# Shared care guideline for sulfasalazine in adults

## General Principles

This agreement outlines suggested ways in which the responsibilities for managing the prescribing of the drug treatment and clinical indication listed in the table below can be shared between the Specialist and General Practitioner (GP). The Specialist(s) is responsible for initiating treatment, prescribing the drug and monitoring of therapy until such a time as when the patient is deemed to be stable. If GPs are not confident to undertake these roles, then they are under no obligation to do so. In such an event, the total clinical responsibility for the patient for the diagnosed condition remains with the Specialist.
**If a Specialist asks the GP to prescribe this drug, the GP should reply to this request as soon as practicable**.
Sharing of care assumes communication between the Specialist, the GP and the patient. The intention to undertake shared care should be explained to the patient by the doctor initiating treatment. It is important that patients are consulted about treatment and are in agreement with it. Patients on sulfasalazine are under regular follow-up, which provides an opportunity to discuss drug therapy.

**The doctor who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use.**

## Indications

Sulfasalazine tablets are licensed for the:
a) Induction and maintenance of remission of ulcerative colitis; treatment of active Crohn's Disease.
b) Treatment of rheumatoid arthritis, psoriatic arthritis and reactive arthritis, which has failed to respond to non-steroidal anti-inflammatory drugs (NSAIDs).
Sulfasalazine is a combination of 5-aminosalicylic acid (5-ASA) and sulfapyridine; sulfapyridine acts as a carrier to the colonic site of action where bacteria cleave the drug.

## Presentation/Dose/Administration

Sulfasalazine is available as orally administered 500mg enteric coated tablets, 50mg/ml suspension and as 500mg rectally administered suppositories.

**Rheumatoid arthritis, psoriatic arthritis and reactive arthritis:**
Starting dose is 500mg daily as enteric-coated tablets increased by 500mg at intervals of one week to a maximum of 2-3g daily in divided doses. Enteric coated preparations (Salazopyrine-EN) are preferred as licensed and better tolerated.

**Gastroenterology**
Rarely used. Induction dose may be up to 1-2g four times a day until remission, reducing to maintenance dose, typically 2g per day, continued indefinitely as discontinuation, even several years after an acute attack, is associated with a four-fold increase in risk of relapse.

Sulfasalazine tablets should be swallowed whole and not chewed; indigestion remedies should not be taken at the same time of day as sulfasalazine.
Sulfasalazine Suspension (250mg/5ml) may provide a more flexible dosage form.

| Responsibility for monitoring sulfasalazine | | | |
|---|---|---|---|
| **MONITORING** | **RESPONSIBILITY** | **CONDITIONS** | **TESTS** |
| Pre-treatment | Hospital team | All | FBC, and LFTs.<br>**Results to be known before drug is commenced** |
| Initiation to stabilisation | Hospital team | All | FBC, LFTs fortnightly for the first 3 months of therapy, then monthly for the next **three months**. |
| Ongoing | GP | All | FBC, LFTs once every **three months (following initial 6 months of fortnightly/monthly monitoring)**.<br>If dose and monitoring is **stable after one year**, blood monitoring can be reduced to **every six months. No monitoring required after two years on drug.**<br>Ask about rash and oral ulceration at each visit. |

| Criteria for managing events & symptoms occurring during sulfasalazine therapy in primary care | | |
|---|---|---|
| **LABORATORY EVENTS** | **VALUES** | **ACTION** |
| Elevation in liver enzymes (AST, ALT) NOT ALK PHOS | >2x Normal | **Stop**, repeat LFTs, (concurrent NSAIDs in rheumatoid arthritis may cause this). Discuss with specialist. |
| MCV | > 110 fl | Check folate, serum B12 and TSH, if normal, **no action**. If abnormal, treat any underlying abnormality. If normal, discuss with specialist team. |
| WBC | < 3.5 x$10^9$/L | **Stop**, repeat FBC in 1 or 2 weeks. Discuss with specialist |
| Neutrophils | < 2.0 x $10^9$/L | |
| Platelets | < 150 x $10^9$/L | |
| Sequential falls in WBC or neutrophils | > 10% on 3 occasions | **Stop,** seek advice |
| Sequential falls in Platelets | > 10% on 3 occasions | **Stop**, unless falls are from high level e.g. 600, 500,400 x $10^9$/L, which are a response to treatment |

