

DIAGNOSIS & MANAGEMENT OF RHEUMATOID ARTHRITIS: NAVAJO NATION

- Initial visit checklist:**
- ❑ LABWORK: RF, CCP, CBC, CMP, ESR, CRP, PPD or Quantiferon, HBV sAg/sAb/cAb, HCV Ab
 - ❑ IMAGING: bilateral hand and foot xrays (to establish baseline and screen for alternate diagnoses)
 - ❑ MEDS: consider scheduled NSAIDs vs. prednisone 5-10mg daily (temporary measure until patient is stable on DMARD therapy)
 - ❑ Pneumovax/Prevnar, flu shot, Shingrix, HBV vaccine, COVID19 vaccine as early as possible.
 - ❑ If TB screen positive (and active TB has been ruled out), start LTBI treatment at least 1 week before starting methotrexate
 - ❑ Schedule follow-up to review labs/xrays and discuss DMARD initiation

DIAGNOSIS: 2010 ACR/EULAR CRITERIA

1. Synovitis must be present; no other diagnosis to explain it
 2. RA diagnosed if ≥6 points from the following:

JOINTS:
 2-10 large joints (i.e. any joint except wrist/hand) ...1 point.
 1-3 small joints (wrists, any hand joint).....2 points
 4-10 small joints.....3 points
 >10 joints, including ≥1 small joint.....5 points

SEROLOGY:
 RF or anti-CCP low-positive (above ULN).....2 points
 RF or anti-CCP high-titer (3x >ULN).....3 points
ESR or CRP ELEVATED.....1 point
SYMPTOM DURATION ≥6 weeks.....1 point

- General principles of treatment:**
- Choose initial DMARD based on disease severity, baseline labs, and comorbidities (MTX is most common first-line tx)
 - Start DMARD ASAP to avoid progressive joint damage
 - **Goal is remission or low disease activity** (RAPID-3 ≤2 or CDAI ≤10)
 - Evaluate patient q3 months until this is achieved
 - Vast majority of patients will require life-long medication

VERY MILD RA
 ALL of the following: <5 joints involved, no extra-articular disease, minimal limitation in joint function, RAPID-3 ≤2 or CDAI ≤10.

MODERATE or SEVERE RA
 ANY of the following: >5 joints involved, extra-articular disease, erosions on baseline x-rays, function limited, RAPID-3 >2 or CDAI >10

HYDROXYCHLOROQUINE
 200-400mg PO daily [max dose 5mg/kg]
 * May reduce risk of diabetes and improve lipids
 * Well-tolerated, safe in pregnancy
 * Retinal exam at baseline and q1yr

SULFASALAZINE
 500mg BID x 1 week → 1000mg BID
 * Better efficacy than hydroxychloroquine, but more likely to cause GI upset
 * Monitor WBC q2 months

After 3 months, if moderate or high disease activity

METHOTREXATE
 10mg PO qWEEK x 4 weeks, then check labs. If no side effects and labs stable then increase to 20mg PO qWEEK. Recheck labs after 4 weeks.
 If RA activity still mod-high after 3 months: switch to 25mg subcutaneous qWEEK
 MTX monitoring:
 * CBC, liver panel, Cr q3months once the dose is stable
 * Must take with folic acid 1mg daily (increase to 2mg daily if mild side effects)

After 3 months, if moderate or high disease activity

If not tolerating MTX, might consider:

LEFLUNOMIDE
 10mg PO daily x 6 weeks, then check labs. If tolerating, increase to 20mg PO daily
 * Diarrhea in 20%
 * Labs and contraindications same as for MTX (see page 2); Avoid in women of childbearing age: risk of birth defects up to 2 years after cessation!

When to use prednisone in RA? *

Prednisone 5-10mg daily may be considered initially (<3 months, while waiting for DMARD to take effect), but should be avoided as chronic therapy whenever possible, due to long term side effects.

“TRIPLE THERAPY”
 Methotrexate + Sulfasalazine + Hydroxychloroquine

- Large pill burden makes adherence challenging
- Lower infectious risk compared to TNFi
- Can be considered in patients who strongly prefer pills over injections

TNF-INHIBITOR
 Adalimumab (Humira) 40mg SC q2weeks or Etanercept (Enbrel) 50mg SC qweek or Certolizumab pegol (Cimzia) 200mg SC q2weeks
 * Ideally, give TNFi AND weekly methotrexate
 * Adalimumab and Etanercept are more readily available
 * Certolizumab is specifically preferred in pregnancy

If still not controlled, discuss second-line biologic options with a rheumatologist

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Conventional DMARD Safety & Monitoring:

Methotrexate:

Contraindicated in: pregnancy, breastfeeding, chronic liver disease, heavy alcohol use, CKD stage 4/5

Caution in: CKD 3 (decrease dose)

Side effects: GI upset, oral ulcers, transaminitis (if AST/ALT <2x ULN: ok to monitor; >2x ULN: reduce dose or discontinue), infections, cytopenias, macrocytosis, pneumonitis (very rare)

Pearls: Dosed once WEEKLY. Splitting the oral dose (half in AM, half in PM) or switching to SQ formulation can improve absorption/efficacy. Always prescribe along with folic acid 1-5mg daily. In case of overdose: IV leucovorin.

