## ED QUICK QUIZ

### WHAT IS THE DIAGNOSIS?

#### BACKGROUND

A 54 year old man presents to A&E with a 3 day history of diarrhoea and vomiting; he is passing 7 watery stools per day and vomiting several times per day. He also has intermittent cramp-like abdominal pain which is relieved by defaecation. His infant grand-daughter has been unwell with diarrhoea and vomiting.

He tells you that he feels light-headed at times, usually when standing, and that he has been passing less urine than usual.

Past medical history: IHD with previous MI and 2 stents, hypertension, mild heart failure, type 2 diabetes.

Drug history: aspirin, isosorbide mononitrate, simvastatin, ramipril, bisoprolol, gliclazide, furosemide.

#### Examination

His capillary refill time is 3 seconds.

Cardiovascular, respiratory and gastrointestinal examinations are otherwise normal.

He is afebrile and examinations are normal.

#### QUESTIONS

1. You think he has viral gastroenteritis, which you know is a self-limiting disease. Is he safe to go home? What things should you check to help you decide?
2. What is your differential diagnosis?
3. Does he need antibiotics?
ANSWERS & DISCUSSION

1. Safe discharge in gastroenteritis

Although gastroenteritis is usually a self-limiting illness, not all patients are equal. A patient can be discharged if they have non-severe illness (more below), no complications of gastroenteritis and are either able to look after themselves or have an able-bodied friend or relative able to look after them. Clinical judgement is needed.

Severe disease in gastroenteritis:

- >6 stools/day
- Fever
- Significant hypovolaemia/shock
- Bloody diarrhoea
- Prolonged illness (>7 days)

This patient takes ramipril and furosemide which predispose to AKI. He also takes bisoprolol which prevents the physiological response to hypovolaemia. He has postural presyncope, delayed CRT and reduced urine output. Given these adverse features you should check bloods and lying and standing blood pressure. When you do so there is a new AKI (urea 15 and creatinine 230) and a 25mHg systolic drop. You should discuss with the SHO on-call for the Infectious Diseases unit to discuss admission or, if there are no beds, the medical team.

2. Differential diagnosis

- Gastroenteritis
- C. Difficile
- Inflammatory bowel disease
- Constipation/obstruction with overflow
- Ischaemic colitis
- Diverticulitis

Given his history of ischaemic heart disease the main alternative diagnosis to consider in this man is ischaemic colitis. Check a venous blood gas to assess his lactate.

3. Antibiotics

These are usually indicated in severe disease (see criteria above) and should not be routinely prescribed in gastroenteritis. In bacterial gastroenteritis antibiotics can reduce the duration of symptoms by several days, but on the flip side they cause side effects, increase bacterial resistance, predispose to C. difficile and can increase risk of haemolytic uraemic syndrome in enterohaemorrhagic E.coli infection.