

## Neurovascular Lesion Caused by Non-Lethal Projectile in Cervical Region

Milton Sérgio Bohatch Júnior, Amanda Fernandes Vidal da Silva, Agnaldo José Graciano Hospital Municipal São José, Joinville, Santa Catarina – Brazil

Male patient, 33 years old, with history of gunshot injury with non-lethal projectile in the right cervical region (Zone I) and motor disorders in the upper right limb. On examination, he had a hard, non-pulsatile nodule and grade III monoparesis. Tomography revealed thrombosis of the right internal jugular vein and a projectile housed next to the common carotid (Figure 1). Exploratory cervicotomy revealed the rubber projectile with intense adhesion process and thrombosis of the right internal jugular vein. To remove the projectile (Figure 2), sternocleidomastoid muscle section was required. Patient was referred for physical therapy rehabilitation.

### **Keywords**

Wounds, Gunshot/surgery; Sternotomy; Jugular Veins/ surgery; Tomography, X-Ray Computed; Venous Thrombosis.

Mailing Address: Milton Sérgio Bohatch Junior • Rua Plácido Gomes, 488. Postal Code 89202-000, Anita Garibaldi, Joinville, SC - Brazil

E-mail: milton.jr87@hotmail.com

Manuscript received December 11, 2017; revised December 16, 2017; accepted January 03, 2018

DOI: 10.5935/2318-8219.20180017

## Authors' contribution

Research creation and design: Bohatch Júnior MS, Silva AFV; Data acquisition: Bohatch Júnior MS; Data analysis and interpretation: Bohatch Júnior MS; Manuscript writing: Bohatch Júnior MS, Silva AFV, Graciano AJ; Critical review of the manuscript for relevant intellectual content: Bohatch Júnior MS, Silva AFV, Graciano AJ.

#### Potential Conflicts of Interests

There are no relevant conflicts of interests.

#### **Funding Sources**

This study had no external funding sources.

#### Academic Association

This study is not associated with any graduate programs.



Figure 1 – Computed tomography. A – Axial view: cylindrical radiodense artifact measuring  $4.3 \times 1.8 \text{ cm}$  (yellow arrow), located in the deep subcutaneous planes of the right anterior cervical region. The arrowhead points to the fracture of the posterior portion of the first right costal arch. B - Coronal view: radiodense artifact (yellow arrow) in close contact with the right common carotid wall(#) on the topography of the right internal jugular vein(\*) that was not highlighted by intravenous contrast, suggesting thrombosis or obstruction. C – 3D reconstruction: artifact (arrow), internal jugular vein(\*) and right common carotid(#).

# Image



Figure 2 – A: Intraoperative image showing intense adhesion process. B: Non-lethal projectile removed.