DERBYSHIRE JOINT AREA PRESCRIBING COMMITTEE (JAPC)

Prescribing advice for Hyperprolactinaemia

Cabergoline GREEN after consultant/specialist initiation
Quinagolide GREEN after consultant/specialist initiation
Bromocriptine Grey after consultant/specialist initiation

Key messages for GPs:

- Follow dosing schedule specified by the endocrinologist
  - **Cabergoline**: the therapeutic dosage usually ranges from 0.25mg to 1mg **per week** (higher doses may sometimes be required)
  - **Quinagolide**: The usual maintenance dosage is 75micrograms to 150micrograms **per day** (daily doses of 300micrograms or higher may be required in a small cohort of patients)
  - **Bromocriptine**: 1–1.25 mg daily, dose to be taken at bedtime, increase dose gradually; usual dose 7.5 mg daily in divided doses. Dosages can go up to 30mg daily however in practice majority patients only require dosages below 10mg (in divided doses).
    MHRA drug safety update - bromocriptine - A safety review has been conducted by the MHRA following a Yellow Card report concerning a patient who was taking bromocriptine. The review concluded that blood pressure monitoring of patients prescribed with this drug is essential especially during the first days of treatment.
- For on-going treatment adjust doses following specialist recommendation
- In the event of pregnancy occurring whilst on quinagolide or cabergoline inform the specialist immediately. Bromocriptine is a treatment option for patients who are pregnant or wishing to become pregnant.
- Although extremely rare be alert for the signs and symptoms of fibrotic disorders which include:
  - Cardiac failure; cases of valvular and pericardial fibrosis have often manifested as cardiac failure

Background

The prescribing of cabergoline, quinagolide, and bromocriptine no longer falls under a shared care agreement. The decision to remove shared care follows a review of the SPC monitoring requirements by consultant endocrinologists at both DTHFT and CRHFT.

Accumulating evidence[1,5] since the MHRA issued statements in 2007 and 2008[2] continues to show that the concerns regarding frequent cardiac valve fibrosis and other fibrotic complications as described in the cabergoline SPC do not relate to the doses used in treating prolactinoma or similar conditions and are considered extremely rare.

Q&As

Who will undertake the initial assessment baseline tests and ongoing monitoring?

This will remain the responsibility of the consultant
Further information

- ✓ Initial assessment for all drugs will be done by secondary care, including the counselling of dose titration and agreement of scope of initial investigations and monitoring. A baseline transthoracic echocardiogram (echo) will be considered and documented in clinic correspondence within a few months of starting treatment, and repeat echo between 2-5 years interval depending on the dose and individual patient characteristics.* The endocrinologists will agree this with the patient and this will be clearly communicated to the GP
- ✓ Other baseline tests in addition to echocardiography include lung function tests, chest x-rays, ESR and renal function, will be done at the discretion of the local endocrinologist
- ✓ Periodic monitoring of prolactin levels to be done at the discretion of the local endocrinologists

*Repeat transthoracic echocardiography should then be performed at 5 years after starting cabergoline in patients taking a total weekly dose less than or equal to 2 mg. If there has been no change on the 5-year scan, repeat echocardiography could continue at 5-yearly intervals. If a patient is taking more than a total weekly dose of 2 mg, then annual echocardiography is recommended

The optimal dose must be titrated individually on the basis of the prolactin lowering effect and tolerability. How will this be done and communicated?

The instructions regarding prescription including dosing, titration and monitoring for prolactin lowering medications will be clearly stated in correspondence from endocrinology clinic or inpatient discharge letter. The general principle will be to give the minimum effective dose. The aim of treatment will vary according to the case and should be made clear by the endocrinologist (e.g. this may be to normalise prolactin or may be to reduce prolactin to extent of removing symptoms).

How long will patients be on treatment?

Medium (3-5 years) to long term (lifelong): depends on response to treatment, side effects and level of disease activity.

Useful contacts:
Contact the referring consultant via hospital switchboard
Chesterfield: 01246 277271 or secretary 01246 513104
Derby: 01332 340131 or secretary 01332 783284 or 783286 or 783283

References:

1. W. M. Drake, C. E. Stiles et al, A Cross-Sectional Study of the Prevalence of Cardiac Valvular Abnormalities in Hyperprolactinemic Patients Treated With Ergot-Derived Dopamine Agonists, JCEM. 2014; 99: 90-96 (accessed online: August 2015)
2. Medicines and Healthcare Regulatory Authority (MHRA) Drug Safety Update October 2008, Ergot-derived dopamine agonists: risk of fibotic reactions (accessed online: August 2015)
3. Electronic Medicines Compendium, Summary of Product Characteristics: Cabergoline (accessed online: August 2015)
4. Electronic Medicines Compendium, Summary of Product Characteristics: Quniagolide (accessed online: August 2015)
5. W. M. Drake, C. E. Stiles et al, A Follow-Up Study of the Prevalence of Valvular Heart Abnormalities in Hyperprolactinemic Patients Treated With Cabergoline, JCEM. 2016; 101 (11): 4189-4194 (accessed online: June 2017)
6. Electronic Medicines Compendium, Summary of Product Characteristics: Bromocriptin
7. Steeds R, Stiles C, Sharma V, Chambers J, Lloyd G, Drake W. Echocardiography and monitoring patients receiving dopamine agonist therapy for hyperprolactinaemia: A joint position statement of the British Society of Echocardiography, the British Heart Valve Society and the Society for Endocrinology. Clin Endocrinol (Oxf). 2019;90:662–669. https://doi.org/10.1111/cen.13940

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Addition of MHRA Drug Safety Update information for bromocriptine	November 2024