| **SYMPTOMS** | **MANAGEMENT** |
|---|---|
| Abnormal bruising/ bleeding or severe sore throat | **Check FBC** immediately and withhold sulfasalazine until results available. Follow relevant course of action from table above Discuss with specialist team if necessary. |
| Dyspepsia, nausea, dizziness, headache | **Reduce dose**. Take with food; try anti emetic. Stop if persistent or unacceptable. Enteric coated tablets may be tried if patient is taking plain tablets |
| Oral ulceration, stomatitis | Withhold until discussed with Specialist Team. |
| Unexplained acute widespread rash | Often non-specific erythematous, dry and itchy. **Stop drug** and Seek for advice (dermatology) if severe. Consider using 1% hydrocortisone and /or antihistamines. Consider other causes of rash |
| Fever / Flu like illness | Discuss with patient |
| Discoloration of urine and/ or soft contact lenses | Reassure patient |

## Key adverse drug reactions (ADRs)

- Hypersensitivity reactions (fever, pruritis, photosensitisation, exfoliative dermatitis, anaphylaxis).
- Blood disorders (leucopenia, neutropenia, thrombocytopenia, stomatitis, megaloblastic anaemia).
- Gastrointestinal disturbances (nausea, vomiting, diarrhoea, abdominal pain).
- May colour the urine orange and stain certain soft contact lenses.
- Reversible male subfertility.
- Skin reactions (rash, dry skin, alopecia, pruritus, Stevens-Johnson syndrome).

**Patients should be advised to report any mouth ulcers, sore throat, fever, epistaxis, unexpected bruising or bleeding and any unexpected illness or infection and should be seen URGENTLY for a full blood count, liver function tests, urea and electrolytes.**

**This document only lists the key important ADRs. For comprehensive information on adverse drug reactions, cautions, contra-indications and interactions, please refer to the current British National Formulary and Summary of Product Characteristics.**

## Contraindications & Precautions

**Contraindications**

- Patients under 2 years.
- Patients with a known hypersensitivity to sulfasalazine, its metabolites or any of the excipients (see SPC) as well as sulfonamides or salicylates.
- Patients with porphyria

**Precautions**

- Known or suspected G-6PD deficiency.
- Slow acetylator phenotype.
- Moderate renal or severe liver impairment.
- **Pregnancy and breastfeeding**. If sulfasalazine is used in pregnancy, the dose should not exceed 2g/day and folate supplements should be given. Sulfasalazine can be prescribed to men of childbearing potential although there may be transient reversible oligospermia. However some rheumatologists advise that men should stop taking sulfasalazine three months before trying to father a child because of possible sperm abnormalities. Taking sulfasalazine whilst breast feeding is thought to be safe for healthy infants.
- Contact lens wearers- may stain lens due to discolouration of body fluids (yellow/orange)
- **Vaccinations**: live vaccines should be AVOIDED (i.e. oral polio, MMR, BCG and yellow fever and oral typhoid). Passive immunization should be carried out using Varicella zoster immunoglobulin (VZIG) in non-immune patients exposed to active chickenpox or shingles. **Annual flu and pneumococcal vaccination is recommended.**

## Drug interactions

- Increase risk of marrow toxicity with azathioprine or 6-mercaptopurine.
- May reduce absorption of digoxin.
- Hypoglycemia has occurred in patients receiving sulfonamides. Patients receiving sulfasalazine and hypoglycemic agents should be closely monitored.

