

Department of Rheumatology

Penicillamine
Oxford and Berkshire Regional Rheumatology Guidelines

To be read in conjunction with the shared care agreement between Oxfordshire and Berkshire Primary Care Trusts and relevant Rheumatology Departments.

Background for use

Penicillamine is a disease modifying anti rheumatic drug used in rheumatoid arthritis. Penicillamine should only be initiated on the recommendation of a Rheumatologist.

Dosage

- Start Penicillamine 125 mg daily, increasing by 125 mg every 4 weeks to 500mg daily in divided doses.
- If no response after a further 3 months, increase by 125 mg every 4 weeks to 750 mg daily in divided doses. Maximum dose 1gram daily may be considered.
- If no response after 3 months on the maximum dose stop treatment

Pre treatment assessment by Rheumatologist

FBC, U&E's CRP, ESR creatinine and urinalysis for protein assessment

Monitoring

Urinalysis with blood tests

- FBC, U&Es, ESR, CRP and LFT's every two weeks until on stable dose for 3 months then monthly
- Patients should be asked about rash or oral ulceration at each visit.

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.

WBC < 3.5 X 10 ⁹ /l	Withhold until discussed with specialist team.
Neutophils < 2 X 10 ⁹ /l	Withhold until discussed with specialist team.
Platelets < 150 X 10 ⁹ /l	Withhold until discussed with specialist team.
Proteinuria 2+	Check MSU: if evidence of infection treat appropriately. If sterile and 2+ proteinuria or more persists withhold until discussed with specialist team.
Haematuria >1+ on >1 occasion	Withhold until discussed with specialist team.
Rash or mouth	Withhold and look for alternative cause. Once

ulcers	symptoms settle rechallenge with a lower dose Pemphigus like rashes occur late in treatment and are an absolute indication for stopping treatment
Abnormal bruising or sore throat	Withhold until FBC result available
Alteration in taste /nausea	Common, and tends to resolve spontaneously

Note:

- Pnuemovax and annual flu vaccinations are recommended

Contra Indications and Precautions

Immunization with LIVE vaccines	Patients receiving penicillamine must NOT receive immunization with LIVE vaccines. Inactivated polio and typhoid are available.
Chickenpox / shingles	Patients suffering from chickenpox or active skin lesions of shingles; withhold penicillamine and inform rheumatologist. Passive immunization using VZIG should be carried out.
Pregnancy and breast feeding	For men and women contraceptive advice should be given as both pregnancy and breast feeding is contraindicated.
Hypersensitivity to penicillin	May cause rare reactions to penicillamine

Notable Drug Interactions (refer to BNF and SPC)

- Iron therapy, antacids and zinc supplements: should not be taken within at least 2 hours of Penicillamine as they interfere with absorption
- Concurrent use of Gold, anti-malarials, nephrotoxic and cytotoxic drugs: can cause haematological and renal adverse effects
- Anti-psychotic drugs: may increase risk of agranulocytosis
- Digoxin: levels of digoxin can be reduced by concurrent use of penicillamine

Contact Telephone Numbers

Heatherwood and Wexham Park Hospital	01753 633000 Bleep Rheumatology registrar
Clinical Nurse Specialists in Rheumatology	Wexham Park 01753 633166