SHARED CARE AND NEAR PATIENT TESTING

Drug: PENICILLAMINE  
Protocol number CV 17

Indication: RHEUMATOID ARTHRITIS

General guidance
This protocol sets out details for the shared care of patients taking penicillamine and should be read in conjunction with the General Guidelines for Shared Care. Sharing of care requires communication between the specialist, GP and patient. The intention to share care should be explained to the patient by the doctor initiating treatment. The doctor who prescribes the medication legally assumes responsibility for the drug and the consequences of its use. The prescriber has a duty to keep themselves informed about the medicines they prescribe, their appropriateness, effectiveness and cost. They should also keep up to date with the relevant guidance on the use of the medicines and on the management of the patient’s condition.

Background
Penicillamine is an effective second-line drug used in the treatment of rheumatoid arthritis.

Responsibilities

A. Consultant responsibilities

1. When treatment is initiated send Shared Care/ Near Patient Testing request form with Shared Care Protocol to GP.
2. Baseline and continued monitoring until patient is stabilised of biochemical parameters (see page 2) (If Near Patient Testing not agreed then monitoring will be continued after patient is stabilised)
3. Initiate therapy following full discussion with the patient of benefits and risks
4. Provide patient with information leaflet/monitoring booklet and inform patient to contact their GP immediately if any of the following occur: rash, mouth ulcers, bruises, bleeding, fever, sore throat, jaundice or other infection.
5. To counsel female patients to take contraceptive precautions during treatment and for 6 months after treatment has ceased (refer to special recommendations). Record in GP referral letter that contraceptive advice has been given.
6. Titrate penicillamine dose according to schedule below, adjusting dose as appropriate and undertake monitoring of clinical response and side effects.
7. When a GP positive response to SC / NPT has been received and patient has been stabilized send a letter to GP “handing over” the Shared Care / Near Patient Testing of the patient to the GP.
8. Respond to any request from GP to review the patient due to adverse effects of therapy.
9. Advise the GP on continuing or stopping penicillamine therapy following medical review of the patient and associated drug therapy.
10. If Near Patient Testing not agreed notify GP if patient is failing to attend for appropriate monitoring and advise GP on appropriate action

B. General practitioner responsibilities

1. Within one week of receipt return the completed Shared Care/Near Patient Testing request form to indicate whether or not willing to undertake Shared Care/Near Patient Testing.
2. Prescribe **penicillamine** as part of the shared care agreement.
3. Monitor the general health of the patient.
4. Where Near Patient Testing is agreed monitor the parameters indicated (see page 2), document results in the patient’s monitoring booklet and report to and seek advice from the consultant on any aspect of patient care which is of concern.
5. Report adverse effects of therapy to the consultant and the Medicines and Health Care products Regulatory Agency (MHRA).
6. Recommend that patient receives pneumococcal vaccination and yearly influenza vaccination as well as Zostavax as part of the national shingles immunisation programme.
7. If Near Patient Testing not agreed, to act on advice provided by the Consultant if patient does not attend for appropriate monitoring.

C. Patient responsibilities

1. Consent to treatment with penicillamine.
2. Attend regular appointments with specialist centre and GP.
3. Report any side effects to the specialist or GP whilst taking penicillamine.
4. Provide monitoring booklet to be updated.

**Dosage Regimen**

Typical dose: 250-500mg per day in divided doses, by 125mg increments every 4 weeks to 500mg (250mg bd) daily if tolerated. Patients are treated for up to 6 months before deciding on efficacy.

**Monitoring**

**Before treatment**

FBC, Creatinine and Electrolytes, LFTs, urinalysis

**During treatment**

FBC & urinalysis every 2 weeks until dose stable for 3 months then monthly. Patient should be asked about the presence of any skin rash or oral ulceration at each visit.
**Following changes in dose**
Repeat FBC and urinalysis 2 weeks after dose change and then monthly

<table>
<thead>
<tr>
<th>Withhold penicillamine and discuss with a specialist if any of the following occurs:</th>
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<tbody>
<tr>
<td>WBC &lt; 4.0 x 10⁹/L</td>
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<tr>
<td>Neutrophils &lt; 1.5 x 10⁹/L</td>
</tr>
<tr>
<td>Platelets &lt; 150 x 10⁹/L</td>
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<tr>
<td>Severe rash or oral ulceration (late rashes are more serious than early ones)</td>
</tr>
<tr>
<td>Abnormal bruising or severe sore throat (check FBC immediately)</td>
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</tbody>
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* patients may continue treatment if WBC is 3.0 - 4.0 x 10⁹/L if the neutrophil count is above 1.5 x 10⁹/L

If proteinuria is 2+ or more - check MSU: If evidence of infection, treat appropriately. If sterile and 2+proteinuria or more persists, withhold until discussed with specialist team.

Please note that in addition to absolute values for haematological indices a rapid fall or a consistent downward trend in any value should prompt caution and extra vigilance

**Adverse effects**

**Mucocutaneous:** Pruritis, skin rash and mouth ulcers may occur, especially early in treatment when the dose is being increased. These symptoms usually respond to a temporary reduction in dose or a brief withdrawal of treatment.

**Haematological:** Reduced white cell or platelet count (see above).
Treatment may be restarted at a lower dose when the count returns to normal. Stop drug if problems recur.

**Gastrointestinal:** Nausea, anorexia and taste disturbances are common early in treatment and usually settle spontaneously. Taking medication before bed may reduce nausea.

**Renal:** Nephrotic syndrome, Goodpastures syndrome.

**Notable drug interactions (refer to BNF & SPC)**
Antacids, iron or zinc supplements – reduce absorption and should not be taken within 2 hours of penicillamine.
Antipsychotic drugs - may increase risk of agranulocytosis.
Digoxin - levels of digoxin may be reduced by concurrent use of penicillamine.
Special Recommendations

Avoid use in pregnancy or lactation

Contact Details

If you suspect an adverse reaction has occurred please stop the drug and contact the rheumatology department at the University Hospital of Wales.

The contact numbers for the rheumatology department are 02920 742627, 02920 742626 and 02920 743184. The fax number is 02920 745017. The rheumatology nurses help line number is 02920 748191.

Date of next review December 2021