

NOTTINGHAMSHIRE AREA PRESCRIBING COMMITTEE SHARED CARE PROTOCOL AGREEMENT

Management of neuroinflammatory diseases in adults with the steroid sparing agent azathioprine

OBJECTIVES

- Provide summary of information on azathioprine therapy for neuroinflammatory diseases to primary care prescribers.
- Define referral procedures between hospital and primary care for initiation of treatment, dose adjustment, identification and management of complications.

CONDITION TO BE TREATED

The autoimmune neurological conditions covered by this agreement can be broadly split into four major categories:

- 1) Neuromuscular junction disorders – Most commonly myasthenia gravis, although can be paraneoplastic (such as Lambert-Eaton myasthenic syndrome), this antibody mediated condition can cause ptosis, oculomotor, bulbar, diaphragmatic and limb weakness. The clinical phenotype characterised by fatiguable weakness with supportive tests such as the presence of antibodies and electromyography is required for diagnosis. The mainstay of treatment is immunosuppression with adjunctive therapy with a cholinesterase inhibitor for symptomatic relief where applicable. Patients with symptoms in excess of ocular involvement require immunosuppression.
- 2) Inflammatory neuropathies – Most commonly chronic inflammatory demyelinating polyneuropathy (CIDP), these immune mediated neuropathies usually cause limb weakness and sensory disturbance, although can also cause cranial nerve and autonomic neuropathies. Clinical phenotype, cerebrospinal fluid analysis and neurophysiological tests confirm the diagnosis. Immunosuppression is the mainstay of treatment, with steroids and then steroid sparing agents first line. If these are unsuccessful, intravenous immunoglobulin and more aggressive therapies can be considered.
- 3) A subset of central nervous system inflammatory diseases, including neuromyelitis optica spectrum disorder (NMOSD), are steroid responsive and require long term therapy. Most are diagnosed on clinical phenotype, characteristic MRI features, serum antibodies and cerebrospinal fluid analysis. Immunosuppression is the mainstay of treatment, with steroids and then steroid sparing agents first line. If these are unsuccessful, intravenous immunoglobulin and more aggressive therapies can be considered. Other examples include CNS inflammation with anti-MOG antibodies and neurosarcoidosis.
- 4) Autoimmune encephalitis is typically characterised by neuropsychiatric symptoms, fever, movement disorders, autonomic dysfunction and seizures. Diagnosis is made on the clinical syndrome, serum antibodies, MRI findings and cerebrospinal fluid analysis. Treatments require expert guidance in the choice of immunosuppression as the mainstay of treatment, with steroids and then steroid sparing agents typically used as first line. If these are unsuccessful, intravenous immunoglobulin and more aggressive therapies can be considered.

REFERRAL CRITERIA

- Prescribing responsibility will only be transferred when it is agreed by the specialist and the patient's primary care prescriber. The patient will be stabilised on steroid therapy with or without other adjunct treatments (such as intravenous immunoglobulins) before the initiation of steroid sparing agents.

PROCESS FOR TRANSFERRING PRESCRIBING TO PRIMARY CARE

- The request for shared care should include individual patient information, outlining all relevant aspects of the patient's care and which includes direction to the information sheets at www.nottsapc.nhs.uk.
- If the GP does not agree to share care for the patient then he/she will inform the Specialist of his/her decision in writing within 14 days.
- In cases where shared care arrangements are not in place, or where problems have arisen within the agreement and patient care may be affected, the responsibility for the patient's management including prescribing reverts back to the specialist.

AREAS OF RESPONSIBILITY

Specialists Roles and Responsibilities

1. The specialist will confirm the working diagnosis.
2. The specialist will recommend and initiate the treatment.
3. The specialist will suggest that shared care may be appropriate for the patient's condition.
4. The specialist will ensure that the patient has an adequate supply of medication (usually 42 days) until shared care arrangements are in place. Further prescriptions will be issued if, for unseen reasons, arrangements for shared care are not in place at the end of 42 days. Patients should not be put in a position where they are unsure where to obtain supplies of their medication. The specialist team will be responsible for monitoring and prescribing the medicine during this initial period. Once the patient is known to be tolerating the treatment transfer to shared care would normally take place. It is expected that at least one hospital review will occur before transfer to shared care occurs.
5. If shared care is considered appropriate for the patient the specialist will contact the GP.
6. The specialist will provide the patient's GP with the following information:
 - diagnosis of the patient's condition with the relevant clinical details.
 - details of the patient's treatment to date.
 - details of treatments to be undertaken by GP*.
 - details of all other treatments being received by the patient that are not including in shared care – e.g. pyridostigmine or corticosteroids etc.
 - details of monitoring arrangements

