Case Description

An 87-year-old woman presented night-time at accident & emergency department with severe abdominal pain. Vital signs and blood tests were unremarkable. A CT scan abdomen-pelvis showed also no significant abnormality apart from sigmoid diverticular disease without signs of inflammation and a gastric distension likely reflecting gastritis.

The pain initially settled but about 12 hours later represented. Vitals were still within normal range; abdomen was tender but soft with no guarding and mildly distended. A chest x-ray was thus requested urgently.

Huge amount of intraperitoneal free air was massively evident bilaterally under diaphragm (Figure 1). Despite the effort to organize an emergency laparoscopic lavage, the patient deteriorated very rapidly and developed severe sepsis: lactate 10.3, heart rate: 102; respiratory rate: 24; blood pressure: 99/69 and altered mentation (qSOFA score: 3).

Intensive Treatment Unit resuscitative management revealed futile and she died few hours later. The cause of the perforated viscus still remains obscure.

Discussion

Considering the initial clinical picture surrounding the pain: soft abdomen, no sign of deterioration and negative CT scan, the suspicion of a gastrointestinal perforation seemed remote. It is still questionable whether there was a valid indication to request an urgent chest X-ray at that stage.

Two hypothetical causes might be a gastric ulcer, although pain was more evident at lower quadrants, or a bowel diverticulum, even though no sign of diverticulitis was defined at CT imaging.

In the almost totality of cases, a perforated viscus is suspected when clinical deterioration becomes unequivocal [1]. Despite in this case the diagnosis accidentally arrived in advance, the rush to organize theatre for emergency procedure and the resuscitative management, septic shock too quickly overwhelmed any chance of survival [2].
References
