True Aneurysm rupture of omental artery leading to hemoperitoneum and shock in a CAPD patient

Sir,

Haemoperitoneum is a rare complication in continuous ambulatory peritoneal dialysis (CAPD) patients. In most cases, haemoperitoneum subsides by itself or by flushing the peritoneal cavity several times with the peritoneal dialysis solution [1,2]. Haemoperitoneum by rupture of visceral aneurysms in CAPD patients is rare [3]. We report a case of true aneurysmal rupture of the omental artery in a patient undergoing CAPD.

A 71-year-old male on CAPD was transferred to our hospital, due to continuous bloody peritoneal effluents and decrease of consciousness. After he was transfused with 200 ml of packed red blood cells at a hospital nearby, the patient was immediately transferred to our hospital because of unstable vital signs and bloody peritoneal effluents.

Bleeding peritoneal fluid was persistently drained through the CAPD catheter at our hospital. He was in a confused mental state. His blood pressure was 80/60 mmHg, body temperature was 36.7°C, pulse rate was 126/min and respiratory rate was 20/min. Laboratory data showed a leucocytosis (white blood cells 16 300/mm³, segmented neutrophils 70%) and his haemoglobin level was 8.2 g/dl.

Free air was not detected on the simple erect chest film. Computed tomographic angiography revealed aneurysmal dilatation of the paracolic gut accompanied by haematoma (Figure 1). We preferred an exploratory laparotomy for the purpose of making a definite diagnosis and determining treatment. An aneurysm of 16 mm in diameter was detected at the margin of the greater omentum covered with blood clots. Omentectomy and aneurysmal resection were performed. The pathology showed a dilated true vessel lumen with all layers. The patient was discharged at 18 days after the operation and was judged to be without sequelae. He is doing well and continues on peritoneal dialysis.

In this case, true aneurysmal rupture of the omental artery was the cause of a massive haemoperitoneum in our patient undergoing CAPD. Several cases of massive haemoperitoneum in CAPD patients have been reported [4–6]. However, to our knowledge, haemoperitoneum caused by rupture of the true omental artery in a CAPD patient has not been reported. Even though this case is extremely rare, we should always suspect this critical condition in a patient undergoing peritoneal dialysis if bloody peritoneal effluent is observed.

Conflict of interest statement. None declared.

1. Department of Internal Medicine
   College of Medicine
   Gyeongsang National University
2. Department of Internal Medicine
   Hallym University Medical School
3. Department of Surgery
   Seoul National University
4. Department of Internal Medicine
   Seoul National University

Email: curie@snu.ac.kr