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

## Consultant /Specialist responsibilities

- Identify those patients who will benefit from treatment with sulfasalazine.
- Undertake pre-treatment monitoring of FBC, U&Es, LFTs, BP and body weight.
- Ensure that the patient/carer is an informed recipient in therapy, provide necessary education on their treatment regimen and any monitoring or follow up that is required and issue local patient information leaflets.
- Provide patients with a patient held record book; undertake pre-treatment monitoring of FBC, LFTs, U&Es, creatinine, in the record book.
- Initiate sulfasalazine and stabilise patient on a therapeutic dose of sulfasalazine before referral to the GP.
- Send a letter to the GP requesting a formal agreement to share care and transfer care to GP only after receipt of a completed and signed agreement from the GP.
- Ensure prior dissemination of sufficient information to patient's GP and other carers.
- Inform the GP that sulfasalazine has been commenced, the dose and future plans for dose changes in keeping with the shared care agreement.
- Clinical and laboratory supervision of the patient by blood monitoring and routine clinic follow-up on a regular basis.
- Send a letter/results notification to the GP after each clinic attendance ensuring current dose, most recent blood results and frequency of monitoring are stated.
- Where the GP is not performing the phlebotomy, the blood test form MUST be annotated to request that blood results are also copied to the GP.
- Evaluation of any reported adverse effects by GP or patient.
- Advise GP on review, duration or discontinuation of treatment where necessary. Where urgent action is required following tests the hospital team will telephone the patient and inform GP.
- Inform GP of patients who do not attend clinic appointments.
- Counsel the patient on contraception and what to do if pregnancy occurs. Document in the notes.
- Provide access to backup advice and support facilities at all times.
  Ensure, where timing is appropriate, that the patient has received a flu vaccine prior to commencing treatment that is likely to cause immunosuppression. Document this in the patient notes and inform the GP it has been given.

## GP responsibilities

- Reinforce the patient's understanding of the nature, effect and potential side effects of the drug before prescribing it as part of the shared care programme and contact the Specialist for clarification where appropriate.
- Prescribe sulfasalazine at the dose recommended by the hospital Specialist once the patient is stabilised on treatment and side effects have been excluded as far as possible by the hospital. Any decision to alter treatment should usually be taken by the hospital Specialist.
- Monitor blood results (FBC, LFT U&E), BP and body weight in line with recommendations in this document.
- Check for possible drug interactions when newly prescribing or stopping concurrent medication.
- Monitor patient's overall health and well-being.
- Report any adverse events to the consultant/Specialist, where appropriate.
- Report any adverse events to the CSM, where appropriate.
- Stop Sulfasalazine if serious adverse drug effect/reaction and contact Specialist team.
- Help in monitoring the progression of disease.

## CCG Responsibilities

- To provide feedback to trusts via South West Essex Medicines Management Committee.
- To support GPs to make the decision whether or not to accept clinical responsibility for prescribing.
- To support trusts in resolving issues that may arise as a result of shared care.

## Patient/ Carer responsibilities

- Report any adverse effects to their GP and/or Specialist
- Ensure they have a clear understanding of their treatment.
- Report any changes in disease symptoms to GP and/or Specialist.
- Alert GP and/or Specialist of any changes of circumstance which could affect management of disease e.g. plans for pregnancy.
- Take/ administer the medication as prescribed.
- Undertake any monitoring as requested by the GP and/or Specialist.

## 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/ Gastroenterologist out-of-hours | 01268 524900 |
| Rheumatology | |
| | |
| | |
| Gastroenterology | |
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| Document Control | |
|---|---|
| **Version:** | Draft v0.12 |
| Shared Care Guidelines are also available electronically via: to insert website link after approval | |
| **Approved by:** | South West Essex Medicines Management Committee |
| **Date of issue** | November 2016 |
| **Next Review Date:** | November 2018 |

SULFASALAZINE PATIENT INFORMATION LEAFLET

This form will be completed by the Hospital Specialist and given to the patient once stabilised and a fax back has been received from the GP accepting the transfer of responsibility to primary care.

You have been prescribed **Sulfasalazine** tablets

for.........................................................

This **treatment** will continue until stopped by your doctor

Your GP has been given all the necessary information regarding your condition and treatment.

The date for your next hospital appointment is ................................

