SHARED CARE GUIDELINES FOR PRESCRIBING DOPAMINE AGONISTS IN PARKINSON'S DISEASE

INDICATION

The dopamine agonists have a useful role for early symptomatic treatment in younger patients to delay the need for levodopa. They may also be used for a levodopa-sparing effect in later disease to treat motor fluctuations. They are expensive drugs and are associated with serious side-effects.

AREAS OF RESPONSIBILITY FOR SHARED CARE

This shared care agreement outlines ways in which the responsibilities for managing the prescribing of a dopamine agonist can be shared between the specialist and general practitioner (GP). GPs are invited to participate. If the GP is not confident to undertake these roles, then he or she is under no obligation to do so. In such an event, the total clinical responsibility for the patient for the diagnosed condition remains with the specialist. If a specialist asks the GP to prescribe this drug, the GP should reply to this request as soon as practicable.

Sharing of care assumes communication between the specialist, GP and patient. The intention to share care is usually explained to the patient by the doctor initiating treatment. It is important that patients are consulted about treatment and are in agreement with it.

The doctor who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use.

REFERRAL AND INITIATION

The diagnosis of Parkinson's disease will be undertaken by a consultant and their team. Pharmacological measures should not be initiated prior to specialist referral. In some cases it may not be appropriate to initiate therapy with a dopamine agonist when the patient is seen by the specialist team. It may therefore be necessary for GPs to initiate therapy where a delay in initiation is required

Choice:

- **first-line** choices are the non-ergoline agonists Ropinirole and Pramipexole. Rotigotine is available in a patch formulation which may be used for those patients who cannot tolerate the first-line oral agents. Pramipexole and ropinirole are available in once daily oral formulation which provide improved night time cover. Initial choice of agent should included consideration of the cost-effectiveness. Currently all have similar acquisition costs but pramipexole's patent expires in Dec 2010 (all formulations) and the standard release form of ropinirole in July 2011.

- If side effects occur with one agonist it is worth trying another.

- If an agonist is tolerated in full dosage but without sufficient efficacy it is unlikely that an alternative agonist will be of more benefit.

- Excessive daytime sleepiness and sudden onset of sleep can occur with **all** dopamine agonists;

- The risk of impulse control disorders and psychotic symptoms should be considered prior to initiating agonist therapy. Patients and their partners should be carefully counselled regarding the risk of hypersexuality, gambling, compulsive spending, repetitive purposeless behaviours and hallucinations.

Note: The ergot-derived dopamine agonists, bromocriptine, cabergoline, and pergolide are associated with pulmonary, retroperitoneal and pericardial fibrotic reactions.

Ergot derived dopamine agonists should only be used for patients with informed choice. They should be the last option, where all other options have been exhausted. GPs will be prompted by the Parkinson's specialist nurses to carry out the required monitoring of patients taking these drugs These include yearly ESR and renal function with bi-annual echocardiography and chest X-ray.

Specialist Responsibilities	
1	To assess the patient and establish the diagnosis, determine a management strategy and ensure appropriate follow-up in conjunction with the GP.
2	Where appropriate: o to initiate and stabilise treatment; o obtain consent from the patient's GP to continue prescribing once treatment has been stabilised (usually after 4 weeks) or if a delay in initiation is required to obtain their consent to start treatment when indicated, o monitor the patient and their therapy at six monthly intervals.
3	To provide the GP with appropriate prescribing information and any additional information requested.
4	To be available for advice if the patient's condition changes.
5	To ensure that procedures are in place for the rapid re-referral of the patient by the GP.
6	To ensure the patient has given informed consent to their treatment.
7	To liase with the GP on any suggested changes in prescribed therapy.
8	Where an ergot derived dopamine agonist is indicated ensure appropriate monitoring is undertaken prior to initiation (ESR, serum creatinine and chest X-ray) and lung function tests are undertaken if use is long-term.

General Practitioner Responsibilities	
1	Initially, to refer the patient for specialist advice.
2	Where appropriate to continue to prescribe a dopamine agonist as part of a shared care arrangement (usually after 4 weeks). If a decision has been made to delay initiation GPs may initiate therapy in accordance with the specialist's instructions.
3	Where patients have been prescribed an ergot derived dopamine agonist beware of symptoms of dyspnoea, persistent cough, chest pain, cardiac failure and abdominal pain or tenderness. If patient presents with any of these symptoms refer to specialist services.
4	To deal with general health issues of the patient.
5	Monitor concordance with therapy

Patient's role (or that of carer)	
1	Report to the specialist or GP if he or she does not have a clear understanding of the treatment.
2	Attend appropriate GP and other follow up appointments
3	Share any concerns in relation to treatment with the dopamine agonist
4	Use written and other information on the medication.
5	Seek help urgently if suspect side effects, or otherwise unwell.

SUPPORTING INFORMATION

The following drugs are included on the local formulary:

- Pramipexole (Mirapexin®)
- Ropinirole (Requip®)
- Rotigotine (Neupro®)
- Cabergoline (Cabaser®)
- Pergolide (Celance®)

The manufacturers of each drug's summary of product characteristics (SPC) and the most current edition of the British National Formulary should be consulted for full information on contra-indications, warnings, side-effects and drug interactions.

References

1. Pharmacological management of Parkinson's disease. Updated by the Bournemouth, Dorset and Poole Prescribing Forum. June 2010
2. British National Formulary 57. March 2010.

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