

METHOTREXATE – ORAL DOSING AND ADMINISTRATION

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- To ensure safe prescribing, monitoring and administration of oral methotrexate.

2. PATIENT

- Women requiring treatment with oral methotrexate

3. STAFF

- Medical, midwifery, nursing and pharmacy staff

4. EQUIPMENT

- Methotrexate tablets
- Cytotoxic tablet counter

5. CLINICAL PRACTICE

Prescribing

- Confirm with the patient the indication and what day(s) it must be administered, including the last day a dose was taken. The MO should document this information in the patient's clinical notes or the Medication Management Plan. Methotrexate is never given daily, seven days a week.
- Prescribe methotrexate (in full with no abbreviation) on the NIMC specifying when it must be administered. Patient's admitted on methotrexate should continue to receive their methotrexate on the same day unless there is rationale for changing. In the case of weekly dosing the MO should clearly specify that administration is ONCE A WEEK, written in full and underlined and specify the day for administration e.g. Methotrexate 10mg orally once a week on Tuesday. In the case of weekly administration the MO must indicate this on the NIMC using crosses (X) to block out the days of the week when methotrexate is not to be administered. Refer to example below.
- Prescribe the dose in milligrams (not "one tablet").
- Document the indication on the NIMC. This is to alert other staff members to any potential prescribing errors. Methotrexate can be prescribed more frequently in haematology and oncology as part of specified protocols.
- Check to see if the patient takes folic acid to reduce the gastrointestinal and haematological side effects associated with methotrexate. If so prescribe this on the NIMC using crosses (X) to block out the days of the week administration is not required. NB Folic acid is never taken at the same time as methotrexate.
- Ensure the patient is not receiving any other medications which may increase the toxicity of methotrexate such as phenytoin, trimethoprim, trimethoprim-sulfamethoxazole, penicillins, aspirin, or NSAIDs (not an all-inclusive list).
- Handover verbally to inform the nursing staff caring for the patient and / or the nurse in charge of the ward of the dose and indication of methotrexate. The nursing staff should include the dose and indication that the patient's has been prescribed on clinical handover.

Monitoring

Monitor the patient's full blood count, renal function and hepatic function at baseline and at least every 3 months for the duration of treatment with methotrexate. More frequent monitoring may be deemed appropriate if the patient is deemed a high risk for haematological toxicity from methotrexate or myelosuppression is suspected. Where necessary, dosage should be reduced or discontinued. Consider checking folate levels every few months during methotrexate therapy.

CLINICAL POLICIES, PROCEDURES & GUIDELINES

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Counselling

Ensure the patient and /or their carer is provided with information about methotrexate. This should include a combination of written and verbal information on:

- Dosage regimen including patient's dose and naming the day of the week for taking tablet(s)
- Actions if a dose is missed
- Possible symptoms of toxicity or intolerance e.g. breathlessness, dry persistent cough, nausea and vomiting, diarrhoea, sore throat, mouth ulcers and bruising
- Importance of regular blood test monitoring and reporting symptoms for early recognition of toxicities
- Emphasis on the similar appearance of methotrexate and folic acid tablets (if the patient is on this supplement) and the difference in dosage of the two medicines
- Emphasis on confirming with the administering nurse the day of the week on which their dose is due, their normal dose and when it was last taken prior to taking a dose of methotrexate.
- Provide patient with the consumer information leaflet for methotrexate and the methotrexate card (available from pharmacy).

Dispensing

- Methotrexate must be dispensed by pharmacy for individual patients, from an order on the NIMC. The label should include a cytotoxic warning label.
- Methotrexate tablets will **not** be available in wards as imprest stock or in the After Hours Drug Room. Where necessary administration should be deferred until a pharmacist is available to review the order and dispense the medication.
- Methotrexate for weekly administration must be dispensed as a single dose.

Administration

- Check with the patient how often they take oral methotrexate and which day(s) they usually take it and when they last took a dose.
- Do not administer methotrexate if the order does not meet the criteria list above in Prescribing.
- Seek clarification from the prescriber or pharmacist if the medication order is unclear prior to administration.
- If methotrexate is charted out of hours discuss with MO if the dose can be delayed until the next Pharmacy working day. If this is not possible contact the on-call Pharmacist.
- DO NOT use ward tablet counter. Use only cytotoxic pill counter labeled with a purple sticker.
- Follow standard chemotherapy precautions including chemotherapy trolley and ready access to cytotoxic waste bags during administration procedure
- If the RN is dispensing the methotrexate, they are to follow the container to lid to pill cup method of dispensing (taking care to not handle the medication).
- The RN must supervise the patient taking the methotrexate.
- Dispose of the medication container and medication cup then the purple gloves into the purple waste bags and remove PPE.
- Document the procedure in the patient's medical record.
- Where the patient does not tolerate or refuses to take methotrexate the prescriber must be notified.
- Any error in administration must be reported to the prescriber and immediate medical review and blood tests completed. An IIMS must also be completed
- If a patient is unable to take oral methotrexate discuss an alternative method of administration with the patient's medical team and Pharmacy. NEVER be cut, crush or dissolve a cytotoxic medication.
- Follow the Workcover NSW Cytotoxic Drugs and Related Waste Guide 2008 and Cancer Institute NSW (eviQ) Safe handling and waste management of hazardous drugs. 2014.
- NOTE: All cytotoxic medications must be checked and signed for by two registered nurses one of whom is accredited to administer it via the prescribed route.

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6. DOCUMENTATION

- Integrated Clinical Notes
- Medication Chart

7. EDUCATIONAL NOTES

Methotrexate is a cytotoxic agent with the potential to cause severe haematological toxicity, and treatment with this agent requires close supervision.

Methotrexate is commonly used as an antineoplastic agent as part of specialised protocols, however it is also used in the non-malignant setting to treat some autoimmune or inflammatory disorders such as rheumatoid arthritis. In this setting, Methotrexate is usually prescribed orally as either a once a week dose, or as a divided dose over two days, each week. More frequent administration can lead to severe immunosuppression and place the patient at risk of developing a life threatening infection.

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- Methotrexate- ectopic pregnancy

9. RISK RATING

- Low

10. NATIONAL STANDARD

- Medication Safety

11. REFERENCES

WorkCover NSW. Cytotoxic drugs and related waste: risk management guide, 2008.
NSW Health PD2015_029 High risk medicines management policy

REVISION & APPROVAL HISTORY

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