

# Pneumoretroperitoneum, pneumomediastinum and neck emphysema due to rectal diverticulosis

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## Abstract

A 55-year old Albanian female, under treatment for intestinal diverticulosis, noted an increase in painful sensations in the lower abdomen, as well as an unexpected sense of suffocation. 20 centimeters from the anal margin a bleeding diverticulum approaching two centimeters in diameter was noted, and a surgical intervention was decided.

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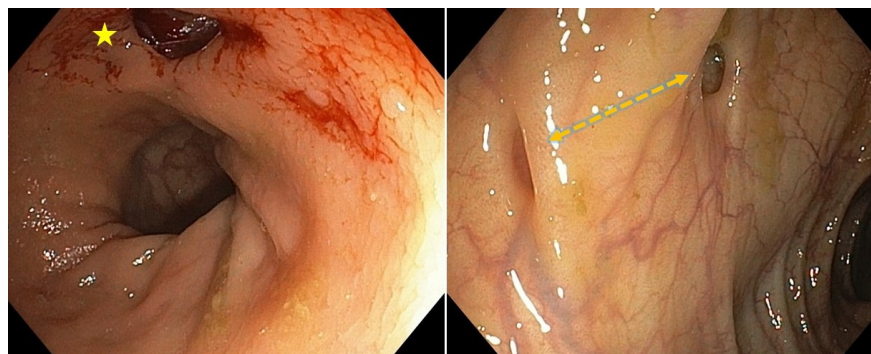
**Keywords:** neck swelling; pneumomediastinum; diverticulosis.

Images in clinical medicine

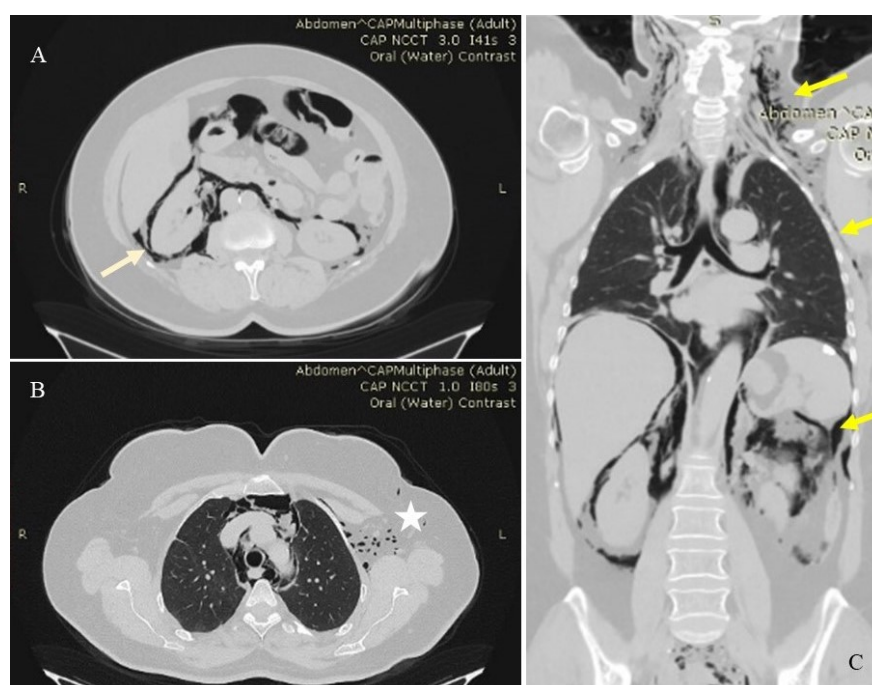
A 55-year old Albanian female, under treatment for intestinal diverticulosis, noted an increase in painful sensations in the lower abdomen, as well as an unexpected sense of suffocation. She had a previous colonoscopy two years before re-appearing for consultancy, and the examination was repeated under anesthesia (midazolam, fentanyl).

20 centimeters from the anal margin a bleeding diverticulum approaching two centimeters in diameter was noted; some thirty centimeters orad other diverticula with normal mucosal appearance are seen (Figure 1A and 1B).

The patient had the same afternoon a total body CT scan and an abdominal CT scan with oral contrast enhancement. Air bubbles were visible in both perirenal areas, advancing to the mediastinum and subcutaneously laterally, mostly in the left subaxillary and supraclavicular spaces, and reaching the neck structures (Figure 2A-C).



**Figure 1A:** bleeding diverticulum twenty cm from the anal margin (star). **1B:** two other diverticula thirty centimeter oral from the first one (arrow).



**Figure 2:** **2A,** free perirenal air (arrow). **2B,** subcutaneous air bubbles (star). **2C,** neck emphysema (arrows).

The patient was sent for emergency surgical intervention, and she had a segmental resection of the interested area, anastomosis and supportive postoperative treatment. Three months after the intervention during a follow-up, she appeared healthy and free from complaints.

The occult perforation of diverticula is a frequent cause of the presence of free air in the abdomen, but cases of air bubbles reaching neck structures are available as well [1, 2].

## REFERENCES

Besic N, Zgajnar J, Kocijancic I. Pneumomediastinum, pneumopericardium, and pneumoperitoneum caused by peridiverticulitis of the colon: report of a case. *Dis Colon Rectum*. 2004 May;47(5):766-8.

Wiles T, Mullett R, Chadwick M. Diverticular perforation: an unusual cause of subcutaneous emphysema. Emerg Med J. 2014 Mar;31(3):259-60.

