History
Teenager shot with a pellet gun. No neurovascular deficit.

Diagnosis
Focal Carotid Dissection

Additional Clinical
The patient underwent endovascular stent graft.

Discussion
Dissection is rare in penetrating trauma, occurring in fewer than 2% of patients (most blunt traumatic dissections result from hyperextension and rotation, hyperflexion, or lesser trauma and occasionally hypertension, fibromuscular dysplasia, or connective tissue diseases).
Cervical dissections may be clinically silent; 50% of patients present with a normal or nonfocal examination consisting of headaches and neck pain. The other 50% can develop symptoms such as transient ischemic attacks, Horner's syndrome, or a neck bruit caused by a dissection with slow propagation of thrombus or delayed embolization.
CT angiography is an accurate noninvasive means of detection of carotid dissection. Endovascular stent grafts are increasingly utilized for treatment.

Findings
CT-Scout image shows the metallic foreign body in the pericervical soft tissue edema. Axial, sagittal and coronal images show a focal linear intimal defect and hematoma around the carotid sheath. Arteriogram-Selective left common carotid injection confirms the focal injury.

Reference

Contributor
John Quick MD
Disclaimer
This teaching site is partially funded by an educational grant from GE Healthcare and Advanced Radiology Services, PC. The material on this site is independently controlled by Advanced Radiology Services, PC, and GE Healthcare and Spectrum Health have no influence over the content of this site.

Content Download Agreement
The cases and images on this website are owned by Spectrum Health. Permission is granted (for nonprofit educational purposes) to download and print materials to distribute for the purpose of facilitating the education of health professionals. The authors retain all rights to the material and users are requested to acknowledge the source of the material.

Site Disclaimer
This site is developed to reach healthcare professionals and medical students. Nothing this site should be considered medical advice. Only your own doctor can help you make decisions about your medical care. If you have a specific medical question or are seeking medical care, please contact your physician.

The information in this website is provided for general medical education purposes only and is not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific medical condition.

The viewpoints expressed in these cases are those of the authors. They do not represent an endorsement. In no event will Advanced Radiology Associates, PC, Spectrum Health Hospitals (Helen Devos Children's Hospital) or GE Healthcare be liable for any decision made or action taken in reliance upon the information provided through this website.