Monitoring: CBC, Cr, LFTs q 3 months

Hydroxychloroquine:

Caution in: advanced renal impairment (decrease dose)

Side effects: Retinal toxicity (risk increases with duration of therapy), GI upset, skin hyperpigmentation. Rare myopathy, rare cardiotoxicity (avoid with known QT prolongation).

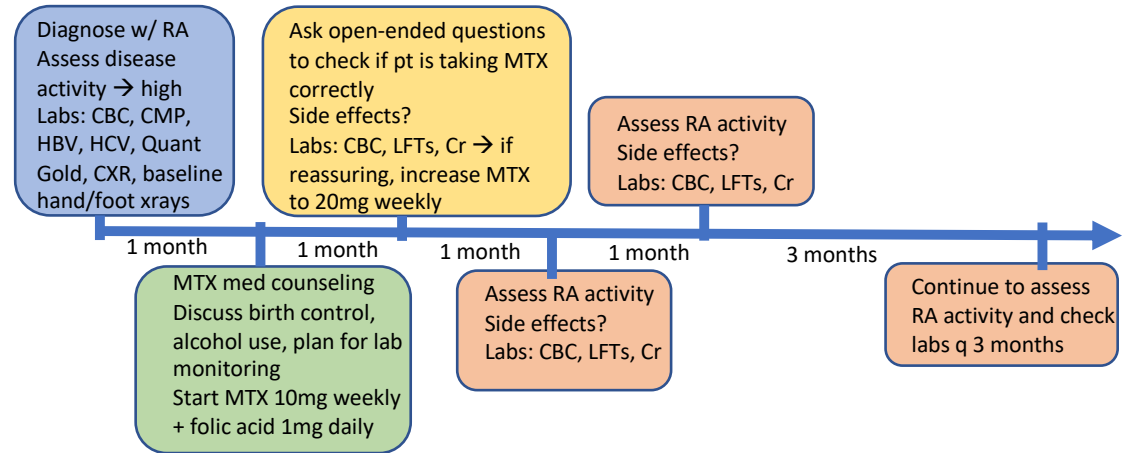
Pearls: Not immunosuppressive. Safe in pregnancy/breastfeeding.

Monitoring: Annual retinal exam (q6 months after >10 years on therapy). No lab monitoring required.

Sulfasalazine:

Side effects: GI upset, hepatotoxicity, leukopenia, hemolytic anemia (higher risk in G6PD deficiency)

Typical Timeline for Starting Methotrexate:



Pregnancy & Breastfeeding:

Safe	Contraindicated	Insufficient/Limited Data
Hydroxychloroquine, Sulfasalazine, TNFi (certolizumab has most data)	Methotrexate, Leflunomide	Abatacept, IL-6 inhibitors, Rituximab, JAK inhibitors

Overview of Biologic DMARDs for RA:

Generic	Trade	Class	Administration	Frequency	Pearls
Etanercept Adalimumab Golimumab Certolizumab Infliximab	Enbrel Humira Simponi Cimzia Remicade	TNF inhibitor	SQ SQ SQ SQ IV	Weekly Q 14 days Monthly Monthly Q 4-8 weeks	Typically used as first-line biologic therapy. Often try 2 different TNFi before moving on to another class. Avoid in class III/IV CHF, SLE-overlap, demyelinating disease.
Abatacept	Orencia	Costim blocker	SQ/IV	Weekly/monthly	Pro: Fewer infectious complications. Con: Longer time to efficacy
Tocilizumab Sarilumab	Actemra Kevzara	IL-6 inhibitor	SQ/IV SQ/IV	Weekly/monthly Weekly/monthly	Pro: Well-tolerated Con: Can cause hyperlipidemia, intestinal perforation
Rituximab	Rituxan	Anti-CD20	IV	2 IV doses every 6 months	Pros: May help RA-ILD, q6 month dosing can help with compliance, lowest risk of activating TB. Cons: B cell depletion = high risk of severe COVID, poor response to vaccines.
Tofacitinib Baricitinib Upadacitinib	Xeljanz Olumient Rinvoq	JAK inhibitor	PO PO PO	Daily or BID Daily Daily	Pro: Oral Con: high rate of zoster, increased risk of CVE/VTE in at-risk patients