

Clinical Image

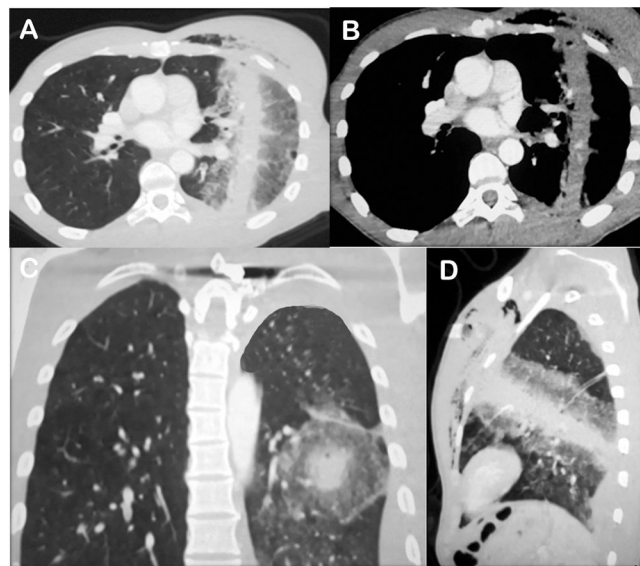
**Tubular Opacity in the Lung Along a Bullet Trajectory**

**Opacidad tubular en el pulmón a lo largo de una trayectoria de bala**

Helvécio Grandinetti<sup>a</sup>, Gláucia Zanetti<sup>b</sup>, Edson Marchiori<sup>b,\*</sup>

<sup>a</sup> Hospital João XXIII – Pronto Socorro – FHEMIG, Belo Horizonte, Brazil

<sup>b</sup> Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil



**Fig. 1.** Axial CT images of the chest obtained with the lung (A) and mediastinal (B) window settings, demonstrating tubular consolidation (hematoma) crossing the left lung with peripheral ground-glass opacities (contusion). Note also a small pleural effusion and subcutaneous emphysema in the anterior chest wall. (C) Coronal reconstruction showing the aspect of a nodule with a halo of ground-glass opacity (halo sign). (D) Sagittal reconstruction showing the tubular opacity along the posteroanterior bullet trajectory.

A 32-year-old man with a history of aggression arrived at the emergency room with a gunshot wound in the posterior left hemithorax, penetrating the seventh intercostal space and transfixing the chest through the pulmonary parenchyma. The exit hole was in the anterior wall, with no associated fracture or mediastinal injury.

On admission, the patient was lucid, complaining of pain and dyspnea. He had a respiratory rate of 24 ipm and heart rate of 100 bpm, and was hemodynamically stable with 95% O<sub>2</sub> saturation. Computed tomography showed tubular consolidation crossing the left lung (Fig. 1). The patient presented a small hemothorax, which was drained. The final diagnosis was pulmonary laceration with hematoma formation along the bullet's path.

Lacerations occur commonly with penetrating chest trauma and are usually located along wound trajectories. They are characterized by alveolar space disruption, typically leading to the formation of a tubular cavity filled with blood and/or air, and frequently surrounded by contusions. Pulmonary lacerations typically resolve in 3–5 weeks. The treatment strategy for gunshot injury to the torso depends mainly on the patient's hemodynamic status. Hemodynamically stable patients may be treated with minor surgical procedures (e.g., chest tube placement) or even conservatively.<sup>1,2</sup>

**References**

1. Reginelli A, Russo A, Maresca D, Martiniello C, Cappabianca S, Brunese L. Imaging assessment of gunshot wounds. *Semin Ultrasound CT MR.* 2015;36:57–67. <http://dx.doi.org/10.1053/j.sult.2014.10.005>.
2. Durso AM, Caban K, Munera F. Penetrating thoracic injury. *Radiol Clin North Am.* 2015;53:675–93. <http://dx.doi.org/10.1016/j.rcl.2015.02.010>.

\* Corresponding author.  
E-mail address: [edmarchiori@gmail.com](mailto:edmarchiori@gmail.com) (E. Marchiori).