

**Rheumatology Shared Care Guidelines**

# Ciclosporin

## Information sheet for GPs

Ciclosporin is of benefit as a disease modifying agent in the treatment of rheumatoid arthritis. Clinical improvement is normally seen within 4 months after starting treatment. NSAIDs can be continued with caution (See Monitoring and Drug Interactions). Simple analgesics should be continued but the doses can be reduced once ciclosporin therapy is established.

### Dose Regimen

- Patients should be maintained on the same oral form of ciclosporin - prescribe by brand name.
- 2.5 mg/kg per day in two divided doses for 6 weeks.
- If insufficient response gradually increase daily dose to maximum of 4 mg/kg per day.
- If response inadequate after 3 months at maximum permitted or tolerated dose discontinue.
- After 6 months of maintenance therapy patients should be re-evaluated. Therapy should only continue if benefits outweigh risks.

### Monitoring

- Baseline FBC, U+E (x2), creatinine (x2), LFTs, Lipid level, BP (should be normal on 2 separate occasions prior to treatment).
- U+E and BP every 2 weeks for the first 12 weeks, 4 weekly thereafter (more frequently if dosage increased or if NSAID is initiated or its dosage increased).
- LFTs monthly for 12 weeks then 3 monthly
- Enter results in patient held record when shared care in place.

### Side Effects

- Gastrointestinal Disturbance  
(Abdominal pain, anorexia, nausea, vomiting, diarrhoea)
- Burning sensation of hands or feet
- Serum creatinine increased by >30%
- Increased blood pressure
- Platelets  $<150 \times 10^9/l$
- >2 fold rise in AST, ALT, Alk Phos
- Abnormal bruising
- Hyperkalaemia
- Hypercholesterolaemia

### Action

- 1.Continue if possible.
  - 2.If troublesome reduce dose
  - 3.D/w rheumatologist
- may occur 1st week of treatment, should subside  
dosage reduction - d/w rheumatologist  
Treat with appropriate antihypertensive.  
If uncontrollable withhold and d/w rheumatologist  
Withhold, d/w rheumatologist  
Withhold, d/w rheumatologist  
Withhold, d/w rheumatologist  
Withhold and d/w rheumatologist  
d/w rheumatologist

*Ask about side effects at every consultation.*

**Please note that a rapid or consistent downward trend in any values should prompt caution and extra vigilance.**

### Absolute Contraindications

- Abnormal renal function
- Uncontrolled hypertension
- Uncontrolled infections
- Malignancy

Please consult the manufacturers Data Sheet or Summary of Product Characteristics for further information.

- Age <18yrs

Please consult the manufacturers Data Sheet or Summary of Product Characteristics for further information.

## Drug (and Non-Drug) Interactions

- Grapefruit or grapefruit juice should not be ingested for 1 hour prior to a dose of ciclosporin
- Systemic antibiotics and other drugs having nephrotoxic effects eg ciprofloxacin, trimethoprim, should be avoided.
- Drugs interfering with hepatic enzymes:-
  - ↑effects of ciclosporin -ketoconazole, itraconazole fluconazole, erythromycin, clarithromycin, doxycycline, oral contraceptives, diltiazem, nicardipine, verapamil, cimetidine
  - ↓effects of ciclosporin -phenytoin, carbamazepine, barbiturates, rifampicin
- NSAIDs -addition to ciclosporin therapy or an increase in dosage requires close monitoring of renal function.  
NOTE: Dose of diclofenac should be reduced by half when given with ciclosporin.
- Nifedipine -avoid in patients who develop gingival hypertrophy with ciclosporin.
- Live vaccinations (Oral polio, measles, mumps, rubella, BCG, oral typhoid, yellow fever) should not be administered whilst taking ciclosporin.
- St. Johns Wort (*Hypericum perforatum*) may reduce the efficacy of ciclosporin.
- Potassium sparing diuretics should be avoided.

## Pregnancy and Breastfeeding

- This drug should not be used in pregnancy or breastfeeding, Discuss with rheumatologist.  
NOTE: Reversible dysmenorrhoea or amenorrhoea may develop.

### References

SPC (Neoral Soft Gelatin Capsules, Novartis Pharmaceuticals UK Ltd), July 2000  
BSR Guidelines, July 2000  
BNF 41, March 2001

### Authors

Dr K Lim, Dr D A Walsh, Sherwood Forest Hospitals  
Dr Al-Khoffash, Doncaster & Bassetlaw Hospitals  
Miss L Goodman, Prescribing Advisor, NNHA

Date of writing: May 2001

Date of review: May 2003

Please consult the manufacturers Data Sheet or Summary of Product Characteristics for further information.