

**Introduction** UK incidence of cirrhosis and hospital admissions to treat complications is increasing. Spontaneous bacterial peritonitis (SBP) results in decompensation or death in over 40% at 90 days. Cirrhotic patients requiring large-volume paracentesis are at significant risk of developing SBP. Identifying those at high risk and screening for infection provide opportunities to intervene to prevent liver-related morbidity and mortality. The authors examined clinical practice and yield from these strategies.

**Methods** Between July 2009 and June 2010, all patients undergoing day case large-volume paracentesis for cirrhotic ascites were identified. Patient demographics, aetiology, MELD and UKELD scores were recorded. Ascitic albumin, total white cell count (WCC) and culture was recorded when performed. SBP was diagnosed either by a total ascitic WCC  $>500 \times 10^6/\text{ml}^1$  or positive culture. Outcome was determined for patients with SBP including *Clostridium difficile*-associated diarrhoea.

**Results** 137 drains in 45 patients were performed over 12 months. 39 were male; median age was 54 (range 35–83). Mean ( $\pm$ SD) number of drains was 3.0 ( $\pm$ 2.8). Aetiology was alcoholic liver disease (ALD) in 32 (71%), HCV in 5 (11%), HCV/ALD in 1, PBC in 1, NASH in 1 and other/cryptogenic in 5. Median MELD and UKELD were 23 and 51 respectively. 23/24 patients tested had baseline ascitic albumin  $<10$  g/l. Of these, 4 were on secondary and 1 on primary antibiotic prophylaxis. 47 (34%) had sampling; WCC from 44 drains, culture from 36 and 33 both. 7 samples (15%) were positive for SBP (4 raised WCC, 2 culture, 1 both). No patients were taking prophylaxis. 5 were subsequently admitted within 30 days for liver-related complications including sepsis and variceal haemorrhage, and 2 died within 90 days. In all, 16 (36%) died, 4 (9%) received and 4 (9%) are awaiting liver transplantation. 1 patient developed *C difficile*-associated diarrhoea following ciprofloxacin secondary prophylaxis.

**Conclusion** Screening for SBP infection or risk was not universal. Over 90% of patients tested met criteria for consideration of primary prophylaxis. 15% of patients screened had SBP with a high rate of liver-related morbidity and mortality. Patients in paracentesis programmes should be actively considered for primary SBP prophylaxis, screened for SBP, and considered for liver transplantation or end-of-life planning.

**Competing interests** None.

**Keywords** ascites, paracentesis, spontaneous bacterial peritonitis.

## REFERENCE

1. Wong CL, Holroyd-Leduc J, Thorpe KE, *et al.* Does this patient have bacterial peritonitis or portal hypertension? How do I perform a paracentesis and analyse the results? *JAMA* 2008;229:1168–78.

PTH-105

## HOW CAN RISK REDUCTION AND EARLY DETECTION OF SBP IN CIRRHOTIC ASCITES BE IMPROVED?

doi:10.1136/gut.2011.239301.506

G A D Major,<sup>1,\*</sup> R Ingram,<sup>1</sup> A Chivinge,<sup>2</sup> M James<sup>1</sup> <sup>1</sup>Nottingham Digestive Diseases Centre NIHR Biomedical Research Unit, Nottingham, UK; <sup>2</sup>Department of Gastroenterology, Nottingham University Hospitals NHS Trust, Nottingham, UK