

Figure 2. A: Endoluminal 3D reconstruction of virtual colonoscopy image demonstrating the fistulous orifice (asterisk) in the large bowel. The reference 2D image of the orifice positioning is highlighted (arrow). **B:** 3D reconstruction demonstrating gaseous bowel distention and the fistulous orifice (arrow).

causing abdominal distension upstream due to fecal buildup (Figure 1B). Endoluminal reconstruction of virtual colonoscopy images demonstrated the fistulous orifice in the transverse colon (Figure 2A). Tridimensional reconstruction for gaseous material demonstrated diffuse gaseous distension of the right, transverse and left colons, and also the site of the choledochal-colonic fistula (Figure 2B). Once the diagnosis was established, the patient was successfully submitted to surgery.

Acute obstructive cholecystitis may approach the serosas of the biliary and intestinal tracts due to the gallbladder and/or common biliary duct dilatation. With the repetition of inflammatory episodes and adherence of the serosas, choledochal-colonic fistularization may occur, allowing for the passage of biliary calculi into the intestinal lumen⁽¹⁾, besides calculi impaction at some point in the tract, causing significant pain, severe local irritation, edema or gangrene⁽²⁾. Amongst cholecystointestinal fistulas, cholecystoduodenal fistulas represent more than 70%, while cholecystocolonic fistulas represent 8% to 26% of them⁽³⁾. Rigler et al. established four criteria (presence of air or contrast medium in the biliary tract; direct or indirect identification of calculus in the bowel; alteration in the position of a previously identified calculus; radiological signs of either partial or total occlusion of the intestinal lumen) which corroborate a diagnosis of bowel obstruction caused by a calculus⁽⁴⁾. Three findings determined by such

criteria constitute the Rigler's triad: signs of small bowel dilation, pneumobilia and ectopic calculi.

Despite the rarity of this condition, one should be attentive to the possibility of biliary colon in acute onset of lower intestinal obstruction, in order to allow for a prompt and correct diagnosis and institution of an appropriate treatment.

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<http://dx.doi.org/10.1590/0100-3984.2014.0073>

Catamenial pneumothorax

Pneumotórax catamenial

Dear Editor,

A previously healthy 29-year-old woman presented at the emergency service complaining of sudden onset dyspnea. At physical examination the vesicular murmur was absent in the entire right hemithorax. Chest radiography demonstrated the presence of pneumothorax at right (Figure 1) and chest computed tomography (CT) did not demonstrate any other alteration besides the already mentioned pneumothorax. Thoracotomy with underwater seal chest drainage was performed. As the pneumothorax presentation coincided with the patient's menstrual period, pelvic ultrasonography was performed and identified an image compatible with endometrioma in the left ovary. In three months, the patient evolved with a new spontaneous pneumothorax at right, and a pig-tail drainage tube was inserted. Later, thoracoscopy was performed, and endometriotic foci were identified and resected (Figure 2). The chest wall was repaired with a Marlex mesh. After three months, the patient remains asymptomatic.

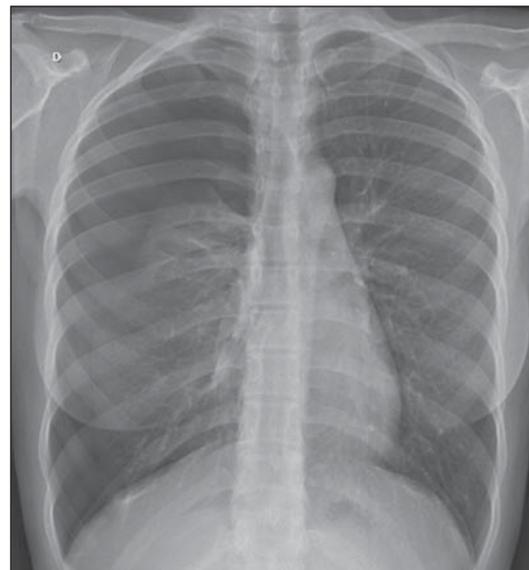


Figure 1. Chest radiography, posterior view showing pneumothorax at right.

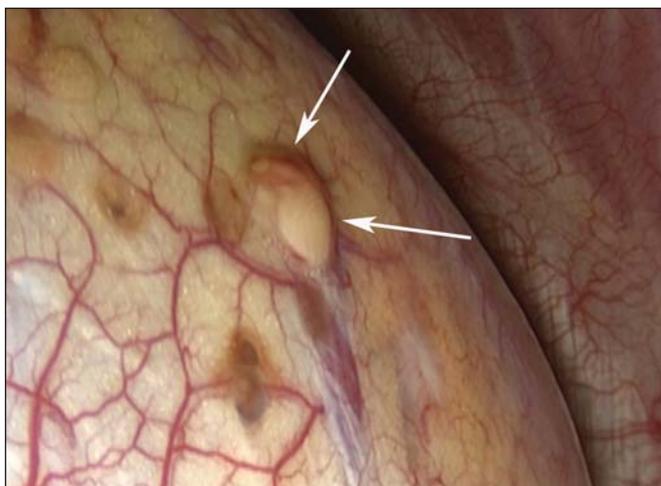


Figure 2. Videothoracoscopy revealing the presence of endometriotic foci (arrows) on the pleural surface.

Imaging evaluation of the chest has been subject of a range of recent publications in the Brazilian radiological literature^(1–10).

Thoracic endometriosis is the presence of endometrial tissue in the lung parenchyma or in the pleural cavity, and manifests clinically by hemoptysis, pneumothorax or hemothorax, occurring in conjunction with menstrual periods^(11–13). Frequently, it affects women in childbearing age, with incidence peak between the third and fourth decades of life⁽¹⁴⁾. Thoracic endometrial implants generally occur in the pleural cavity and, less frequently, in the lung parenchyma⁽¹⁴⁾.

Pleural endometriosis is an entity whose course is generally benign, occurring most frequently at right, possibly due to congenital defects in the right diaphragmatic dome and to continuous flow of fluid from the pelvis into the right upper quadrant of the abdomen⁽¹⁵⁾. Typically, thoracic endometrial implants occur concurrently with periodical symptoms (from one day before to the first two days of menstruation)⁽¹⁶⁾. The clinical presentation depends on the site of involvement, namely, catamenial pneumothorax or hemothorax in cases of pleural implants; and catamenial hemoptysis or asymptomatic pulmonary nodules in cases of implants in the pulmonary parenchyma. Histologically, the presence of endometrial tissue is identified in the lungs and/or pleura. Cytology reveals the presence of endometrial cells in the pleural fluid, in pulmonary nodules/masses aspirates, or in bronchial lavage fluid. Imaging studies include principally chest radiography and CT, which can demonstrate pneumothorax, hydropneumothorax or pleural nodular lesions. Magnetic resonance imaging has increasingly gained relevance since, besides differentiating parenchymal from pleural lesions, this method presents a better spatial resolution and, if performed during the menstrual period, it can identify glandular tissue in the affected site (hyperintense foci on T2-weighted images)^(17–19).

The treatment has two main pillars: the conservative treatment, based on hormone replacement to prevent recurrence of pneumothorax and hemothorax; and the surgical treatment that is indicated in cases of hormone therapy failure, severe treatment side effects, recurrence after treatment interruption, or if the patient wants to become pregnant⁽²⁰⁾. Therefore, one may conclude that catamenial pneumothorax should be suspected in the presence of clinical signs coinciding with the menstrual period, and

that imaging studies can confirm the diagnosis. The treatment may be either surgical or medical, and should be appropriately indicated to avoid disease recurrence.

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<http://dx.doi.org/10.1590/0100-3984.2014.0067>