Intensive Care Med (2019) 45:523–524
https://doi.org/10.1007/s00134-018-5460-x

IMAGING IN INTENSIVE CARE MEDICINE

Nasogastric tube ending in the right pleura of an intubated patient

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An 89-year-old woman was treated in our intensive care unit with *Escherichia coli* urosepsis. The patient developed multiple organ failure and became intubated and mechanically ventilated. On the third intensive care day, a new 16Fr. type "Levin" nasogastric tube was inserted for enteral feeding. As no anatomical abnormalities were described, we followed a blind insertion technique, encountering no resistance while advancing the tube towards the stomach, and final position was confirmed by auscultation of a gurgling noise over the epigastrium. Enteral nutrition was started, according to ICU feeding protocol. However, 48 h later, acute hemodynamic instability was observed and invasive mechanical ventilation became difficult. A bed-side ultrasonography showed a pleural effusion on the right side, and a puncture for pleural-catheter placement revealed nutrition in the pleural space. 3D-reconstructed images of a chest computed tomography (Fig. 1a, arrow) demonstrated the endpoint of the nasogastric tube into the right pleura, confirming the perforation of the right lower lobe bronchus and massive lung parenchyma damage (Fig. 1b), despite the patient having an endotracheal tube in situ and giving no signal of cuff insufficiency. We suggest that radiological control remains the standard procedure to confirm the correct position of a nasogastric tube, even by invasive ventilated patients.

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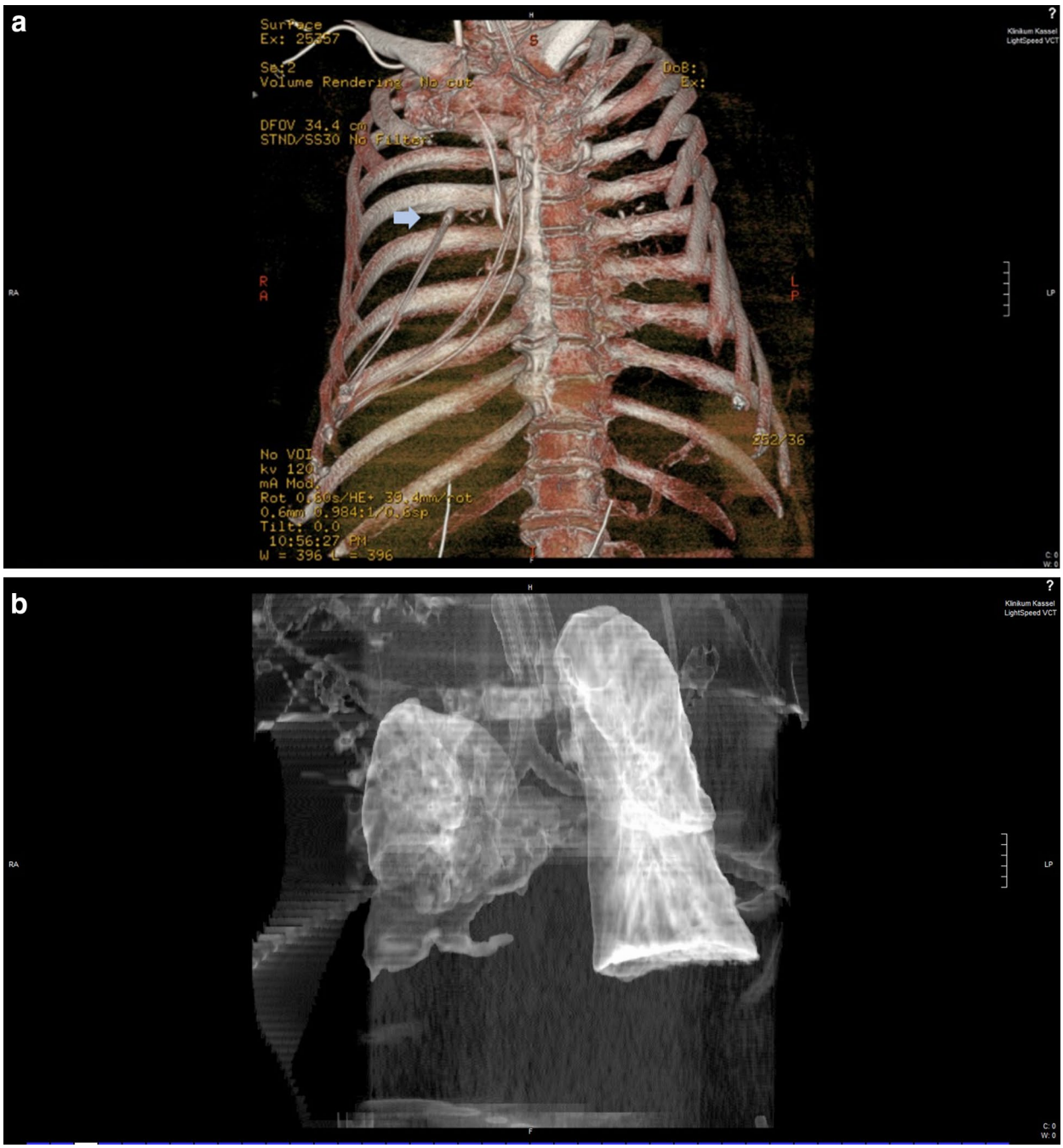

Fig. 1 **a** 3D-reconstructed image of a chest computed tomography, demonstrated the endpoint of the nasogastric tube into the right pleura (*arrow*). **b** 3D-reconstructed image of a chest computed tomography, showing the massive right lung parenchyma damage

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Received: 5 November 2018 Accepted: 8 November 2018
Published online: 14 November 2018