A patient with Parkinson’s disease (PD) is seen in secondary care and she is prescribed the dopamine agonist ropinirole in a starter pack. She then goes to her GP surgery, where the starter pack is put on her record as a repeat prescription. Rather than having her ropinirole titrated up to a therapeutic dose of 1mg three times a day, and then continued, the patient receives a starter pack for several months in a row — she starts again at 0.25mg three times a day, works her way up over 28 days to 1mg three times a day, then right back to 0.25mg three times a day, and so on . . .

I have encountered this kind of scenario several times in the neurology clinics I run in primary care. For the patients concerned, it causes unnecessary nausea, not to mention distress. Getting such patients’ treatment back on track is an important part of my work as a specialist pharmacist for neurology — a role I describe in this article.

As well as assessing, managing and prescribing for patients with PD and other neurological conditions, I provide medicines management leadership and support. Indeed, my position was created so that neurology patients and their carers would have better access to medicines expertise — as would the primary care neurology team, which includes specialist nurses, physiotherapists, occupational therapists, dieticians, psychologists and speech and language therapists.

The role is funded for two days a week by the medicines management department of Dudley Primary Care Trust and is an excellent fit for my experience to date — I have a PhD in neurology, am qualified as an independent prescriber and am accredited as a pharmacist with a special interest in neurology.

Getting started

After being appointed, my first task was to ensure that we had the most appropriate medicines on the local formulary for neurology clinicians in the Dudley area to prescribe. I spent several weeks submitting medicine proposals to the area medicines management committee. I also wrote local guidance for the management of PD in primary and secondary care. It was hoped that such guidance would ensure that patients receive high-quality and consistent care, irrespective of clinical location.

Once the pathways were completed, I was then able to begin my direct involvement with patients through weekly clinics.

Initially my clinic was available to patients with PD who are aged 18 years or over and registered with a GP within the PCT area; more recently I have managed several patients with multiple sclerosis (MS). I receive patient referrals from consultants, GPs, other healthcare professionals and patients themselves. My role in the clinic is to:

- Help to resolve complex medication issues that would otherwise need to be dealt with by a patient’s neurologist
- Provide support and advice to the PD and MS specialist nurses, and the wider neurology team, regarding prescribing and medicines management
- Offer medicines management advice and support to GPs in Dudley PCT
- Help improve communication between primary and secondary care
- Assist in the management of neurology patients who are not currently under the care of a neurology consultant
- Refer patients to other services (eg, in secondary care) as required

A patient’s first appointment with me takes about 45 minutes, with follow-up appointments taking about half an hour. For the most part I work independently but once a month I take part in a hospital multidisciplinary clinic with a consultant and specialist nurse (an
Advice around the use of codeine by breastfeeding mothers

**Q**

Is it safe for breastfeeding mothers to take codeine?

**A**

Codeine is generally considered the safest opioid analgesic for breastfeeding mothers and their infants. However, its use is not without risks. Adverse effects can occur in a breastfed infant whose mother has taken codeine. Such effects include lethargy, poor feeding, drowsiness, bradycardia and breathing problems. In one case, a baby died from opioid toxicity. These adverse effects can occur with low doses of codeine.

Codeine is metabolised to its active metabolite morphine by cytochrome P450 2D6. The amount of codeine and morphine in breast milk can vary widely depending on CYP2D6 genotype. Women who are CYP2D6 ultrarapid metabolisers can produce large amounts of morphine. This can put their breastfed infants, particularly neonates, at increased risk of adverse effects.

Neonates and young infants are at the highest risk of adverse effects because their hepatic enzyme function is immature. Therefore, extra caution should be taken in infants less than two months of age (infants older than two months of age eliminate morphine more quickly).

Use of codeine by breastfeeding mothers should be at the lowest effective dose and for the shortest duration possible. Regular use of any opioid beyond three days should be under close medical supervision.

If a woman, or her breastfed infant, develops substantial adverse effects after taking codeine, this could suggest that she is a CYP2D6 ultrarapid metaboliser. It is not practical to genotype all breastfeeding mothers to predict the side effects they (and their infants) might experience with codeine.

Therefore, all breastfeeding mothers should be informed of potential adverse effects of codeine and advised to monitor their infants for such effects. If infants develop adverse effects, the possibility of opioid toxicity should be considered, regardless of the maternal dose of codeine. Ideally, in this situation, codeine would be replaced with an alternative non-opioid analgesic and breastfeeding interrupted until the cause of the symptoms is clear.

Non-opioid analgesics, such as paracetamol, ibuprofen or diclofenac, should be used before opioid analgesics in all cases (unless contraindicated); codeine should be considered third line.

This information relates to full-term healthy infants. For infants who are preterm, of low birth weight or who have medical problems, or for mothers taking multiple medicines, specialist advice should be sought from the UK Drugs in Lactation Advisory Service.