Inhibition of lactation: risks associated with dopamine agonists

A survey conducted in Lyon, France, shows that many women are prescribed drugs, especially bromocriptine, to inhibit lactation. The authors highlight the high risk of severe and sometimes life-threatening adverse effects, especially cardiovascular and neurological disorders. 

In France, bromocriptine and lisuride, two rye ergot derivative dopamine agonists, are approved for inhibition of lactation. They carry a risk of arterial hypertension, stroke, hallucinations and seizures (1).

With support from the Rhône-Alps regional health insurance services, URCA, the Lyon Regional Pharmacovigilance Centre (CRPV) conducted a survey of methods currently used to inhibit lactation in France (2). A questionnaire was sent to 618 maternity units in university, public and private hospitals. The authors analysed prescriptions reimbursed by the Rhône-Alps health insurance services for women aged 14 to 50 years (3).

Bromocriptine and dihydroergocryptine often used. The questionnaires (response rate 43%) revealed that a drug was used to inhibit lactation in 95% of cases; bromocriptine was prescribed in 89% of cases. Dihydroergocryptine and cabergoline, two other rye ergot derivatives, were proposed as first-line or second-line choices in respectively 39% and 24% of cases.

Lisuride, homeopathy and non-drug measures were rarely recommended. Analysis of prescription reimbursements showed an increase in dihydroergocryptine prescriptions and a decline in bromocriptine prescriptions. Dihydroergocryptine was prescribed more frequently to women receiving cardiovascular or psychotropic medications, suggesting that French prescribers prefer dihydroergocryptine over bromocriptine for women with cardiovascular or neuropsychiatric risk factors.

The authors also analysed reports of adverse effects implicating rye ergot derivatives used to inhibit lactation, recorded between November 1993 and December 2008 in the French national pharmacovigilance database, among women aged 14 to 50 years (a)(3).

Reports of sometimes serious cardiovascular reactions. There were 197 reports implicating bromocriptine: 77 of these cases were serious and included 2 deaths. The most frequent effects were cardiovascular disorders (74 cases), including 9 cases of myocardial infarction, 1 of which was fatal, and 29 cerebrovascular events, including 15 strokes (1 death) and 9 cases of benign cerebral angiopathy.

Neuropsychiatric reactions included seizures (4 cases), and onset or aggravation of psychiatric disorders (12 cases). Predisposing factors were present in 45 patients, including smoking (16 cases) and obesity (6 cases).

Eleven reports implicated dihydroergocryptine, including 1 case of benign cerebral angiopathy and 1 case of haemorrhagic stroke. Nine reports implicated lisuride. No adverse effects were attributed to cabergoline.

In practice. The absence of breastfeeding, without any other measures, is rarely associated with serious complications. Paracetamol and non-drug measures are generally sufficient to relieve pain (experienced by 40% of women) and breast inflammation (10%).

Dopamine agonists derived from rye ergot have little place in the inhibition of lactation, especially when the frequency and potential severity of their adverse effects in this setting are taken into account (4).

Selected references from Prescrire’s literature search.