



Fig. 1. (a) Axial and (b) coronal CT image showing gas attenuation in the wall of the distended stomach with free intra-peritoneal gas.

without concomitant infection. The gastrointestinal obstruction secondary to peptic ulcer, pyloric or duodenal stenosis and carcinoma (antrum, pancreas, ampullary) are the main causes for gastric emphysema. Patients are less acutely unwell and it takes a benign clinical course in contrast to the fulminant emphysematous gastritis. The gastric distension and linear gas pattern in the gastric wall demonstrated by computerized tomography is diagnostic.² Leakage of the gastric intramural air into peritoneal reflections and gastric ligaments may escape into the peritoneal cavity or retroperitoneal space³ as shown in our case. The pneumoperitoneum is an unusual manifestation of gastric emphysema and does not warrant operative intervention.⁴ The clinical outcome depends on the general condition of the patient and the cause of gastric emphysema.

References

1. Shipman PJ, Drury P. Emphysematous gastritis: case report and literature review. *Australas. Radiol.* 2001; **45**: 64–6.
2. Omojola MF, Pirani MK, Sylven M, al Sebayel M. Computed tomographic evaluation of gastric emphysema – a report of three cases. *Clin. Radiol.* 1997; **52**: 381–3.
3. Kussin SZ, Henry C, Navarro C, Stenson W, Clain DJ. Gas within the wall of the stomach report of a case and review of the literature. *Dig. Dis. Sci.* 1982; **27**: 949–54.
4. Badrinath K, Jairam N, Ravi HR, Augustine T. Gastric emphysema following drug-induced gastritis. *Br. J. Surg.* 1992; **79**: 320.

Girivasan Muthukumarasamy,* MBBS, MRCS (Glasg)

Karthikeyan Damodharan,† MBBS, FRCR

Michal Chudy,* MD

Mark Ablett‡ MBChB, FRCR, FRCP (Glasg)

*Department of Surgery, Ayr Hospital, Ayr, Scotland,

†Department of Radiology, Leicester Royal Infirmary, Leicester,

and ‡Department of Radiology, Ayr Hospital, Ayr, Scotland, UK

doi: 10.1111/j.1445-2197.2010.05559.x

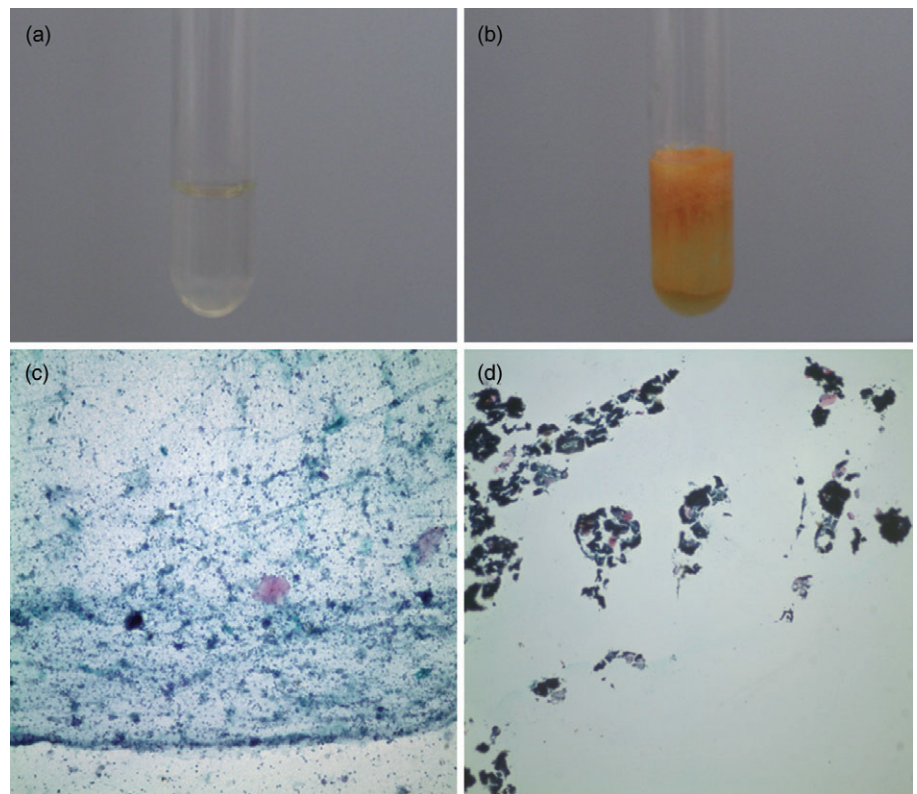
Dear Editor,

Effects of Ankaferd Blood Stopper on Pancreatic Fluid: An *in vitro* study

Ankaferd Blood Stopper (ABS) has been approved as a medicinal product in the management of external haemorrhage and dental surgical bleedings in Turkey based on the safety and efficacy reports, indicating its sterility and non-toxicity.¹ ABS is a standardized herbal extract obtained from five different plants: *Thymus vulgaris*, *Glycyrrhiza glabra*, *Vitis vinifera*, *Alpinia officinarum* and *Urtica dioica*.¹ ABS has been shown to promote the formation of an encapsulated protein mesh which acts as an anchor for erythrocyte aggregation.¹ There is accumulating evidence on the efficacy of ABS in gastrointestinal system bleeding.^{2–4} The effect of ABS on pancreatic fluid has still not been investigated.

