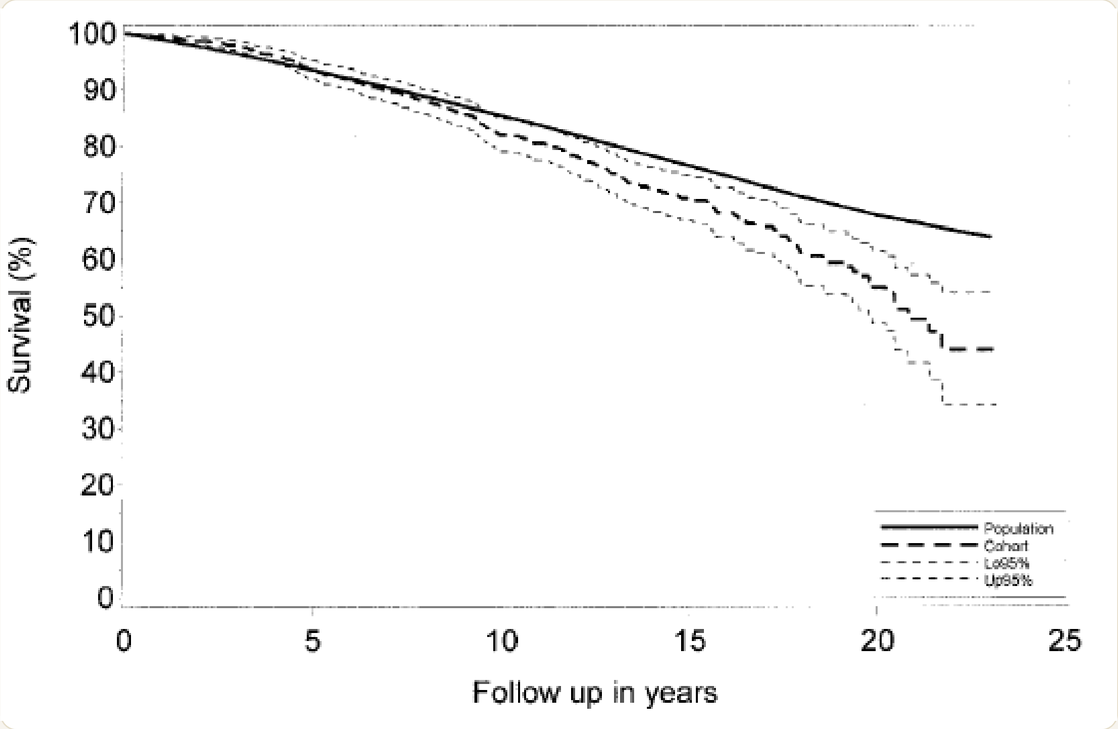
“In early RA irreversible damage is seen in 60% of patients within the first 2 years of diagnosis.”

Adapted from Kirwan. J Rheum 1999;26:720-5. Adapted from Saleem et al. Clin Exp Rheum 2006;24:S33-6.

MORTALITY IN PATIENTS WITH RA AFTER 10 YEARS

Prospective inception cohort of RA patients diagnosed between January 1985 and October 2007 was followed for up to 23 years after diagnosis [1]

- Higher disease activity levels contribute to premature death in RA patients [1]
- “The era of the new biologic therapies might just be too short to significantly influence” [1]
- SMR in patients with RA is 1.47[2]
- Patients with RA have a **47% increased risk of death** compared to the general population[2]



[1]Radovits et al. Arthritis Care Res 2010;62:362-70. [2]Humphreys et al. Arthritis Care Res 2014;66:1296-301.

5. INVESTIGATE — BUT NEVER LET TESTS DELAY REFERRAL

FBC

Anaemia / cytopenia clues

ESR / CRP

Inflammatory activity

RF

Supportive, not diagnostic

anti-CCP

Specificity + prognostic value

U&E / LFT

Baseline / alternative causes

X-ray hands & feet

Baseline structural change

ORDER IN PARALLEL WITH REFERRAL — NOT AS A GATEKEEPER

HOW IS RA DIAGNOSED? …… JOINT SWELLING !!!

- Clinical assessment remains central — no single blood test diagnoses RA.
- **Rheumatoid factor (RF)**: supportive but not specific.
- **Anti-CCP / ACPA:** highly useful supportive antibody and associated with erosive risk.
- **ESR and CRP** help assess inflammation but may occasionally be normal.
- FBC, renal and liver tests provide baseline information before treatment.
- **Radiology** : X-ray, ultrasound or MRI may demonstrate synovitis or structural damage.

Joint swelling

Warmth, tenderness and soft/boggy synovitis.

