

Hydropneumothorax as an iatrogenic complication after nasogastric intubation

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DESCRIPTION

A 62-year-old woman with history of frontotemporal dementia was admitted to a Psychiatry ward due to severe insomnia. In the morning, after the admission a nasogastric tube was placed to initiate enteral feeding and medication since she was refusing all oral intake. Later that night, she was found unresponsive, dyspnoeic and with severe hypotension. Physical examination identified clinical signs of respiratory distress and decreased vesicular breath sounds on the right hemithorax. The gasometric evaluation revealed the presence of hypoxaemia and lactic acidosis. A posteroanterior chest radiograph showed a right pleural effusion and a misplaced nasogastric tube (figure 1). A thoracic CT scan revealed the presence of a right hydropneumothorax and also identified a tube inside the trachea and the right main bronchus, which perforated the lung parenchyma and ended in the pleural cavity (figure 2).

It was assumed an iatrogenic complication after nasogastric intubation. The content obtained after pleural effusion drainage was consistent with food delivered through the nasogastric tube during breakfast and lunch. The patient was submitted to a right segmental lobectomy, with no immediate complications. She has been evaluated for the last 2 years, showing no respiratory symptoms or pulmonary dysfunction. She maintains regular Psychiatry consultations due to her frontotemporal dementia.

Nasogastric intubation is associated with iatrogenic complications in up to 8% of the cases.¹ The

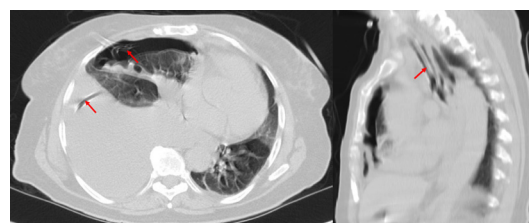


Figure 2 Thoracic CT scan showing right hydropneumothorax and also a tube inside the trachea and the right main bronchus, which perforated the lung parenchyma and ended in the pleural cavity (arrows).

most common ones are related to the respiratory system.² In order to prevent such accidents, the use of auxiliary techniques such as the capnography and endoscopy during nasogastric intubation is recommended.³

Learning points

- ▶ Iatrogenic complications still play an important role in the daily activity in any medical institution and every clinician must be aware of them
- ▶ Nasogastric intubation is not an innocuous procedure and is associated mainly with respiratory system complications
- ▶ Auxiliary techniques should be used in order to prevent these kinds of complications

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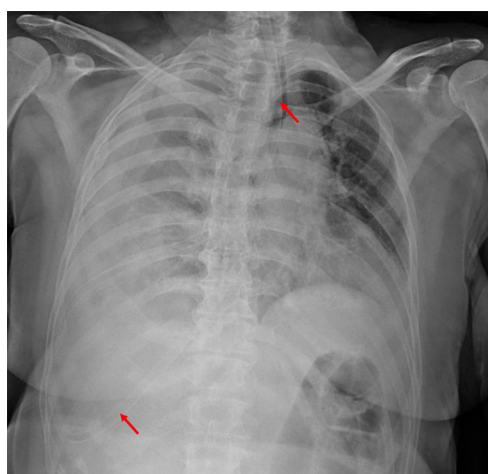


Figure 1 Posteroanterior chest radiograph showing right pleural effusion and a misplaced nasogastric tube (arrows).



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