

Safety Update July 2020

Safer Prescribing of Methotrexate Tablets

Please see below information regarding safer prescribing of methotrexate tablets. The Vale of York Medicines Management team is asking all practices to review their prescribing of oral methotrexate.

Summary of Advice and Action Points for GP practices:

- Ensure all prescribers and dispensary staff are aware of the requirement to use methotrexate 2.5mg tablets as best practice
- Review all prescriptions for oral methotrexate to ensure the dose is clearly defined in both 'mg' *and* the number of tablets *and* the frequency as once weekly. For example: Take FIVE tablets (12.5mg) ONCE a WEEK on the SAME DAY each week
- Ensure all patients on methotrexate are also prescribed folic acid and are actually ordering this item
- Review any existing prescriptions for 10mg tablets, which should be used in exceptional circumstances **only**
- Any new requests for methotrexate 10mg tablets should be discussed with the Medicines Management Team prior to issuing a prescription
- Dispensing practices should ensure any stock of methotrexate 10mg tablets is clearly segregated
- Prescriptions for doses greater than 30mg weekly should be queried
- Discontinue methotrexate for a minimum of two doses during acute infective episodes requiring antibiotic therapy. Prescribing of methotrexate with co-trimoxazole or trimethoprim should be avoided, unless under specialist supervision.
- It is recommended that repeat prescriptions for methotrexate be reviewed and reauthorised separately from other repeat prescriptions, to ensure blood monitoring is satisfactory.

Background information:

- Due to the narrow therapeutic index of methotrexate and once weekly dosing, methotrexate presents a high risk of accidental overdose.
- Despite several previous safety alerts, twenty-one deaths caused by methotrexate poisoning were reported from 1993–2017 in England and Wales (2).
- National Patient Safety Alerts (NPSA) in 2004 and 2006 issued a series of guides, checklists and recommendations to reduce the risk of harm to patients (1).
- The BNF has the following advice, based on the NPSA alerts (4):
 - the patient is carefully advised of the dose and frequency and the reason for taking methotrexate and any other prescribed medicine (e.g. folic acid)
 - only one strength of methotrexate tablet (usually 2.5 mg) is prescribed and dispensed
 - the prescription and the dispensing label clearly show the dose and frequency of methotrexate administration

- the patient is warned to report immediately the onset of any feature of blood disorders (e.g. sore throat, bruising, and mouth ulcers), liver toxicity (e.g. nausea, vomiting, abdominal discomfort, and dark urine), and respiratory effects (e.g. shortness of breath).
- A recent cohort study in English primary care by the British Journal of General Practice showed there remains use of methotrexate 10mg tablets across the nation (2).
- Correct prescribing of methotrexate remains a key priority for the NHS; it is one of 16 targeted issues in the current NHS 'Never Events' list (3).

Messages on the OptimiseRx system are consistent with this advice.

We would like to remind all staff involved in making alterations to prescriptions that patients should be informed of any change. Ideally this should be done face to face (although we understand this may not be possible at the present time), by telephone or by letter. Alternative methods of communication may be considered, but must be clear and unambiguous. This is particularly important with high risk medicines such as methotrexate.

Yours sincerely,

The Medicines Management Team

References

1. Specialist Pharmacy Service NPSA Archive: <https://www.sps.nhs.uk/articles/npsa-alert-improving-compliance-with-oral-methotrexate-guidelines-2006/>
2. British Journal of General Practice: <https://bjgp.org/content/70/696/e481>
3. NHS Improvement: <https://improvement.nhs.uk/resources/never-events-policy-and-framework/>
4. BNF Online: <https://bnf.nice.org.uk/drug/methotrexate.html>