DERBYSHIRE JOINT AREA PRESCRIBING COMMITTEE (JAPC)

Guidance on the prescribing of midodrine in orthostatic hypotension (OH)

Goals of treatment are:

- Improving symptom control
- Improving quality of life and
- Preventing injury

rather than achieving a target blood pressure.

Definition

Orthostatic hypotension (OH) results from an inadequate physiological response to postural changes in blood pressure. OH is defined as a >20 mmHg fall in systolic blood pressure and/or a >10 mmHg fall in diastolic blood pressure within 3 minutes of standing with symptoms.

In people with the condition, standing leads to an abnormally large drop in blood pressure, which can result in symptoms such as light-headedness, blurring of vision, pre-syncope and syncope and falls. Coat-hanger pain (pain in the neck radiating to the shoulders on standing) can also occur. Symptoms of OH are often circadian in nature with symptoms worse in the morning.

Causes

Chronic: Autonomic Failure (e.g. Parkinson's disease, multi-system atrophy, and diabetic autonomic neuropathy), medication including anti-hypertensives, anti-parkinsonian medication and anti-psychotics.
Acute: dehydration, anaemia and rarely Addison's disease.

Non-pharmacological management:

1. Initial treatment of OH should exclude acute causes and include a medication review.
2. Patient education on orthostatic hypotension and advice on factors that influence blood pressure (e.g. high environmental temperatures, sudden change in posture, alcohol).
3. Physical measures including raising the head of the bed, moving to upright gradually, and full length TED stockings (these are non-prescribable on an FP10).
4. Carefully controlled and individualised exercise training (swimming, aerobics, cycling and walking), if appropriate.
5. Increased water and salt ingestion if not contraindicated.

Pharmacological management:

Should be considered if the non-pharmacological strategies have been unsuccessful and there are recurrent symptoms:

- **Midodrine can be used either alone, or in combination with fludrocortisone.**

Traffic light classification for midodrine: **GREY** after consultant/specialist initiation and dose titration for orthostatic hypotension

Midodrine - consultant responsibilities:

- For older patients introduce 2.5mg once daily and then increase to twice daily after one week and then review.
- Usual maintenance dose – **2.5mg three times daily**
- Increased as clinically indicated according to response, up to a maximum maintenance dose of **5-10mg three times daily**.
- Once patient's condition is stable, care will be discharged to the GP.
- Provide the GP with advice on when to reduce/stop midodrine dose that is individualised and patient specific.

Caution

A careful evaluation of the response to treatment and of the overall balance of the expected benefits and risks should be undertaken with the person before any dose increase or advice to continue therapy for long periods. If supine hypertension occurs, which is not overcome by reducing the dose, consider stopping treatment with midodrine after discussion with the patient depending on the severity of the symptoms of OH.

Treatment should be guided by symptom control and supine blood pressure levels not measured changes in blood pressure only.

GP responsibilities:

- Continue prescribing midodrine at dose recommended by specialist
- Monitor supine and standing blood pressure every 3 months. Blood pressure monitoring and management of raised blood pressure when lying down (supine hypertension) if needed.
- Monitor on-going symptoms

Patient responsibilities:

- **Last dose to be taken at least 4 hrs before bed** to prevent supine hypertension
- Patient should be told to report symptoms of supine hypertension immediately, such as chest pain, palpitations, shortness of breath, headache and blurred vision. The patient should be monitored for these side effects by the treating clinician. (Supine hypertension may be controlled by an adjustment to the dose).
- Adverse effects include paraesthesia, headache, nausea, dyspepsia, stomatitis, pruritus, rash, chills, flushing, urinary retention and supine hypertension.

References

1. NICE Evidence summary ESNM61 (2015) www.nice.org.uk/guidance/esnm61
2. Scottish Medicines Consortium Advice on Midodrine hydrochloride (Bramox) (2015) https://www.scottishmedicines.org.uk/SMC_Advice/Advice/1094_15_midodrine_hydrochloride_Bramox/midodrine_hydrochloride_Bramox

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Document Control

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