Oxford University Hospitals NHS
NHS Foundation Trust

NHS
Oxfordshire
Clinical Commissioning Group

SULFASALAZINE FOR USE IN ADULT RHEUMATOLOGY
Shared Care Protocol

This protocol provides prescribing and monitoring guidance for sulfasalazine therapy. It should be read in conjunction with the Summary of Product Characteristics (SPC) available on www.medicines.org.uk/emc and the BNF.

Shared Care Protocol – Responsibilities

Shared care assumes communication between the rheumatology specialist, GP and patient. The intention to share care should be explained to the patient and accepted by them. Patients are under regular follow-up and this provides an opportunity to discuss drug therapy. See Rheumatology Shared Care Responsibilities document for further information.

Rheumatology Specialist Team

At the start of treatment:

- Complete pre-treatment assessments, including baseline tests, in accordance to the specific shared care protocol
- Initiate treatment by prescribing the first 56 days
- Supply the patient with 3 blood cards (for FBC, U&E and LFTs) and inform patients to book and attend blood tests at 2, 4 and 6 weeks after starting treatment
- Ensure that patients understand the nature and complications of drug therapy and their role in reporting adverse effects promptly, as part of obtaining informed agreement to shared care
- Provide a copy of the drug-specific patient information leaflet (or direct patient to Versus Arthritis website https://www.versusarthritis.org/about-arthritis/treatments/drugs/)
- Provide a copy of OUHFT 'Rheumatology Shared Care Monitoring Card' to the patient and/or carer, which includes contact details for the rheumatology advice line
- Send a letter to the GP requesting shared care once dose is stable, confirming the above has been completed. Include any results from pre-treatment assessments if appropriate. Provide details of the dose to be continued. Outline shared care protocol criteria and/or direct them to the relevant document on the Oxfordshire CCG website

After 2-6 weeks of treatment:

- Check blood test results from week 2, week 4 and week 6 (available on EPR for Oxfordshire patients/contact GP practice for blood results if patient's GP practice is not in Oxfordshire)
- Ensure any abnormal results are acted upon promptly

After 4-6 weeks of treatment:

- Conduct a consultation with the patient and/or to check that the patient is not experiencing any issues or side effects.
- Confirm that the patient is stable (no side effects, tolerating the drug and established on monthly blood tests). Communicate this information in a shared care handover letter to the GP. Shared care can now commence.
- If the patient is not stable requiring change in the treatment regime, the patient will remain under the care of the specialist until they become stable, as above.

Unless any concerns are raised by the GP within 14 days, shared care will be assumed and the patient will collect the next prescription from the GP. [4]

During treatment:

- Liaise with GP regarding changes in disease management, drug dose, missed clinic appointments
- Be available to give advice to GP and patient
- If the dose is increased, patient's bloods will be monitored as above
- If dose is decreased, additional monitoring may not be required at discretion of the rheumatology specialist - this will be clearly communicated in the clinic letter and the existing monitoring schedule should continue

GP

- Ensure that provision has been made for the patient to have blood monitoring as per local arrangements
- Prescribe medication once the dose is stable or shared care is agreed
- Ensure all monitoring is completed in accordance to 'Recommended monitoring schedule for patients taking disease-modifying anti-rheumatic drugs (DMARDs)'
- Check results then advise the specialist of any deteriorations or abnormal results. Results should be recorded on the monitoring card if the GP practice is outside of Oxfordshire.
- Notify the specialist to any changes in patient's condition, any adverse drug reactions or failure to attend tests
- If a patient fails to attend for monitoring:
  - Only issue a 28 day prescription and book them in for the next available appointment for a blood test
  - If they fail to attend a second blood test then contact the specialist team for advice and to discuss suitability for continuing treatment before supplying further prescriptions

