Green urine

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An 85-year-old woman was brought to the emergency department after she was found on the floor of her bedroom with generalized weakness and confusion. Her medical history was noteworthy for coronary artery disease, type 2 diabetes and atrial fibrillation. She was taking diltiazem, sitagliptin, pantoprazole, atorvastatin, bisoprolol and hydroxyzine.

At the emergency department, the patient was febrile (body temperature 38.3°C), hypotensive (blood pressure 88/70 mmHg) and tachycardiac (heart rate 120 beats/min). We found a diffuse abdominal tenderness on palpation. A urinary catheter was inserted and it drained green-colured urine (Figure 1). The patient had a white blood cell count of 42.3 (normal range 4.0–11.0) × 10^9/L, with neutrophils at 35.1 (normal range 2.0–7.5) × 10^9/L and a serum creatinine level of 100 (normal range 62–102) µmol/L. Results from urinalysis showed a pH of 6.5 (normal range 5.0–8.5) with trace ketones, but no blood or leukocytes were found. Computed tomography of the abdomen showed a distended gallbladder with mild wall thickening that was suggestive of cholecystitis.

We started treatment with broad spectrum antibiotics, and, after 24 hours, the patient had improved substantially and was no longer confused. On further history, she reported that she had undergone a colonoscopy with snare polypectomy in a different hospital the day before her admission. During the procedure, the physician had used submucosal saline injections containing methylene blue to elevated the polyp, which led to urine discolouration.

Green-coloured urine has been reported with medications such as propofol, metoclopramide, methylene blue, Clorets breath fresheners and traditional Chinese medicines.[1–3] Purple urine caused by formation of pigments from dietary trypotophan by gram-negative bacteria has been reported.[4] Black urine, which stains the collection containers, can be seen with elevated urobilinogen.[5]

Although urine colour can be a clue to diagnosis of diseases such as porphyria, a thorough history can often provide a diagnosis without invasive investigations. Abnormal urine colour can be distracting to the health care providers. In this case, it was not the cause of sepsis in this patient.

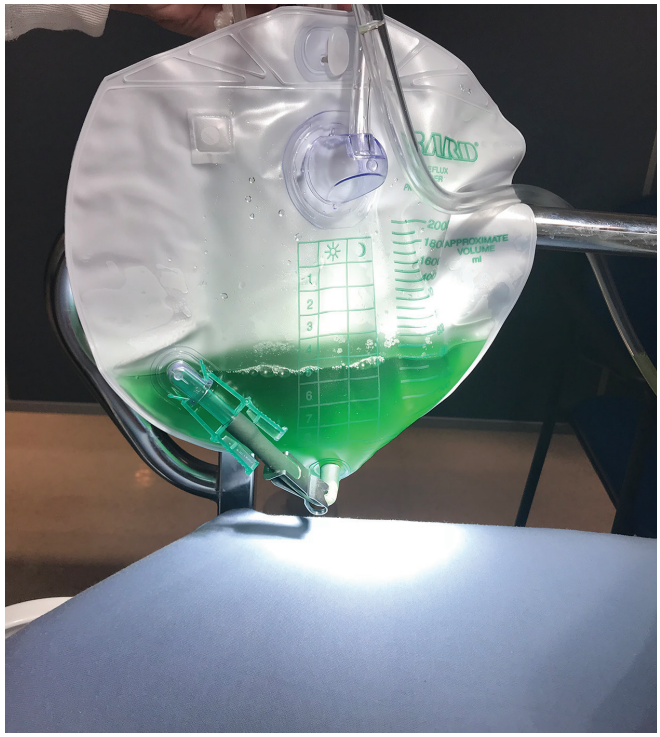

Figure 1: Catheter drainage showing green urine in an 85-year-old woman who was admitted to hospital with generalized weakness and confusion.

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This article has been peer reviewed.

The authors have obtained patient consent.

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