Shared Care of Patient on low dose Methotrexate for Rheumatological Disease

Rheumatology Sub-Stream

This document is available under "Resources" at https://metronorth.health.qld.gov.au/specialist_service/refer-your-patient/rheumatology

Many rheumatology patients are suitable for rheumatologist/GP **shared care** methotrexate (MTX) management. MNHHS rheumatologists advocate this where appropriate (including for this patient if this document accompanies a clinic letter). Sharing care can improve specialist access and enhance patient compliance and satisfaction.

Please do the following for your patient:

- ☐ **Review vaccination status** – COVID, pneumococcal and yearly flu vaccinations recommended. Patients on MTX receiving a first flu vaccine should probably get 2 doses, 4 weeks apart. Live vaccines (e.g. varicella) are not contraindicated with low dose MTX (<0.4mg/kg/wk.). Biological and targeted synthetic DMARDs are a contraindication to live vaccines. Rheumatology - Table of Vaccinations
- ☐ **Arrange a skin check if** not done within previous 6m and ensure repeated annually
- ☐ **Discuss the critical importance of ongoing, effective contraception in women**
- ☐ **Ensure pathology tests are done** and action results appropriately - *see Tab A: below*
- ☐ **Arrange clinical reviews** as appropriate and consider software reminders for regular tasks
- ☐ **Please contact the rheumatology team if you have any concerns (Registrar via switch)**

A: Pathology testing

- Regular **FBC, E/LFT, ESR/CRP** are required with **results to GP and rheumatologist**
- Please review the patient in the context of the clinic letter to assess symptoms, possible side effects and to action abnormal results. If the protocol below recommends a treatment change please alert rheumatologist.
- When the dose of MTX is stable for 3 months and there are no other relevant changes (e.g. development of impaired renal function) the above tests should be performed at **minimum 3 monthly**
- If **co-prescribed leflunomide** the **minimum interval is 2 monthly** due to increased potential toxicity
- Regular cardiovascular risk review, including lipids, is advisable for all patients with autoimmune disease

If your patient has elected to use Queensland Health pathology, they have been provided with a form. If your patient wishes to use a private pathology provider, their GP will need to issue pathology forms. The rheumatologist may have given them a form for their first test. Ensure your details are in the cc field.

Managing abnormal tests:

- **Liver function**
  - If ALT/AST levels >2x upper limit of normal (ULN) but <3x ULN, MTX dose should be reduced by 50% and tests repeated in 1 month. Once normalized any MTX titration should be monitored with monthly blood tests until the dose has been stable for 3 months
  - If ALT/AST >3x ULN, withhold MTX, continue folic acid and discuss with rheumatology registrar
  - Compliance and dose of folic acid should be confirmed
  - Lower dose MTX may be reinstituted following ALT/AST normalisation
  - Consider screening for other causes of LFT derangement if ALT/AST >3x ULN 4 weeks after discontinuation
- **Renal Function**
  - In cases of acute kidney injury: eGFR 20-40 max. dose MTX 10mg/wk, if eGFR <20 **STOP** MTX. Please inform treating team if changes are made
- **Haematology**
  - If Hb drops 20 g/l below baseline, WBC <2 x 10^9/L, neutrophils <0.5 x 10^9/L or platelets <50 x 10^9/L withhold MTX, continue folic acid and discuss with rheumatology registrar
  - If less severe abnormalities check compliance with folic acid treatment and consider increasing folic acid as outlined in C below. Reduce MTX dose by 50% and repeat tests in 2 weeks
  - Myelosuppression is more common in initial months but can occur any time during treatment. Risk factors include age >70, low albumin, folate deficiency and renal impairment

B: Possible side effects

- The most common side effects are mouth ulcers, nausea, vomiting and diarrhoea. Using folic/folinic acid, taking MTX with food/in the evening or changing to SC administration may reduce these
- Skin dryness, rashes and increased sensitivity to the sun may also occur
- Fatigue, headache, mental clouding, fever, dizziness, tinnitus, blurred vision, and alopecia are reported
- Serious side effects of myelosuppression, hepatotoxicity and pneumonitis are much less common

C: Folic acid

- Folic acid minimises adverse effects and must be co-prescribed (not funded by the PBS unless ATSI/DVA)
- At least 5mg/wk should be taken, but not on the day of MTX due to potential GI absorption competition
- Folic acid dose can be increased to 5mg/day if needed but not on the day of MTX
- Therapeutic Guidelines recommend the total weekly dose of folic acid ≤3x the total weekly dose of MTX
- Folinic Acid (Calcium Folinate/Leucovorin) may be considered if the patient is unable to tolerate MTX. It is given 7.5-15mg once a week, 8-12 hours after MTX

Further Information

MTX is CONTRAINDICATED with trimethoprim (including co-trimoxazole) in most clinical situations:

- It may be indicated in PJP prophylaxis (which is usually a lower/less frequent dosing)
- This interaction can be life threatening; seek expert input before co-prescribing

MTX and infections

- Patients can usually continue MTX while being treated with oral antibiotics (except as above)

MTX can be taken with other medications including:

- Other DMARDs including biological and targeted synthetic DMARDs
- Steroids such as prednisolone
- NSAIDs / low dose aspirin / paracetamol / PPIs

MTX and alcohol:

- MTX usage in heavy drinkers has been associated with liver cirrhosis
- It is not known precisely what level of drinking is safe when on MTX
- Maximum intake should remain within NHMRC alcohol consumption guidelines
- Drinking >4 std drinks on one occasion, even infrequently, is strongly discouraged

Dose titration will be directed by the rheumatologist

- Standard dose is 20-30mg/wk., it may be lower if elderly / mild renal impairment / low BMI
- MTX is usually taken as a single dose on the same day each week. The oral dose may be divided over 24h to improve tolerance without compromising efficacy
- Dose escalations range from 5mg to 15mg/week every 1-4 weeks to a maximum of 30mg once a week
- Response is assessed after 4-8 weeks at a specific dose
- At doses of 20mg a week or above the parenteral (SC) route is often used to improve absorption

Ongoing prescribing

- MTX tablets are available in 2.5mg or 10mg strengths. It is recommended to only prescribe the 10mg tablets
- Please carefully consider the number of repeats you provide to ensure recommended monitoring is adhered to
- Only patients taking >25mg/week eligible for 50-tablet packs – carefully consider safety before prescribing
- Be precise with prescriptions e.g. “20mg once a week on Monday”
- SC administration is encouraged if patient unable to tolerate a sufficient oral dose for disease control
- Prefilled syringes are now available on the PBS for RA and psoriasis
- In case of accidental pregnancy: stop MTX, start folic acid 5mg daily and contact the treating rheumatologist
- MTX is undetectable in serum 24h after administration. Patients on low dose weekly MTX are NOT “HOT” and pose no risk to others. It is not absorbed through the skin so tablets and injections can be handled safely

The ARA website has more information including up-to-date COVID advice and vaccine information and a Methotrexate SC injection demonstration video:
Medications: https://rheumatology.org.au/patients/medication-information.asp
Pregnancy: Rheumatology Medications for Autoimmune Rheumatic Diseases in Pregnancy
For more information on MTX shared care from NPS: Shared care approaches to rheumatoid arthritis: supporting early and sustained methotrexate - NPS MedicineWise
HealthPathways is a valuable GP decision-support tool which includes sections on all major rheumatology conditions: https://brisbanenorth.healthpathwayscommunity.org/18668.htm Username: Brisbane Password: North