Patient and/or carer

- Agree to treatment and monitoring after making an informed decision
- Agree to being under the shared care of the GP and specialist
- Ensure that they are booked in for blood test monitoring as per local arrangements and attend as required
- Attend all hospital and GP appointments as scheduled
- Ensure monitoring card is kept up to date and is brought to all appointments (especially patients whose GPs are out of Oxfordshire)
- Report any side effects to the GP or a member of the specialist team

BACKGROUND FOR USE

Sulfasalazine is a disease modifying antirheumatic drug (DMARD) and aminosalicylate. It is commonly used for:

- Rheumatoid arthritis (licensed)
- Seronegative spondylarthropathies, including psoriatic arthritis (unlicensed)
- It can be used in combination with other DMARDs, such as methotrexate or hydroxychloroquine in patients with more severe disease.

DOSAGE

Increase slowly.
Week 1: 500mg each morning
Week 2: 500mg bd
Week 3: 1g each morning and 500mg each evening
Week 4: 1g bd (usual maintenance dose)

- Occasionally, doses of 3g per day can be used.

- Time to response is up to 3 months.
- Tablets should be taken with or after food and swallowed whole with a full glass of water.
- Sulfasalazine 500mg gastro-resistant tablets and 250mg/5ml oral suspension are available.

PRE-TREATMENT ASSESSMENT BY THE SPECIALIST

FBC, U&Es, LFTs and CRP

ONGOING MONITORING

For more information see separate guideline; 'Recommended Monitoring Schedule for patients taking disease-modifying anti-rheumatic drugs (DMARDs)'.

Baseline assessments should include height, weight, blood pressure, FBC, U&Es, LFTs and CRP.

Standard Monitoring Schedule as per British Society of Rheumatology Guidelines[1]:

- Following initiation or dose change: Check FBC, U+Es and LFTs **every 2 weeks** until on stable dose for **6 weeks**
- Once on stable dose, check FBC, U+Es and LFTs **monthly** for **3 months**
- Thereafter, check FBC, U+Es and LFTs **every 3 months**.
- More frequent monitoring is appropriate in patients at higher risk of toxicity (extremes of body weight, CKD3 or above, pre-existing liver disease, significant other medical co-morbidity, age over 80 years and previous DMARD toxicity)

Exceptions and Additions to the Monitoring Schedule:

Drug	Laboratory monitoring	Other monitoring
Sulfasalazine	Standard monitoring schedule. Once patient is stable for 12 months, routine monitoring is no longer required.	

Abnormal Laboratory Results and Action to be Taken:

Please note that in addition to absolute values for haematological indices a rapid fall or consistent downward trend in any value should prompt caution and extra vigilance.
Some patients may have abnormal baseline values; specialist will advise if so. e.g. some patients with cirrhosis will have pre-existing pancytopenia and lupus patients may have leucopenia because of lymphopenia.

Laboratory Result	**Action**
WBC less than 3 x 10^9/l	Withhold and discuss with Rheumatology. Bone marrow suppression can occur abruptly.
Neutrophils less than 1.6 x 10^9/l	Withhold and discuss with Rheumatology. Bone marrow suppression can occur abruptly.
Platelets less than 140 x 10^9/l	Withhold and discuss with Rheumatology. Bone marrow suppression can occur abruptly.
MCV greater than 110 fl	Withhold and discuss with Rheumatology. May be able to continue if chronic increase. Check folate and B_{12}. If level low, start appropriate

	supplementation.
Creatinine increase greater than 30% over 12 months and/or calculated GFR less than 60ml/min/1.73m^2	Discuss with Rheumatology as dose adjustments or further investigations may be required.
Adult liver function ALT greater than 2.5 x upper limit of normal or over 100U/l	Withhold and discuss with adult rheumatology.