The aim of the present study was to observe the reaction of ABS on pancreatic fluid of human subjects *in vitro*. Pancreatic fluid samples were collected separately from five patients' external drainage catheters who had previously undergone Whipple's procedure for carcinoma of the periampullary region. One millilitre of ABS solution was added to each 4 mL of pancreatic fluid samples. In the control group ($n = 5$), 1 mL of 0.9% NaCl was added to each 4 mL of pancreatic fluid in sterile tubes. When added to pancreatic fluid, ABS induced solidification like a frozen gel (Fig. 1a, b). The architecture of the solid layer was observed in tubes *ex vivo* along 4 days without disruption. After 4 days, it began to resolve. No reaction was observed in the control group. Cytopathologically, in the control group, the background was commonly filled with proteinous material, degenerated duct cells of pancreatic fluid and a few scattered squamous epithelial cells due to the pancreatic catheter (Fig. 1c). When ABS was added to the pancreatic fluid, a cluster of aggregated proteinous material of the pancreatic fluid was observed (Fig. 1d). Biochemical analyses revealed decreases in amylase (median 91025 U/L versus 41 U/L, $P = 0.04$), protein (median 0.51 g/dL versus 0.02 g/dL, $P = 0.04$) and albumin levels (median 0.14 g/dL versus 0.06 g/dL, $P = 0.04$) (Wilcoxon signed-rank test). Following

Fig. 1. (a) The pure pancreatic fluid. (b) The addition of ABS to the pancreatic fluid resulted in a layer of solidification like a frozen gel. (c) In pure pancreatic fluid, the background was commonly filled with proteinous material and degenerated duct cells, and a few scattered squamous epithelial cells due to the main pancreatic channel catheterization (Papanicolaou $\times 40$). (d) After adding ABS to the pancreatic fluid, a cluster of aggregated proteinous material and epithelial cells was observed, leaving the background empty and clean (Papanicolaou $\times 20$).



the addition of ABS to the pancreatic fluid, it forms aggregates of protein network. Therefore, we believe that ABS could be used in postoperative complications such as pancreatic fistulas. Further investigations are needed to understand the role and efficacy of ABS on pancreatic fluid.

References

1. Goker H, Haznedaroglu IC, Ercetin S *et al.* Haemostatic actions of the folkloric medicinal plant extract Ankaferd Blood Stopper. *J. Int. Med. Res.* 2008; **36**: 163–70.
2. Kurt M, Kacar S, Onal IK, Akdogan M, Haznedaroglu IC. Ankaferd Blood Stopper as an effective adjunctive hemostatic agent for the management of life-threatening arterial bleeding of the digestive tract. *Endoscopy* 2008; **40**(Suppl. 2): E262.
3. Kurt M, Disibeyaz S, Akdogan M, Sasmaz N, Aksu S, Haznedaroglu IC. Endoscopic application of Ankaferd blood stopper as a novel experimental treatment modality for upper gastrointestinal bleeding: a case report. *Am. J. Gastroenterol.* 2008; **103**: 2156–8.
4. Kurt M, Akdogan M, Onal IK *et al.* Endoscopic topical application of Ankaferd Blood Stopper for neoplastic gastrointestinal bleeding: a retrospective analysis. *Dig. Liver Dis.* 2010; **42**: 196–9.

Kerem Karaman,* MD
Bahadır Celep,* MD
E. Birol Bostanci,* MD
Zafer Teke,* MD
Murat Ulas,* MD
Nazmiye Dincer,† MD
Mevlut Kurt,‡ MD
Musa Akoglu,* MD

*Turkiye Yuksek Ihtisas Teaching and Research Hospital, Department of Gastrointestinal Surgery, Ankara, †Cankiri State Hospital, Department of Pathology, Cankiri, and ‡Turkiye Yuksek Ihtisas Teaching and Research Hospital, Department of Gastroenterology, Ankara, Turkey

doi: 10.1111/j.1445-2197.2010.05560.x

Dear Editor,

TAPP repair in a giant bilateral scrotal hernia – limits of a method

Only a few cases of giant bilateral hernias have been reported.¹ This case was previously presented as a successful application of a minimally invasive-assisted laparoscopic mesh repair with a trans-abdominal preperitoneal patch (TAPP) technique.² In 2004, a 65-year-old farmer presented to our outpatient clinic with acute inguinal pain, inappetence, constipation and weight loss of more than 15 kg within a few weeks (Fig. 1). He reported having the hernia since the age of 18. Since then, the hernia had grown larger, but the patient was able to reduce the herniation himself until 2 weeks before admission to the hospital. TAPP hernia repair was performed and the patient recovered quickly. Two weeks after discharge, he was able to resume his normal activities. One, 2 and 3 years after the initial operation, the patient presented with a hernia at the umbilical trocar site and lateral left and right inguinal