

COMMENTARY

History

As the consultant surgeon on call, you were called to see a 46-year-old man in the emergency department (ED) who is referred from a nearby district hospital, 24 hours after being involved in a road traffic accident. He was doing well on conservative treatment, but, showed rapid deterioration over the last 3 hours before referral. In the ED, the patient is fully conscious complaining of progressive abdominal pain, distension and difficult breathing. He has a negative past medical and surgical history.

Examination

The patient is anxious, pale and sweaty. He is dyspnoeic with a respiratory rate of 35/min and oxygen saturations of 90% on 5L/minute oxygen. His temperature is 37.5°C, blood pressure of 80/45 mmHg and pulse rate 120/min, regular and weak. Air entry is decreased on both lung bases. Abdominal examination showed moderate abdominal distension, contusion on the right upper quadrant, diffuse rigidity, dull flanks with positive shifting dullness, markedly reduced liver dullness and faint infrequent bowel sounds. Foley's catheter returned 10 ml of dark urine over the last 4 hours. **Laboratory data are presented in the table.**

After resuscitation, exploration revealed large amount of haemoperitoneum, an actively bleeding deep laceration in the anterosuperior surface of the right lobe of the liver, a complete transection of the right transverse colon with gross fecal

spillage, marked edema of the bowel and its mesentery and a right side zone II non-expanding non-pulsating retroperitoneal haematoma.

Laboratory data

Value	Result	Reference
Haemoglobin	8.0 g/dL	11.5–16.0 g/dL
Haematocrit value	31%	45-55%
White cell count	14.2X10 ⁹ /L	4.0–11.0 10 ⁹ /L
Platelets	235X10 ⁹ /L	150–400 X10 ⁹ /L
Sodium	135 mg/dL	135–145 mg/dL
Potassium	4.0 mg/dL	3.5–5.0 mg/dL
Urea	60.0 mg/dL	20-40mg/dL
Creatinine	1.5 mg/dL	0.2-1.2mg/dL
pH	7.31	7.35–7.45
Partial pressure of CO ₂ (paCO ₂)	25 mm/Hg	35-45 mm/Hg
Partial pressure of O ₂ (paO ₂)	94 mm/Hg	90-100 mm/Hg
O ₂ saturation	90%	95-100%
Bicarbonate (HCO ₃)	16.0 mg/dl	22-26 mg/dl
Base excess	-5	-2 to +2
Lactate	20.0	4.5-14.5 mg/dl

Describe your approach to the management of this patient.

(200 Marks)