The importance of taking a thorough history

Introduction

Movement disorders have long been associated with various medications and illicit drugs. Various dyskinesias, including chorea, choreoathetosis, dystonia and ballism, are associated with use of dopaminergic agents (Heinrich, 2002). These drugs improve or worsen chorea depending on whether the striatal content of dopamine is decreased or increased respectively. Ropinirole, a dopamine agonist of the non-ergoline class of medications, acts as a D_2, D_3 and D_4 dopamine receptor agonist, with highest affinity for D_2, and is weakly active at the 5-HT_2 and α_2 receptors. It is licensed to treat Parkinson's disease and restless legs syndrome in patients who fail to respond to other therapies (Kushida, 2006). Common side effects include nausea, dizziness, headaches and somnolence (Titlic et al, 2008).

This case describes a 77-year-old woman, with no previous history of movement disorders, who developed choreoathetoid movements secondary to ropinirole which had been commenced 5 months' previously.

Discussion

This patient presented with new onset writhing movements. Clinical examination revealed choreoathetosis, which is a common pattern of involuntary movement induced by levodopa and dopamine agonists (Calabresi et al, 2010). This dopamine agonist-induced dyskinesia is indistinguishable from the movements of Huntington's disease or tardive dyskinesia (Factor et al, 2005) which prompted the authors to consider the following differentials:

- Huntington's disease (usually presents <60 years of age, patient had no family history)
- Wilson's disease (usually presents at a younger age, patient had no hepatic dysfunction or family history)
- Neuroacanthocytosis (hereditary, usually presents in the 30 or 40s)
- Senile chorea
- Cerebrovascular disease (important differential to consider in a patient of this age, and why a computed tomography brain was ordered, which was normal).

However, once it was recognized that the patient was taking ropinirole and the authors were able to establish that this had been started by the GP for restless legs syndrome 5 months' previously (and the dose increased 3 months' later), this was felt to be the likely cause, so it was stopped and no further investigations performed while assessing the response.

Restless legs syndrome is a common neurological disorder characterized by an urge to move the legs and is worse at rest and bedtime. Benzodiazepines have often been used but dopaminergic agents such as ropinirole are now being used to treat restless legs syndrome (Trenkwalder et al, 2004).

This case report highlights that detailed history taking is crucial and shows the vital role the ward pharmacist played in fitting the 'missing piece of the jigsaw' regarding why and when the patient was commenced on ropinirole. Remember that adverse drug reactions are a common cause of hospital admissions (Pirmohamed et al, 2004) and should be reported using the Yellow Card Scheme (https://yellowcard.mhra.gov.uk/the-yellow-card-scheme/). BJHM

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Case Report

A 77-year-old woman was referred to the acute medical unit from the emergency department after being found on the bathroom floor of her house. This woman was 'acting out of character' but was not confused and could identify family members. She exhibited new onset 'writhing' movements.

A past medical history of depression, vitamin B_{12} deficiency, thoracic discitis, hypothyroidism and multiple myeloma was documented on admission. Her medications included cyclizine, furosemide, bisacodyl, nystatin, omeprazole, ciprofloxacin, ropinirole, levothyroxine, paracetamol, lactulose, tiotropium bromide and salbutamol inhalers.

Cardiovascular, respiratory and gastrointestinal examinations were normal. Neurological examination revealed choreoathetoid movements, with the rest of the neurological examination limited by these movements.

Full blood count, urea and electrolytes, liver function tests, thyroid function tests, C-reactive protein level and blood glucose were within normal limits. Computed tomography of the brain was normal. The admitting medical registrar planned to order a magnetic resonance imaging scan +/- a lumbar puncture. However, upon reviewing the patient on the ward round, no documented pathology explained why the patient was receiving ropinirole. The patient was also unclear, but the team was able to establish via the ward pharmacist and the Egton Medical Information System (EMIS) that ropinirole had been commenced by her GP for restless leg syndrome 5 months' previously and increased from 0.5 mg once daily to 2 mg once daily 3 months' later. Once this information became clear, this was suspected as the likely aetiology for her presentation and stopped. The neurology team also advised commencing tetrabenazine to improve the choreoathetoid movements.