Important

Seronegative RA exists. A negative RF or anti-CCP does not automatically exclude inflammatory arthritis.

RED FLAGS: DON'T LABEL EVERY SWOLLEN JOINT AS RA

Acutely hot, very painful monoarthritis = septic arthritis until adequately excluded.

SEPSIS / SEPTIC JOINT

Fever, systemic illness, acute hot joint → urgent same-day assessment

NEUROVASCULAR COMPROMISE

Acute deficit or threatened limb → emergency assessment

SYSTEMIC VASCULITIS

Purpura, neuropathy, renal / pulmonary features → urgent specialist pathway

SEVERE SYSTEMIC ILLNESS

Weight loss, marked constitutional symptoms → broaden differential

2010 ACR CLASSIFICATION CRITERIA FOR RA

Synovitis plus score of ≥6/10 needed for the classification of definite RA

Joint involvement	One large joint	**0**
	2-10 large joints	**1**
	1-3 small joints*	**2**
	4-10 small joints*	**3**
	>10 joints (at least one small joint)	**5**
Serology#	RF- and ACPA-	**0**
	Low RF+ or low ACPA+	**2**
	High RF+ or high ACPA+	**3**
Acute-phase reactants#	Normal CRP and normal ESR	**0**
	Abnormal CRP or abnormal ESR	**1**
Duration of symptoms	<6 weeks	**0**
	≥6 weeks	**1**

Scan for the ACR criteria calculator

*With or without involvement of large joints. # At least one test result needed for classification. Adapted from Aletaha et al. Ann Rheum Dis 2010;69:1580-8.

CASE 1 - 42Y INDIAN LADY

- 2/12 history of joint pain and swelling
- Presented with giddiness and high temperature, developed severe, painful joint swelling starting in the **ankles**
- Progression of pain and swelling to the **knees** and **fingers** over several weeks.
- MSK examination
  - Right hand: Swollen and tender **interphalangeal (IP) joint 2**
  - Left hand: Tenderness on palpation of the fifth left metacarpophalangeal **(MCP) joint** and second proximal interphalangeal **(PIP) joint.**
- **CRP 15**
- **RF low positive**
- **antiCCP negative**

Does she have RA ?

How would you treat in Primary Care ?

CASE 2 - 34 VIETNAMESE LADY

- Complaint - pain of knee on and off 6 months
- wants to teach yoga - gets pain when she tries
- nonsmoker
- no alcohol - occ - stop for 3 months
- yoga and pilates a lot 3 - 4x a week
- No family h/o
- MSK - bilateral knee tender
- RF - negative,
- CRP 7

Does she have RA?

How would you treat in Primary Care ?

- MRI bilateral knees - mild synovitis
- Anti CCP positive 100
- H/o fluids in the knees 10y ago

CASE 3: WOULD YOU REFER?

PATIENT

46-year-old woman

- 8 weeks of hand pain and swelling
- Morning stiffness 75 minutes
- MCP + PIP swelling bilaterally
- CRP normal
- RF negative

Is This RA?

Clue : Persistent small-joint synovitis — not the negative RF or normal CRP.

ACTION

Urgent rheumatology referral + investigations in parallel

TREATMENT GOALS

1. Control inflammation

Reduce pain, stiffness and swelling.- **NSAIDS**

2. Prevent damage

DMARDs reduce progression of joint damage.

3. Preserve life function

Maintain mobility, independence, work and quality of life.

Current EULAR guidance: start a DMARD as soon as RA is diagnosed and aim for sustained remission or low disease activity.

TREATMENT OVERVIEW

NO Steroids in GP setting please

Symptom relief

Analgesia / NSAIDs -
e.g. Celecoxib (generic e.g. revcox Sandoz), Arcoxia - these do not prevent structural damage.

Short-term glucocorticoids

Iv Hydrocortisone 100mg tds
IV methyl prednisone 500mg
May be used as bridging therapy; minimise duration and taper as clinically feasible.

csDMARDs

Methotrexate: GOLD STD
Leflunomide (Arava)
Sulfasalazine.(SSZ)
Hydroxychloroquine (HCQ)

bDMARDs

- TNF inhibitors
  - Infliximab,
  - Golimumab,
  - Eternecept,
  - Adalimumab (Humira, Hyrimoz biosimilar)
- Abatacept
- B cell rx - Rituximab
- IL-6 inhibitors - Tocilizumab