CONTRAINDICATIONS AND PRECAUTIONS

Contraindication	**Action**
G6PD deficiency or porphyria	Do not use - may cause haemolysis
Severe renal failure (GFR less than 10 ml/min)	Do not use
Sulphonamide or salicylate hypersensitivity	Do not use

Precautions	**Action**
Renal impairment	May cause significant crystalluria. If mild or moderate renal impairment: increase fluid intake and use with caution. Stop if GFR less than 10 ml/min.
Chickenpox or active skin lesions in shingles	Withhold sulfasalazine and inform specialist. For those with exposure to chickenpox or shingles and no history of infection/vaccination, passive immunisation with VZIG should be carried out.
Elective surgery	Sulfasalazine can be continued (caution for early detection of infection and complications).

SIDE EFFECTS AND ACTION TO BE TAKEN

Side Effects	**Action**
Acute widespread skin rash	Withhold and seek urgent specialist advice. If it presents with unexplained fever, FBC is required.
Oral ulceration	Withhold, investigate alternative cause. If it settles promptly, re-challenge with a lower dose. If symptoms recur stop and contact specialist. If this presents with unexplained fever, FBC is required.
Abnormal bruising or severe sore throat	Withhold and check FBC.
Nausea, vomiting, dizziness, headache	Often transient. If possible, continue with use of anti-emetic or reduce dose by 500 mg.
Diarrhoea	Reduce dose by 500 mg. If persistent, consult rheumatologist.
Soft contact lenses	Can cause staining.
Discolouration of urine	Reassure patient that yellow/brown discolouration is expected.

NOTABLE DRUG INTERACTIONS
(Please note that this is not an extensive list. Refer to BNF and SPC for any specific drug interaction queries)

Drug	Interaction
Digoxin	Sulfasalazine may reduce digoxin absorption, monitor therapeutic levels if appropriate
Oral hypoglycaemic agents	Sulfasalazine can increase the risk of hypoglycaemia, please monitor.
Mercaptopurine	Sulfasalazine may produce additive toxic effects on bone marrow.
Azathioprine	Sulfasalazine may increase the risk of leucopenia.
Methotrexate	Sulfasalazine may increase the risk of nausea, however commonly co-prescribed.

FAMILY PLANNING

Follow advice from secondary care

VACCINATIONS

Check Department of Health green book guidance and if not covered, discuss with secondary care

BACK-UP INFORMATION AND ADVICE

Contact Details	Oxford University Hospitals NHS Foundation Trust	
Rheumatology	Rheumatology Helpline (Adult and Paediatric) Monday to Friday 8am - 2pm (answerphone service) Closed on weekends and bank holidays Rheumatology Registrar/Consultant on call Monday to Friday 9am-8pm Weekends and bank holidays 9am-5pm	Tel: 01865 737656 Email: Rheumatology.NOC@nhs.net OUH switchboard number: 0300 304 7777, ask for Rheumatology on call
Medicines Information	Tel: 01865 221505 (Monday to Friday 9am - 5pm) Email: Medicines.information@ouh.nhs.uk	

REFERENCES

1. Ledingham J, Gullick N, Irving K, Gorodkin R, Aris M, Burke J, Gordon P, Christidis D, Galloway S, Hayes E, Jeffries A (2017). BSR and BHPR guideline for the prescription and monitoring of non-biologic disease-modifying anti-rheumatic drugs. Rheumatology. 1;56(6):865-8.
2. Summary of Product Characteristics. Salazopyrin tablets (Pfizer). Last updated on eMC: 02/2014 (Accessed via www.medicines.org.uk on 26/07/19)
3. BNF online (Accessed via www.evidence.nhs.uk on 26/07/19)
4. Shared Care Protocols (SCP) Best Practice Guidelines. March 2019. Available from: https://clinox.info/clinical-support/local-pathways-and-guidelines/Prescribing/Shared%20Care%20Protocol%20Best%20Practice%20Guidelines.pdf
5. NHS England. Responsibility for Prescribing Between Primary and Secondary/Tertiary Care. (2018). Available from: https://www.england.nhs.uk/wp-content/uploads/2018/03/responsibility-prescribing-between-primary-secondary-care-v2.pdf