Cardiff & Vale (C&V) UHB Corporate Medicines Management Group (c MMG)

SHARED CARE AND NEAR PATIENT TESTING

Drug: CICLOSPORIN (NEORAL) **Protocol number CV 29**

Indication: RHEUMATOID ARTHRITIS

General Guidance

This protocol sets out details for the shared care of patients taking **ciclosporin** 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

Ciclosporin is used as a second-line agent in rheumatoid arthritis or psoriatic arthritis and takes 1-2 months to work. Ciclosporin should be avoided in renal disease or hypertension. Maintain patient on specific brand-do not switch.

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, haematological and clinical parameters (see page 2)
3. Initiate therapy following full discussion with the patient of benefits and risks
4. Titrate ciclosporin dose according to schedule below, adjusting dose as appropriate and undertake monitoring of clinical response and side effects.
5. When a GP positive response to SC / NPT has been received and patient has been stabilised send a letter to GP "handing over" the Shared Care / Near Patient Testing of the patient to the GP.
6. Respond to any request from GP to review the patient due to adverse effects of therapy.
7. Advise the GP on continuing or stopping ciclosporin therapy following medical review of the patient and associated drug therapy
8. 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 **ciclosporin** as part of the shared care/near patient testing agreement
3. Monitor the general health of the patient.
3. 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.
4. Report adverse effects of therapy to the consultant and the Medicines and Health Care products Regulatory Agency (MHRA.
5. Recommend that patient receives pneumococcal vaccination and annual influenza vaccine.
6. 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 ciclosporin.
2. Attend regular appointments with specialist centre and GP.
3. Report any side effects to the specialist or GP whilst taking ciclosporin.
4. Provide monitoring booklet to be updated.

Dosage Regimen

RA starting dose: 2.5mg/kg/day (less in obese patients): in 2 divided doses for 6 weeks. Dose may be increased at 2 – 4 weeks intervals by 25mg until clinically effective or the maximum dose of 4mg/kg/day is reached.

Monitoring

<u>Before treatment</u>

FBC including differential white cell count, creatinine and electrolytes, eGFR, LFTs & fasting lipids.

Blood pressure – to be ≤ 140/90 before treatment on 2 measurements 2 weeks apart. If greater than this treat hypertension before starting ciclosporin.

Urine protein/creatinine ratio

<u>During treatment</u>

FBC and LFTS every month until dose and trend stable for 3 months then every 3 months.

Creatinine and electrolytes every 2 weeks until dose and trend stable for 3 months and then monthly.

Extra vigilance is required if co-prescribing a NSAID (includes selective inhibitors of cyclo-oxygenase-2).

Fasting lipids should be checked annually.

BP should be checked every time patient attends monitoring clinic and should be maintained ≤ 140/90.

Blood ciclosporin levels are not required routinely but may be useful if non-compliance or toxicity is suspected-take blood 12 hours after a dose (i.e. at trough level).

Following changes in dose

Repeat FBC, LFT and creatinine and electrolytes, 2 weeks after dose change

Withold ciclosporin and discuss with specialist if any of the following occurs:

WBC	$< 4.0 \times 10^9$/L
Neutrophils	$< 1.5 \times 10^9$/L
Platelets	$< 150 \times 10^9$/L
Creatinine	>30% rise above baseline (see below for details)

Potassium rises to above the reference range
Significant rise in fasting lipids
AST/ALT or alkaline phosphatase > 2 x upper limit of reference range
Abnormal bruising (check FBC immediately)

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

Patient monitoring record booklets will be provided by the hospital.

Adverse effects

Impaired renal function:

If creatinine increases by 30% above baseline, repeat in 1 week and if still > 30% above baseline reduce dose by 50mg decrements until normal.
If creatinine increases by 50%, reduce dose by half.
If creatinine remains elevated, **STOP** cyclosporin.

Hypertension: if BP > 140/90mmHg on 2 consecutive readings 2 weeks apart, treat with antihypertensive agents before stopping the ciclosporin (note interactions with several anti-hypertensives).If BP cannot be controlled, stop ciclosporin and obtain BP control before restarting drug.

Other: Hypertrichosis, tremor, hepatic dysfunction, gum hypertrophy, GI upset (usually transient), burning sensation of hands/feet, headache, rash, hyperkalaemia, hyperuricaemia, hypomagnesaemia.

Notable drug interactions (refer to BNF & SPC)

Diclofenac – reduce the dose of diclofenac by 50%

Colchicine – avoid concomitant use

Simvastatin – maximum dose 10mg/day

Nifedipine – use with caution

Digoxin – may increase serum levels of digoxin

St John's Wort – decreases ciclosporin activity

Avoid other nephrotoxic drugs, eg trimethoprim, aminoglycosides, ciprofloxacin.

ACE inhibitors and potassium sparing diuretics will cause increased risk of hyperkalaemia.

For drug information please contact one of the rheumatology pharmacists or your local Medicines Information Dept.

Special recommendations - patients should be advised not to take ciclosporin with grapefruit juice as this may increase levels.

Live vaccines should be avoided in patients taking ciclosporin

In patients receiving ciclosporin exposed to chickenpox or shingles, passive immunization should be carried out using varicella zoster immunoglobulin (VZIG).

Ciclosporin is not teratogenic in animals. However there are no adequate and well controlled studies in pregnant women, therefore ciclosporin should be used during pregnancy only if the potential benefit justifies the potential risk to the foetus. Ciclosporin passes into breast milk. Mothers receiving treatment with ciclosporin should not therefore breast-feed their infants.

Contact information

If you suspect an adverse reaction has occurred please stop the drug and contact the rheumatology department at the University Hospital of Wales – 029 20 742346, 742627, 743184, 743575, 742626 or after 5pm by rheumatology radiopage through the switchboard on 02920 747747.For drug information queries, please contact one of the rheumatology pharmacists on 02920 746665.

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