ECHOCARDIOGRAPHY MONITORING OF PATIENTS RECEIVING
DOPAMINE AGONIST THERAPY FOR HYPERPROLACTINAEMIA
ABUHB Endocrinology Directorate’s Position Statement

The role of echocardiography in monitoring patients receiving dopamine agonist (DA) therapy for hyperprolactinaemia was discussed in the ABUHB’s Diabetes & Endocrinology Directorate meeting of June 2019, and it was agreed to adopt the joint position statement of the British Society of Echocardiography, the British Heart Valve Society and the Society for Endocrinology.¹

**ABUHB Summary:**

- All patients should undergo echocardiography before commencing cabergoline therapy
- Patients taking a dose of cabergoline ≤2mg per week, should undergo surveillance echocardiography at 5 years
- Patients taking a dose of cabergoline >2mg per week should undergo annual echocardiography
- Patients taking a dose of cabergoline ≤2mg per week who develop a change in valve function should undergo annual echocardiography if treatment is to continue

Although the joint statement was written primarily to provide endocrinologists and cardiologists with practical guidance in this area (based on a contemporary review of the available literature) the ABUHB summary advice above will also be useful to GP practices repeat prescribing cabergoline for hyperprolactinaemia, or for other ‘off label’ uses.

**Background** (reproduced in part from *Clin Endocrinol* (Oxf). 2019 May;90(5):662-669)

Dopamine agonists (DA) are first-line therapy for the treatment of hyperprolactinaemia because of excellent biochemical and tumour control in the majority of patients, the alternative being surgery with or without radiotherapy, exposing patients to the risks of hypopituitarism. Cabergoline is generally the agent of choice because alternatives, such as bromocriptine, require multiple daily doses and have a less favourable side effect profile. The use of cabergoline in Parkinson’s Disease (PD) and hyperprolactinaemia differs considerably. Cabergoline is used in PD patients over a shorter period (months) at much higher dose (typically 3mg a day) compared to a much longer period of treatment (years) at lower doses (typically 0.5-1mg weekly) in hyperprolactinaemic patients.

As a result of studies documenting an increased risk of valvulopathy in PD patients, the MHRA recommended² that baseline echocardiography to exclude valvular heart disease should be performed in all patients before starting cabergoline or bromocriptine, followed by a second echocardiogram performed 3-6 months after commencement and then at 6-12-month intervals while continuing on the medication. It was also recommended that treatment be stopped if echocardiography showed worsening or new valvular restriction, thickening or regurgitation. In the intervening years, much echocardiographic data from cabergoline-treated hyperprolactinaemic patients has been published. Most of these data suggest that the risk of developing significant valvular heart disease is negligible and not a cause for clinical concern. Despite this, constraints imposed by the working relationship between the MHRA and the EMA dictate that the published recommendations are unlikely to be revised.