tsDMARDs

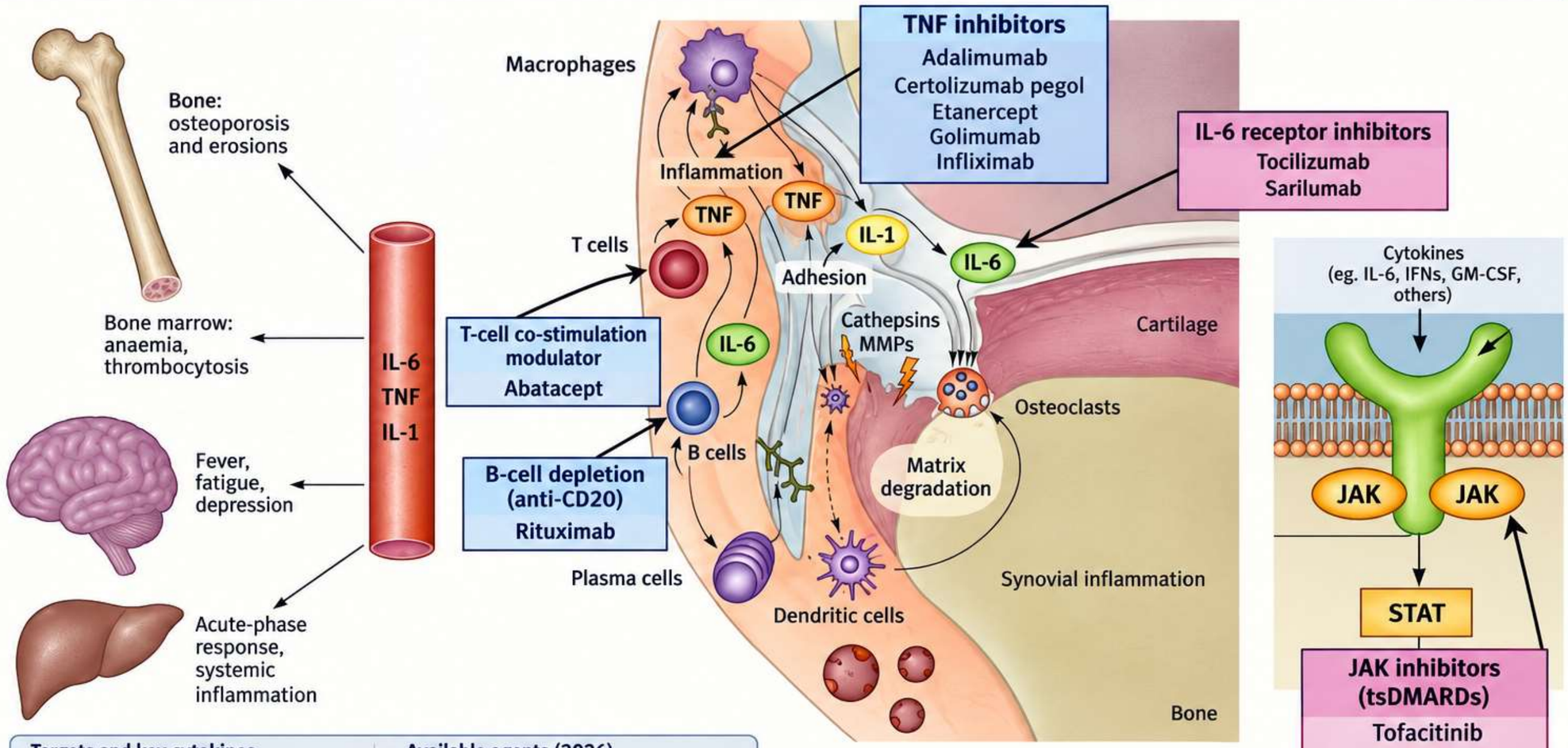
JAK inhibitors; individual cardiovascular, malignancy and thromboembolic risks matter.

- Baracitinib
- Tofacitinib
- upadacitinib
- filgotinib

Non-drug care

- Exercise
- physiotherapy/OT
- smoking cessation
- vaccinations
- bone health
- cardiovascular health.

Available Biologic (bDMARDs) and Targeted Synthetic DMARDs (tsDMARDs) in RA (2026)



Targets and key cytokines	Available agents (2026)
TNF: TNF-α	Adalimumab, Certolizumab pegol, Etanercept, Golimumab, Infliximab
IL-6: IL-6/IL-6R	Tocilizumab, Sarilumab
T-cell co-stimulation: CD80/86–CD28	Abatacept
B cells: CD20	Rituximab
JAK: JAK–STAT pathway (multiple cytokines)	Tofacitinib, Baricitinib, Upadacitinib, Fligotinib

Adapted and updated from Choy et al. *Nat Rev Rheumatol* 2013; EULAR RA recommendations 2025.

BEFORE TREATMENT - PRIMARY CARE

1. Quantiferon TB - Screen for tuberculosis
2. Hepatitis B and C; HIV testing
3. Review vaccination status before significant immunosuppression.
4. Check for active infection before treatment.
5. Baseline blood tests and relevant comorbidity assessment.
6. Consider pregnancy plans and drug-specific risks.
7. Document patient education and provide clear instructions about when to seek help.

