Shared Care of Patient on low dose Methotrexate for Rheumatological Disease

Rheumatology Sub-Stream

Many rheumatology patients are suitable for rheumatologist/GP **shared care** methotrexate (MTX) management. MNHHS rheumatology clinics are advocating this where appropriate and writing to GPs about this. Sharing care improves rheumatology access and enhances patient compliance and satisfaction. You may find the following helpful:

The following information is from the letters MNHHS rheumatologists are sending to support shared care of patients on low dose Methotrexate.

Please do the following for your patient:

- ☐ **Review vaccination status** - Pneumococcal & yearly flu vaccinations recommended
  Live vaccines (e.g. Zostavax) are not contraindicated with low dose MTX (<0.4mg/kg/wk). Other treatments (e.g. biological DMARDs) may be a contraindication
- ☐ **Arrange a skin check** if not done within previous 6m and ensure repeated annually
- ☐ **Discuss the critical importance of ongoing, effective contraception in women of childbearing potential**
- ☐ **Ensure pathology tests are done** and action results appropriately Box A: *below*
- ☐ **Arrange a clinical review** as appropriate Box B: *and* Box C *below*
- ☐ **Contact the rheumatology team if you have any concerns**

A: Blood testing (pathology preferences at top of document)

- Regular **FBC, U/E/LFT, ESR/CRP** are required with **results to GP and rheumatologist**
- If your patient has elected to use Queensland Health pathology, they have been provided with a form
- If your patient has chosen to use a private pathology provider, they have been asked to see you for a Rule 3 Exemption form for these tests. The rheumatologist may have given them the form for their first test
- Please review the patient as per the clinical letter to assess symptoms / possible side effects and to action abnormal results. If the protocol outlined below recommends a change in treatment please forward details to the rheumatology clinic
- The clinic letter may have further details
- When the dose of MTX is stable for 3 months and there are no other relevant changes (eg development of impaired renal function) the above tests should be performed at a minimum of every 3 months
- If co-prescribed leflunomide the interval should be a minimum of 2 months

Managing abnormal tests:

- **Liver function**
  - If ALT/AST levels >2x upper limit of normal (ULN) but <3x ULN, the dose of MTX 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 with folic acid should be confirmed
  - Lower dose MTX may be reinstituted following ALT/AST normalisation
  - Screening for other causes of LFT derangements should be considered if ALT/AST persistently >3x ULN 4 weeks after discontinuation
- **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 contact rheumatology registrar

- If less severe abnormalities check compliance with folic acid treatment and consider increasing folic acid as outlined below. Reduce MTX dose by 50% and repeat tests in 2 weeks
- Myelosuppression can occur at anytime during MTX treatment
- While more common in the initial months it is unpredictable.
- Risk factors include age >70, low albumin, folate deficiency and renal impairment

B: Possible side effects

- The most common possible side effects are mouth ulcers, nausea, vomiting and diarrhoea. The use of folic/folinic acid, taking MTX with food or in the evening 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 is required to minimise adverse effects and must be co-prescribed even though removed from the PBS list (unless ATSI/DVA) in May 2016
- At least 5mg once weekly should also be taken preferably not on the day of MTX due to potential competition for the same uptake transporter in the gut
- Folic acid dose can be increased to 5mg/day if needed but not the day of MTX
- Therapeutic Guidelines recommend the total weekly dose of folic acid does not exceed 3 times the total dose of weekly 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):
- This interaction can be life threatening. Seek expert input before co-prescribing

MTX can be taken with other medications including:
- Other DMARDs including biological DMARDs
- Steroids such as prednisolone
- NSAIDs / low dose aspirin
- Simple pain medicines such as 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
- MTX tablets are available in 2.5mg or 10mg strengths. It is recommended to only prescribe the 10mg tablets
- Please review the number of repeats you provide to ensure the recommended monitoring is adhered to
- Be precise with any prescriptions e.g. “20mg once a week on Monday”
- Standard dose is 20-30mg/wk, it may be lower in elderly / mild renal impairment
- Dose escalations range from 5mg to 15mg every 1-4 weeks
- Response is assessed after 4-8 weeks at a specific dose
- The dose can be adjusted up to a maximum of 30mg once a week
- MTX is usually taken as a single dose on the same day each week. The dose may be divided over 24h to improve tolerance without increasing serious adverse effects
- In case of accidental pregnancy: stop MTX, start folic acid 5mg daily and contact the treating rheumatologist
- The half-life of MTX is 6-8 hours after ingestion; it is undetectable in serum by 24 hours. Patients on low rheumatological doses given weekly are NOT “HOT” and pose no risk to others. It is not absorbed through the skin so tablets and injections can be handled safely by patients and carers
- Parenteral (SC) dosing may be considered if the patient is unable to tolerate a sufficient oral dose or has incomplete disease control

The ARA website has more information and an injection demonstration video:
https://rheumatology.org.au/patients/documents/SelfinjectionoflowdoseMTXOct17.pdf