The success and safety of your treatment also **depends on you.**

- You will have been given information, which tells you about your treatment and condition.
- Avoid excessive alcohol consumption.
- Do not take any over-the-counter medicines, herbal, complementary or alternative medicines and treatments without getting advice from your doctor.
- Avoid contact with chicken pox or shingles.
- Avoid driving and hazardous work until you have learned how Sulfasalazine affects you, as this drug can occasionally cause dizziness.
- Sulfasalazine can increase the skin's sensitivity to sunlight and the risk of developing some forms of skin cancer. Use sun block and wear a hat and light clothing when out in strong sunshine.
- Do **not** use sunlamps or sun beds.
- You will need to have blood tests at least every three months .
- Your GP/ Practice Nurse needs to see you every

.....................................................................months.

*If you experience any of the following side-effects, urgently see your GP:*

- Mouth ulcer, sore throat, sore mouth.
- Feeling generally unwell.
- Feeling sick, upset stomach, diarrhoea.
- Rashes – new rash or severe itching anywhere on the body.

**Stop treatment and get immediate medical advice if you develop:**

- An infection with fever and or chills or a severe sore throat.
- Sudden shortness of breath (breathlessness).
- The whites of your eyes or skin become yellow.
- Severe itching of the skin.
- New unexplained bleeding or bruising.
- Severe and continuing abdominal pain or diarrhoea or vomiting.

- If you think you are pregnant contact the IBD nurse or Specialist.
- If you have any concerns about your treatment contact your GP or the hospital.

The direct-dial telephone numbers for the department are...........................................

GP SULFASALAZINE SHARED MONITORING AGREEMENT 1ST LETTER

Name of GP ………………………………………………………………

Address ………………………………………………………

Drop code of GP……………………………………………………………………

Dear Dr
Re: Patient's name……………………………………………
Date of birth………………………………………………
Hospital number…………………………………………
NHS number…………………………………………………

I have seen this patient and believe that he/she is suitable for treatment with Sulfasalazine for:

………………………………………………………………………………………………………………………………………………

I have initiated the patient on Sulfasalazine 500mg EC / non- EC tablets (delete as applicable)

Take………………… tablets (…………mg) …………………… times a day

I will be prescribing and monitoring this patient at our clinic until such a time that the patient is deemed stable, which is likely to be in the region of …………………… months.

I would like to seek your agreement to take over the prescribing and monitoring of this patient's treatment after this stabilisation period as per agreed shared care guideline which is enclosed for your information.

Please complete, sign and fax back the form below to stated safe haven fax.

I thank you in anticipation.

Yours sincerely

Dr
(Consultant)

SULFASALAZINE SHARED CARE GP/PRACTICE FAX BACK FORM

Patient name………………………………………………… Hospital number………………………………………

Dear GP
You will take over monitoring of the patient including responsibility for organising blood tests and other tests required in accordance with the shared care guidance (enclosed). You will be responsible for reviewing underlying disease including complications and efficacy of therapy.

PLEASE COMPLETE, SIGN AND FAX BACK TO CLINIC/HOSPITAL: ………………………………………………………………

I agree to take over the prescribing and monitoring of this medication and disease.

Signed by (GP)………………………………………………………………

Name of GP ……………………………………………………………

Address ………………………………………………………

or

I am not willing to undertake shared care for this patient because…………………………………………………………………………………………………………………………………………………
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…………………………………………………………………………………………………………………………………………………………

Signed by (GP)………………………………………………………………

Name of GP ………………………………………………………………

Address ………………………………………………………………………

Please return to ………………………………………………………………………………………………………………………………

Or Faxback to:…………………………………………………………

**References:**

1. Cambridge University Hospitals NHS Foundation Trust. Sulfasalazine- in rheumatic diseases Approved: June 2015, review date June 2016.
2. City & Hackney NHSnd Homerton University Hospital: Sulfasalazine shared care guideline. Approved January 2005.
3. BNF 70
4. Sulfasalazine (Salazopyrin-EN®; Pfizer) Summary of Product Characteristics accessed on Electronic Medicines Compendium (eMC). Last Updated on eMC 25 February 2014. Last accessed November 17, 2016.
5. NICE Clinical Knowledge Summaries: DMARDs (https://cks.nice.org.uk/dmards). Last accessed November 17, 2016.