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DMARD MONITORING GUIDELINES – Reviewed 23.01.15

RNHRD GP TELEPHONE ADVICE LINE (from 11.00am to 1.00 pm daily): 07747 630875

The current BSR DMARD and Denosumab Monitoring Guidelines are now available via the following link: http://www.rnhrd.nhs.uk/our-services/for-clinicians

D-Penicillamine

A. Indications: (Licensed) RA and Wilson's disease
BAD: Dermatologists generally do not use this drug.

B. Dose: Grade of evidence: A
Typical regimen: 125–250 mg/day increasing by 125 mg every 4 weeks to 500 mg/day [1–5]. If no response in 3 months consider an increase in dose to 750 mg/day.
Maximum dose is 1–1.5 g/day [4, 5] but there appears to be no clear advantage in using doses greater than 500 mg/day [1, 6].

Inadequate response to 750 mg/day should prompt a review of the patient's DMARD therapy [2, 4].

C. Route of administration: Oral

D. Time to response: 3–6 months [3–7]

E. Caution: Grade of evidence: C
Renal impairment, concomitant nephrotoxic drugs including gold treatment [5].

F. Contraindications: Grade of evidence: C
(1) Systemic lupus erythematosus.
(2) Renal impairment (moderate to severe) [4, 5].
(3) Pregnancy and lactation: Avoid [4, 5].

G. Notable drug interactions:
(1) Antacids, iron or zinc supplements: Do not give within 2h as D-penicillamine absorption is reduced.
(2) Antipsychotic drugs: May increase risk of agranulocytosis.
(3) Digoxin: Levels of digoxin can be reduced by concurrent use of D-Penicillamine.

Rheumatology

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H. Monitoring schedule: Grade of evidence C

	BSR
(a) Pre-treatment assessment	FBC, U&E, creatinine and urinary dipstick for protein.
(b) Monitoring	FBC and urinalysis every 2 weeks until dose stable for 3 months, and then monthly [2,3]. Patient should be asked about the presence of rash or oral ulceration at each visit.

I. Actions to be taken: Grade of evidence C

WBC < 3.5 x 10^9/l [2,7]	Withhold until discussed with specialist team
Neutrophils < 2.0 x 10^9/l [2,7]	Withhold until discussed with specialist team
Platelets < 150 x 10^9/l [2,7]	Withhold until discussed with specialist team
If proteinuria is 2+ or more [2,7]	Check MSSU; if evidence of infection treat appropriately. If sterile and 2+ proteinuria or more persists, withhold until discussed with specialist team.
Severe rash or oral ulceration [2,7]. Late rashes are more serious than early ones [4,5].	Withhold until discussed with specialist team.
Nausea	Taking medication before bed may reduce nausea.
Alteration of taste [2,7]	Continue treatment (may settle spontaneously).
Abnormal bruising or severe sore throat [2,7]	Check FBC immediately and withhold until results are available.

References

D-Penicillamine

1 Suarez-Almazor ME, Spooner C, Belseck E. Penicillamine for treating rheumatoid arthritis. Cochrane Database Syst Rev 2000;4:CD001460.
2 British Society for Rheumatology. National guidelines for the monitoring of second line drugs, 2000. www.rheumatology.org.uk/
3 American College of Rheumatology Subcommittee on Rheumatoid Arthritis

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Guidelines. Guidelines for the management of rheumatoid arthritis: 2002 update. Arthritis Rheum 2002;46:328–46.
4 British National Formulary 48. Pharmaceutical Press, 2004.
5 Summary of product characteristics from Alliance Pharmaceuticals as makers of Distamine. 26 October 2004.
6 Dixon AJ, Davies J, Dormandy TL et al. Synthetic D(-)penicillamine in rheumatoid arthritis. Double-blind controlled study of a high and low dosage regimen. Ann Rheum Dis 1975;34:416–21.
7 White CE, Cooper RG. Prescribing and monitoring of disease-modifying antirheumatic drugs (DMARDs) for inflammatory arthritis. In: collected reports on the rheumatic diseases 2005. Arthritis Research Campaign. Available at: http://www.arc.org.uk/arthinfo/documents/6508.pdf