*Including reasons for choice of treatment, medication or medication combination, frequency of treatment (including day of the week if weekly treatment), number of months of treatment to be given before review by the consultant.

7. Review patients annually.
8. Whenever the specialist sees the patient, he/she will
 - send a written summary within 14 days to the patient's GP.
 - record test results on the patient-held monitoring booklet and take any action necessary.
9. Contact details for primary care prescribers for during working and non-working hours will be made available
10. Details for fast track referral will be supplied.

Primary Care Prescribers Roles and Responsibilities

1. Ensuring that he/she has the information and knowledge to understand the therapeutic issues relating to the patients clinical condition.
2. Undergoing any additional training necessary in order to carry out a practice based service.
3. Agreeing that in his / her opinion the patient should receive shared care for the diagnosed condition unless good reasons exist for the management to remain within secondary care.
4. Prescribing the maintenance therapy in accordance with the written instructions contained within the GP information sheets, and communicating any changes of dosage to the patient.
5. It is the responsibility of the clinician to action the results from monitoring, in accordance with this shared care guideline, and thereby prescribing for the patient to complete the patients record with the necessary information.
6. Reporting any adverse effect in the treatment of the patient to the consultant.
7. The GP will ensure that the patient is monitored according to the Nottinghamshire Area Prescribing Committee shared care agreement for neurology and will take the advice of the referring consultant if there are any amendments to the suggested monitoring schedule.
8. The GP will ensure that the patient is given the appropriate appointments for follow up and monitoring, and that defaulters from follow up are contacted to arrange alternative appointments. It is the GPs responsibility to decide whether to continue treatment in a patient who does not attend appointments required for follow up and monitoring. If the patient regularly fails to attend for monitoring, the GP may withhold the prescription and inform the consultant responsible for the patients care.
9. Offer patients vaccination in line with the current Joint Committee on Vaccination and Immunisation advice (green book)
<https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book>

CLINICAL INFORMATION

Information sheet for the GP prescribers is attached

NATIONAL GUIDANCE AND REFERENCES

- 1) [Myasthenia gravis: Association of British Neurologists' management guidelines | Practical Neurology \(bmj.com\)](#)
- 2) [The European LEMS Registry: Baseline Demographics and Treatment Approaches | SpringerLink](#)
- 3) [European Federation of Neurological Societies/Peripheral Nerve Society Guideline on management of chronic inflammatory demyelinating polyradiculoneuropathy](#)
- 4) [Paraneoplastic Neurological Syndromes - European Handbook of Neurological Management - Wiley Online Library](#)
- 5) [Clinical features, treatment and outcome in neurosarcoidosis: systematic review and meta-analysis.](#)
- 6) Autoimmune encephalitis treatment with Azathioprine and Mycophenolate mofetil are among those recommended by international experts (Dalmau J, Lancaster E, Martinez-Hernandez E, Rosenfeld MR, Balice-Gordon R. [Clinical experience and laboratory investigations in patients with anti-NMDAR encephalitis.](#)

AUTHORS

*Dr Christopher Allen
Neurology SpR
Queen's Medical Centre*

*Dr Fahd Baig
Neurology SpR
Queen's Medical Centre*

IN CONSULTATION WITH

*Dr Bruno Gran
Neurology Consultant
Queen's Medical Centre*

*Prof Cris Constantinescu
Neurology Consultant
Queen's Medical Centre*

CONTACT DETAILS

Consultant Neurologist who initiated therapy, QMC – Nottingham

Tel 0115 924 9924 + request consultant's secretary

Working Hours 9 am - 5 pm

Out of Hours Via on call Neurology SpR at QMC

Immediate/Urgent advice As above

Fast Track Referral As above