

Ciclosporin GP information leaflet for neurological indications

NHS South West London supports the prescribing of [ciclosporin \(oral\) for patients within adult services \(non-transplant indications\)](#) under shared care guidelines. This leaflet is intended to be used with those guidelines as an adjunct to be referenced for neurology indications. The [BNF treatment summaries](#) also provides information on prescribing immunosuppressants for neuromuscular disorders.

Ciclosporin, a calcineurin inhibitor, is a potent immunosuppressant which is virtually non-myelotoxic but markedly nephrotoxic. It is a well-established drug with a clearly recognised side effect profile. It is used in immune-mediated neurological disorders as a second line therapy (as a steroid-sparing agent).

Treatment of Myasthenia Gravis

Corticosteroids are established as a treatment for myasthenia gravis. In generalised myasthenia gravis azathioprine is usually started at the same time as the corticosteroid and it allows a lower maintenance dose of the corticosteroid to be used. Ciclosporin, methotrexate, or mycophenolate mofetil can be used in patients unresponsive or intolerant to other treatments [unlicensed indications].

Treatment of Myositis

Conventional therapies include glucocorticoids usually in combination with another or multiple immunosuppressive agents including Azathioprine, Methotrexate, Mycophenolate, Tacrolimus and Cyclophosphamide remain the mainstay of treatment. Biologic agents including rituximab are being increasingly used.

Treatment of CIDP (Chronic inflammatory demyelinating polyradiculoneuropathy)

About one-third of patients with CIDP are refractory or not sufficiently responsive to steroids, ivig and plasmapheresis. Even in those patients which are responsive there is a need to reduce the side effects of long term steroid use with steroid sparing agents and reduce the cost and health burden of frequent ivig administration.

Dosing

After first 6 weeks of treatment can increase dose every 2 to 4 weeks by 25 mg until clinically effective or the maximum dose is reached as advised in clinic letter.

Ongoing monitoring schedule and advice in primary care.

Time to response: 6 weeks to 3 months.

Side-effects

Common side effects: Burning sensation in hands and feet (usually during the first weeks of treatment), nausea, vomiting, diarrhoea, abdominal discomfort may occur initially but usually subsides, pancreatitis, poor appetite, tremor, headache, increased hair growth, muscle cramps, myalgia and fatigue.

Less Common: Increased risk of idiopathic intracranial hypertension.

Blood: Nephrotoxicity (increases in serum creatinine and urea during first few weeks of treatment are generally dose dependent and reversible on dose reduction).

Actions to be taken in primary care in the event of abnormal blood results or side effects

- **Rash**
 - Action: Withhold until FBC result available and discuss with specialist team
- **Benign gingival hyperplasia**
 - Action: Advise good oral hygiene. If hyperplasia persists it is advisable to consider stopping, but discuss with the specialist team first.
- **Hirsutism**
 - Action: May be a cause for stopping therapy in some. May try bleaches and depilatory creams that are often safe.
- **Headache, Tremor, Paraesthesia**
 - Action: If persistent or severe, discuss with the specialist team.
- **Nausea, vomiting, diarrhoea**
 - Action: Administer tablets after meals to reduce nausea. An anti-emetic or dose reduction may help. If severe withhold until settles and reintroduce at a lower dose.
- **Lymphadenopathy**
 - Action: If a patient develops a single swollen lymph node fast track referral of the patient to specialist for review.

Contraindications and Precautions

Vaccinations: Patients must NOT receive live vaccines until at least 6 months after stopping cyclosporin.

Notable drug Interactions

Refer to the [Summary of Product Characteristics](#) and [BNF](#) for a full list. Additional interaction to those listed in the [ciclosporin \(oral\) for patients within adult services \(non-transplant indications\)](#) shared care:

- **Antihypertensives:** Usually a beta-blocker or calcium channel blocker is used. Verapamil should NOT be used as it may increase the plasma ciclosporin levels.
- **Lipid regulating drugs:** use lower doses to reduce the risk of muscular toxicity (Simvastatin max dose 10mg/day).
- **Herbal / Complimentary medications are not recommended when taking this medication as** interactions may occur.

Contact details

Please see section 13 of the [ciclosporin \(oral\) for patients within adult services \(non-transplant indications\)](#) shared care for contact details of specific services or individuals. In the first instance it may be appropriate to contact the prescribing doctor.

Document History

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