BNSSG Joint Formulary DMARD Monitoring Advice Guidance

METHOTREXATE for use in rheumatic diseases

Background
This sheet provides guidance on monitoring of methotrexate in primary care. These recommendations have primarily been taken from current BSR guidance on DMARD monitoring. Some rheumatology departments may have slight variations in their monitoring practices. For the full shared care protocol and responsibilities for primary care refer to www.bnssgformulary.nhs.uk/Shared-Care-Protocols

Treatment schedule
Methotrexate is usually started at a dose between 7.5mg-15mg ONCE weekly orally. It is also available in an injectable form and patients may require switching to a subcutaneous preparation. The starting dose will vary depending on the severity of the condition, age, renal function and other co-morbid conditions. Doses may go up to 25mg/week. The decision to increase the dose will be taken by the rheumatology team. We recommend co-prescription of folic acid 5mg once weekly, usually to be taken the day before methotrexate.

Cautions and special recommendations
Contra-indications
Methotrexate is contraindicated in pregnancy and breast feeding. It is strongly recommended that methotrexate should be stopped by both male and female users 3 months before any planned pregnancy. If methotrexate is stopped, effective contraception will need to continue for a further 3 months.

Cautions
- Significantly impaired renal function (eGFR <50 reduces clearance. If eGFR 20-50: use 50-100% of normal dose; if eGFR 10-20: use 50% of normal dose; if eGFR<10: contra-indicated).
- Significantly impaired hepatic function
- Localised or systemic infection (including hepatitis B or C and TB)
- Unexplained anaemia / cytopaenia associated with marrow failure
- Pre-existing lung disease
- Excessive alcohol consumption. Patients should be advised to limit their alcohol intake to well within national recommendations
- Avoid live vaccines

Side-effects
Common side-effects include nausea, diarrhoea and dyspepsia (consider increasing folic acid frequency e.g. 5mg 3-6 days per week). Serious but rare side-effects include neutropaenia and methotrexate pneumonitis.

Drug interactions
DO NOT prescribe trimethoprim or co-trimoxazole as severe bone marrow suppression may occur with concurrent use of methotrexate. Also DO NOT prescribe etretinate (acitretin metabolite) or acitretin.
Theoretical interactions may occur with salicylates, hypoglycaemics, diuretics, phenytoin, tetracyclines, chloramphenicol, penicillin, probenecid, tolbutamide, NSAIDs and omeprazole but at the doses used in rheumatic diseases this is rarely a problem.

Monitoring

Pre-treatment assessment:	FBC, renal function, LFT and CXR (unless CXR done within last 6 months). This will be done by the rheumatology department.
Monitoring:	FBC, renal function, LFT every 2 weeks until dose of methotrexate and monitoring stable for 6 weeks; thereafter monthly until the dose and disease is stable for 1 year. Thereafter the monitoring may be reduced in frequency based on clinical judgement.
Actions to be taken:	Methotrexate should be WITHHELD if any of the following occur. Please repeat monitoring bloods in 1 week and if still low/high then discuss with the rheumatology team. Falling trends may also prompt discussion.

- Neutrophils <1.5 $x10^9$/L
- Platelets <100 $x10^9$/L
- ALT >twice upper limit of reference range
- Rash or oral ulceration
- New or increasing dyspnoea or dry cough
- Acute renal impairment (e.g. eGFR <50): stop drug if acute change. If gradual may need dose reduction.
- Severe sore throat, abnormal bruising: immediate FBC and withhold until the result of FBC is available.

February 2015 Dr Matthew Roy on behalf of Bristol & Weston rheumatology consultants

Rheumatology Departments' contact details

Trust / Hospital	Contact	Telephone / Fax	On call service	Availability
University Hospitals Bristol Foundation Trust, Bristol Royal Infirmary	Rheumatology Telephone Advice Line	T: 0117 3424881 F: 0117 3423841	Registrar pager: 07623972925	**Mon – Thu 9am to 5pm** **Fri 9am to 1pm**
North Bristol Trust, Southmead Hospital	Consultant secretary as per clinic letter OR Rheumatology Telephone Advice Line	Telephone advice line T: 0117 4140600 F: 0117 4140570 For clinicians only T: 07894800989	T: 07894800989 Sat/Sun 9am-noon (GP service for existing NBT rheum patients only)	**Mon – Fri 9am to 5pm**
Weston Area Health Trust, Weston General Hospital	Rheumatology Telephone Advice Line	T:01934 881075 F: 01934 647025	01934 636363 Bleep 279	**Mon – Fri 9am to 5pm**