An unfortunate complication of intravenous contrast injection

H.J. van Ommen, T.P. Dormans
Intensive Care Department, Zuyderland Medical Centre, Heerlen, the Netherlands

Correspondence
H.J. van Ommen - j.vanommen@zuyderland.nl

Case
A 73-year-old lady had been admitted to the Gastroenterology Department because of symptomatic normocytic anaemia due to bleeding from a large stomach ulcer at the incisura angularis. The ulcer was coagulated and she was treated with proton pump inhibitors. During admission, she became hypoxic and a computer tomography (CT) scan of the thorax was performed to exclude pulmonary embolism. When the patient sat up after scanning, she collapsed and cardiopulmonary resuscitation (CPR) was initiated. Upon arrival of the CPR team, within minutes, radial pulsations were palpable. Shortly thereafter she regained full consciousness. CT images showed an intracardiac air pocket after intravenous injection of contrast agent (figure 1). An accidental injection of air together with the contrast agent was suspected. CT scan of the thorax was immediately repeated, showing no residual intracardiac air (figure 2). She recovered without neurological sequelae. A cause of her dyspnoea was not discovered. Careful examination of the incident showed the contrast syringe had wrongfully not been de-aired by the radiology assistant due to stress-related factors. The contrast injection protocol was consequently adjusted to prevent future events.

Figure 1. CT scan of the thorax showing intracardiac pocket of air (white arrow)

Figure 2. CT scan after resuscitation showing full resolution of intracardiac air

Disclosures
All authors declare no conflict of interest. No funding or financial support was received.