Vaccination principle

- Where possible, update indicated vaccines before immunosuppression
- Live vaccines generally require specialist timing/avoidance with significant immunosuppression.

Contraception | Double barrier method

Vaccinations in autoimmune patients

drramani.co/vaccinations-autoimmune-patients

METHOTREXATE — WHAT EVERY DOCTOR SHOULD KNOW

- taken **ONCE WEEKLY** — verify the prescribed day.
- **Folic acid** is commonly prescribed to reduce adverse effects; follow the local regimen. Taken OD except day of MTX
- **Monitor** FBC, liver function and renal function
- Ask about Side Effects : mouth ulcers, severe nausea, unusual bruising, breathlessness, fever or infection.
- Medication interactions and renal impairment can increase toxicity — escalate concerns. • GFR < 30 ml/min
- Liver disease or excessive alcohol intake.
- Pregnancy planning requires specialist advice; methotrexate is contraindicated in pregnancy.

MTX Checklist

- Cxr
- Hepatitis B, C, HIV
- Quantiferon TB
- Contraception

SAFETY ALERT

Daily instead of **weekly** methotrexate dosing can cause severe or fatal toxicity.

Check

Confirm dose, day, monitoring status and adverse symptoms.

Comorbidities in Rheumatoid Arthritis

Higher risk of multiple conditions compared with the general population
(Updated evidence to 2026)

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Hypercomorbidities (More common in RA)	Relative risk vs general population (2026 data)
Lung cancer	**SIR 1.56** (95% CI 1.32–1.83)
Lymphoma	**SIR 1.70** (95% CI 1.40–2.06)
Other malignant neoplasms	**SIR 2.11** (95% CI 1.93–2.30)
Hodgkin disease	**SIR 3.02** (95% CI 2.34–3.90)
Non-Hodgkin lymphoma	**SIR 1.82** (95% CI 1.61–2.06)
Atherosclerosis-related cardiovascular disease	**SMR 1.41** (95% CI 1.27–1.56)
Serious infections	**RR 1.48** (95% CI 1.35–1.62)
Osteoporosis (fracture risk)	**RR 1.84** (95% CI 1.62–2.08)
Gastrointestinal disorders (peptic ulcer, diverticulitis)	**RR 1.26** (95% CI 1.13–1.40)

Primary Care

- Screen for comorbidities
- Optimise vaccination and infection prevention
- Aggressive cardiovascular risk factor control
- Assess bone health and fracture risk
- Consider GI risk (especially with NSAIDs and glucocorticoids)
- Age-appropriate cancer screening
- Provide holistic, multidisciplinary care

Key take-home message

People with RA have a **higher risk** of several malignant, cardiovascular, infectious, skeletal and gastrointestinal comorbidities. Comorbidity screening and management should be an integral part of RA care in 2026 to improve long-term outcomes.

SIR: Standardised incidence ratio. SMR: Standardised mortality ratio. RR: Relative risk. CI: Confidence interval.

Selected references (updated to 2026): 1. Dougados M et al. *Nat Rev Rheumatol.* 2023;19:287–299. 2. Dabin J et al. *Ann Rheum Dis.* 2024;83:611–620. 3. Simon TA et al. *Arthritis Res Ther.* 2024;26:15. 4. EULAR Recommendations for the management of RA. *Ann Rheum Dis.* 2024;83:706–719. 5. *RMD Open.* 2025;11:e002874. 6. ACR Guideline for the Treatment of RA. *Arthritis Rheumatol.* 2025;77:1231–1289. 7. Recent meta-analyses up to 2026.

REFERRAL: WHEN SHOULD THE GP ACT?

SUSPECTED PERSISTENT SYNOVITIS OF UNDETERMINED CAUSE → REFER

! SMALL JOINTS

Hands or feet affected

! >1 JOINT

Polyarticular involvement

! DELAY ≥3 MONTHS

Symptoms present before seeking advice

NICE quality standard: suspected persistent synovitis affecting >1 joint or small joints of hands/feet should be referred within 3 working days of presentation in primary care.

Collaboration Between Primary Care & Rheumatologist Ensures Optimal Care

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COLLABORATION

Primary Care

- Provisional diagnosis
- Immediate referral to rheumatologist
- Monitor for toxicities and disease progression
- Address CVD risk and extra-articular issues

Rheumatologist

- Confirm diagnosis
- Initiate early, aggressive DMARD therapy
- Monitor for toxicities and disease progression

Thank you

Early recognition → early rheumatology referral.

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