

Gastroparesis in a patient with Parkinson's disease

LEARNING POINTS

- Although apparently rare, the authors propose that hepatic endometrioma should be included in the differential diagnosis for a woman of any age presenting with a hepatic mass, with or without a history of pelvic endometriosis.
- As there are no characteristic features on non-invasive imaging investigations, invasive investigations like transhepatic biopsy may be necessary for diagnosis.
- Transhepatic biopsy has risks and should be considered with caution.
- Medical hormonal therapy is associated with risk of recurrence, and may not be effective for all cases.
- When hepatic endometriosis is detected at an early stage it is unclear whether these women need follow up to see if they develop endometriotic liver cysts and, if so, whether these require treatment if asymptomatic.

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A 67-year-old man who had Parkinson's disease had recurrent hospital admissions for aspiration pneumonia and persistent vomiting. There was associated weight loss, decreased appetite and abdominal distension.

Upper gastrointestinal endoscopy showed oesophagitis, retained food in the stomach and duodenum without any evidence of obstruction, erosions, ulcers or masses. Computed tomography of the abdomen with oral contrast (*Figure 1a*) showed delayed gastric emptying with massively distended stomach but no evidence of gastric outlet obstruction. Gastric scintigraphy (*Figure 1b*) showed abnormal gastric emptying confirming gastroparesis. His symptoms improved with oral domperidone.

About 70–100% of patients with

Parkinson's disease attending neurology clinics report delay in gastric emptying but the prevalence of symptomatic gastroparesis in people with Parkinson's disease is unknown (Hardoff et al, 2001). Gastroparesis seems to occur early in Parkinson's disease and its severity does not correlate well with disease duration, although predictors of severity include the presence of dose response fluctuations, rigidity and action tremor.

Domperidone and mosapride provide some therapeutic benefit (Asai et al, 2005). Pharmacological therapy for gastroparesis aims to reduce dose response fluctuations, not to reduce upper gastrointestinal symptoms (Heetun and Quigley, 2012).

It is unclear whether levodopa causes a further delay in gastric emptying in patients with Parkinson's disease or whether it partly corrects delay by ensuring more coordinated gastric contractions. The role of gastric electrical stimulation has not yet been defined in this population. **BJHM**

Dr Maheep Sangha is Resident Physician in the Department of Internal Medicine, Weiss Memorial Hospital, Chicago, Illinois, USA

Dr Alok Arora is Resident Physician in the Department of Internal Medicine, Weiss Memorial Hospital, Chicago, 60640, Illinois, USA

Dr Keith Shulman is Consultant in the Department of Hematology-Oncology, Weiss Memorial Hospital, Chicago, Illinois, USA

Correspondence to: Dr A Arora (alarora@weisshospital.com)

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Figure 1. a. Massive stomach dilation with delayed emptying and no evidence of outlet obstruction. **b.** Gastric scintigraphy shows 50% of food is still in stomach after 2 hours, confirming gastroparesis.

