Methotrexate in Rheumatoid arthritis (oral, sub cutaneously or intramuscularly)

Licensed Indication and key points

- **Methotrexate is licensed for the treatment of rheumatoid arthritis**
- **Methotrexate does not possess analgesic properties, it exhibits a disease modifying effect**
- **Methotrexate may take 4 months to exhibit effects in rheumatoid arthritis**
- **NSAIDs and simple analgesics should be continued but doses can be reduced once methotrexate therapy is established**
- **Methotrexate is available as 2.5mg and 10mg tablets. ONLY 2.5MG SHOULD BE PRESCRIBED TO REDUCE THE RISK OF DOSING ERRORS.**
- **Dose of MTX is weekly and folic acid should be co prescribed usually as 5mg once weekly on a different day to MTX**
- **Methotrexate is also available in pre filled syringes in various strengths and monitoring is the same as for oral methotrexate**
- **Methotrexate should be avoided in pregnancy and patients and partners should avoid pregnancy for 6 months after treatment is stopped**

Initiation and Maintenance

- **Patient history checked to ensure there are no contraindications to methotrexate therapy**
- **A full blood count, renal function and liver function tests should be carried out at baseline (prior to initiation of methotrexate**
- **A chest X-ray is required prior to initiation of methotrexate**
- **Dose is usually started low and titrated up:**
    - Adult: Initial dose is 7.5 to 10mg once a week increasing by 2.5mg per week every 2 weeks up to a maximum of 25mg per week depending on response and side effects.
    - Children: 10mg to 15mg per m2 once a week. There is no need for an incremental increase in children.
- **For product information see SPCs:**
  https://www.medicines.org.uk/EMC/medicine/22954/SPC/Methotrexate+2.5mg+Tablets
  https://www.medicines.org.uk/emc/medicine/26959
- **Patients are given a methotrexate therapy record book by the hospital. This is completed at initiation and maintained by the GP looking after the patient. When the patient is transferred to shared care the consultant will acknowledge this in the book and advise the patient.**
- **Time to reach a stable condition may take 6 months**

Monitoring

MONITORING	RESPONSIBILITY	TESTS
Pre-treatment	Hospital team	• FBC, U&Es, electrolytes, LFTs, CXR • Pulmonary Function Tests in selective high risk cases • Varicella status – record history of chickenpox or VZV IgG immunity status in patient booklet. (Hospital to vaccinate if necessary)
Initiation to stabilisation	Hospital team	• Check FBC, creatinine/calculated GFR, ALT and/or AST and albumin every **2 weeks** until on stable dose for 6 weeks Once on a stable dose; **monthly** FBC, creatinine/calculated GFR, ALT and/ or AST and albumin **for 3 months**
Ongoing	GP	• Thereafter, FBC, U&Es creatinine/calculated GFR, ALT and/or AST and albumin at least every 12 weeks.

Recommendations from British Society of Rheumatologists for managing abnormal results

LABORATORY EVENTS	VALUES	ACTION
Elevation in liver enzymes AST, ALT, GGT or falling albumin	Serial rise over 3 visits **or** >2 times normal	**Stop treatment and seek advice from specialist team.**
Mild-to-moderate renal impairment	Mild: GFR 20 to 50 mL/min Moderate: GFR 10 to 20 mL/min Severe: GFR <10ml/min	
WBC	< 3.5 x 10^9/L	
Neutrophils	< 1.6 x 10^9/L	
Platelets	< 140 x 10^9/L	
Unexplained eosinophilia	> 0.5 x 10^9/L	
Serial falls in WBC and / or Platelets	>10% on 3 occasions	
MCV	> 105 fL	**Seek advice from specialist team** • check serum B12, folate and TFTs and alcohol intake • May require folinic acid rescue for bone marrow toxicity

Criteria for managing side effects occurring during Methotrexate therapy in primary care

SYMPTOMS	MANAGEMENT
Rash	**Stop drug** and discuss with specialist team. ***(See relevant telephone number(s) on page 5)***
Severe sore throat, abnormal bruising or bleeding	**Stop drug** and repeat FBC immediately. Follow relevant course of action from table above.
Unexplained or prolonged cough, dyspnoea or fever	**Stop drug** and seek advice from specialist team.
Oral ulceration and stomatitis	May be overcome by low-dose folate (e.g. increase from 5mg to 10mg per week). If persistent, seek advice.
Unexplained or prolonged dyspepsia, diarrhoea, nausea, vomiting	May be overcome by low-dose folate and/or taking tablets with evening meal or eating a banana with the dose or increasing the fluid intake over 24 hours prior to taking methotrexate. If persistent, seek advice.

Drug interactions, contraindications and precautions

See BNF and manufacturer's SPC Home - electronic Medicines Compendium (eMC) for up-to-date advice

Prescribing responsibilities

Refer to principles of shared care document

Contact details

Consultant, medical staff and nurse practitioners at the Basildon and Thurrock University Hospitals NHS Foundation Trust (BTUH) are available to give advice and can be contacted either through the main hospital switchboard or direct.

Department / Specialist	Contact Telephone Number
Hospital switchboard – ask for specialist or On-Call specialist rheumatologist out-of-hours	01268 524900
Rheumatology	01268 598461
Email contact for shared care queries ONLY: RheumatologyOsteoporosisPOD@btuh.nhs.uk) (48 hours response)	

Local Enhanced Services for Shared Care Monitoring

Level 1: The prescribing of this medication only.
Level 2: The prescribing and monitoring of this medication and disease

Document Control	
Version:	Version 1.0
The original Microsoft Word file of this document is located on: N:\SW Essex Prescribing\Shared Care\Shared Care 2018 BBCCG	
Shared Care Guidelines are also available electronically via: https://basildonandbrentwoodccg.nhs.uk/your-health/medicines-management	
Prepared by :	Medicines Management Team Thurrock CCG
Checked by:	Rheumatologists, BTUH BBCCG Prescribing Working Group
Approved by:	South West Essex Medicines Management Committee (BTUH/BBCCG) May 2018
Date of issue	1st August 2018
Next Review Date:	31st July 2021 or earlier if evidence requires