Abnormal results and what to do

Abnormal Blood Count

☐☐**WCC**< 3.5 x10^9/l or **neutrophil** count < 1.6 x 10^9/l - stop drug. Inform rheumatology. If the patient is febrile or has other evidence of infection, hospital admission for supportive treatment may be necessary

☐☐**MCV –** a rise in MCV is common with methotrexate. If MCV > 105 fl, check B12 and folate and treat if low. Methotrexate need not be discontinued

☐☐**Platelet count <140 x 10^9/l** stop drug and inform rheumatologist. Bleeding or bruising may require hospitalisation for supportive treatment if severe

☐☐Rapid falls or persistent downward trends in any of these measures, even if still within the normal range, may require dosage reduction

Abnormal LFT's

☐☐ALT and alkaline phosphatase within 2 times the upper limit of the normal are acceptable. However, rapid rises in these enzymes, should be discussed

Deteriorating renal function increases the risk of toxicity. Deterioriation in renal function requires closer monitoring and a discussion about dose with the rheumatologist. Patients developing acute renal failure while taking methotrexate should stop the drug and may require folinic acid rescue. Take care when introducing ACE-inhibitors & angiotensin II receptor antagonists

Pregnancy and methotrexate

☐☐**Men and women** taking methotrexate **must avoid pregnancy.** Methotrexate should be discontinued **for at least 3 months (with continued use of effective contraception)** prior to attempting to conceive a child. Where a patient wishes to conceive, alternative treatment should be discussed before the patient stops methotrexate

☐☐Women taking methotrexate **must not breast feed**

Surgery and methotrexate

Methotrexate may be continued for most elective surgery. However, some surgeons may choose to stop it 1 week prior to surgery. Rheumatology are happy to advise if there is doubt. Careful attention should be given to the early detection and treatment of infections.

Other adverse drug reactions

☐☐**Rashes** –Where methotrexate is considered the cause the drug withhold the drug and contact the rheumatology team for further advice

☐☐**Breathlessness** – **may** be due to infection or pneumonitis. New, unexplained or worsening breathlessness should be managed by stoppingmethotrexate and obtaining a CXR. Infection should be treated. If there is no evidence of infection or the breathlessness fails to settle the rheumatologist should be informed. Consider admission to hospital if severe.

☐☐**Mouth ulcers** – if numerous or severe, a full blood count should be checked urgently. If white cell or neutrophil count is low hospital admission for supportive treatment may be necessary. For mild cases offer folic acid 5 mg every day except the day of methotrexate

Alcohol and methotrexate

Patients taking methotrexate should limit their alcohol intake to well within recommended drinking limits (maximum of 14 units per week for men and women with at least 2 alcohol free days per week)

Contacting the rheumatologist (GPs and treatment room nurses)

Emergency problems – contact the rheumatologist via the above numbers. If this fails advice may be sought from the on-call physician. When in doubt stop the drug at least temporarily Less urgent problems may be dealt with by:

☐☐Writing or e-mail (using the rheumatology advice inbox) providing CHI number and clinical details

☐☐Rheumatology telephone clinic for GPs Tuesday mornings 11-12.30—01896 826665

Borders Rheumatology Service Borders
General Hospital MELROSE
TD6 9BS
Tel:
01896 826665 (office)
01896 826666 (nurse helpline)
E-mail: rheumatology@borders.scot.nhs.uk

RheumatologyAdvice@borders.scot.nhs.uk
(for health care professionals only)

Prescribing and Monitoring Guidelines

Methotrexate

Shared Care Guidance for General Practitioners and Practice Nurses

November 2017
(review November 2021)

Patient's name
Address

Telephone Number:

This information is provided as a guide – it does not replace manuals such as the BNF or drug data sheets. In case of any uncertainty, such sources should always be consulted

Dosing

- **2.5 mg tablets only** are licensed for use
- Usual starting dose is 10mg/week, as a single dose, at bedtime. Maximum dose is 25mg/week. Dose increases should be no more than every 2 weeks, on medical advice
- Folic acid 5mg/week is given 24 hours after the methotrexate, to reduce the risk of toxicity of without reducing efficacy

Pre-treatment assessment

- Weight, FBC, ESR, U &E's and LFT's
- Chest radiograph
- Blood borne virus screening
- Zoster antibody status (if positive no specific precautions required if the patient is exposed to somebody with chickenpox or shingles)

Monitoring

- FBC, eGFR & LFTs 2-weekly until the dose has been stable for 6 weeks, revert to this schedule after any dose increase
- Thereafter monthly FBC, eGFR & LFTs for 3 months
- Thereafter the frequency of monitoring may reduce to every 3 months at the discretion of the rheumatologist

Drug interactions with Methotrexate

- **Co-trimoxazole** and **trimethoprim** are folate antagonistis and must not be prescribed with methotrexate
- Non-steroidal anti-inflammatory drugs do not need to be discontinued, though should be used with caution where there is a deterioration in renal function
- Phenytoin, tolbuatmide, probenecid and penicil- lin may increase methotrexate levels and monitoring should be increased if given long term
- ACE inhibitors and angiotensin II receptor antagonists can reduce renal clearance of methotrexate particularly in the context of dehydration. Patients should stop these drugs and methotrexate if they have diarrhoea and/or vomiting

Date	Dose/ week	Hb	WCC	Neutro-phils	Plate-lets	ESR	ALT	Alk Phos	Urea	Creat	Date next test	Message to patient