Four days later, her choreathetoid symptoms fully resolved, but her restless leg syndrome returned, necessitating the commencement of pregabalin, with good effect. The patient was discharged from hospital shortly afterwards.

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LEARNING POINTS

- The importance of taking a thorough history cannot be underestimated.
- Drug interactions account for 1 in 16 hospital admissions and 4% of the hospital bed capacity. A medication history is important as adverse drug reactions are a considerable burden on the NHS.
- This case highlights the importance of using the ward pharmacist and Egton Medical Information System (EMIS) to get the full picture.
- Monitoring clinical response after removing the offending medication is essential, but don't forget why the medication was started in the first place – the recurrence of the patient's restless legs syndrome required the use of an alternative medication.
- Report adverse drug reactions using the Yellow Card Scheme.

A common autoimmune disease with rare organ involvement

A 32-year-old woman presented with a 5-week history of vomiting, upper abdominal pain radiating through to the back and weight loss. Physical examination revealed epigastric tenderness. Abdominal computed tomography showed a mass involving the head of the pancreas (*Figure 1*). Endoscopic ultrasound showed a hypoechoic pancreas with multiple peripancreatic nodes. At laparotomy the findings were of ascites, peritoneal seedlings, pancreatic mass and venous collaterals suggesting portal hypertension. Pancreatic and lymph node histology was consistent with systemic sarcoidosis (*Figure 2*). A chest radiograph showed bilateral hilar adenopathy. At bronchoscopy an endobronchial cobblestone appearance was observed, consistent with sarcoidosis.

The patient was started on prednisolone 40mg/day and improved clinically. The ascites, which were thought to be secondary to sarcoidosis, resolved with furosemide. Follow up computed tomography after 1 month on a reducing dose of prednisolone (5 mg per week) showed a resolving pancreatic mass.

Sarcoidosis, a systemic granulomatous disease of unknown aetiology, affects mostly young adults. It may mimic malignancy, with pancreatic involvement being present in only 1–5% (Delgado-Bolton et al, 2011; Tsintsadze et al, 2011).

Two thirds of patients with pancreatic sarcoidosis have abdominal pain, and three quarters have bilateral hilar adenopathy. Thus, abdominal pain in a patient with bilateral hilar adenopathy should lead the clinician to think of pancreatic sarcoidosis (Wijkstrom et al, 2010). BJHM

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Figure 1. Abdominal computed tomography showing mass involving the head of the pancreas (arrow), enlarged peripancreatic lymph nodes and portal vein compromise with evidence of left-sided portal hypertension and gastric varices.

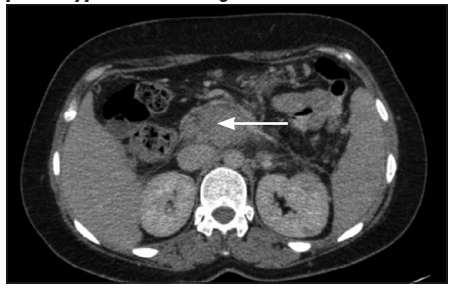
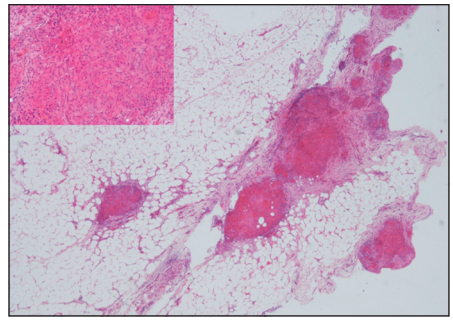


Figure 2. Peripancreatic soft tissue biopsy demonstrating multiple non-caseating granulomata within adipose tissue. High power (inset) shows classical aggregates of epithelioid histiocytes with scattered lymphocytes and no necrosis, features consistent with sarcoidosis.



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