

Case | (247) Post-traumatic subclavian vein aneurysm.
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CASE PRESENTATION

A 39-year-old male patient was brought to the emergency department due to a multiple trauma related to motorcycle accident at 40 kph, hitting the occipital area of the head and the right side of the body. Physical examination revealed profuse bleeding in the occipital area and pain in the right shoulder.

A thoracoabdominopelvic CT was performed, identifying a comminuted fracture with a free fragment of the right clavicle, among other findings. It cannot be ruled out a venous injury because the fracture was in intimate contact with the right subclavian vein, the soft tissue component (suggestive of posttraumatic hematoma) and the subclavian vein cannot be adequately assessed due to the lack of opacification of the same.

To evaluate the state of the vascular system, it was decided to repeat CT with a specific protocol for the venous system assessment, performing an early phase after the administration of contrast. In the second study, a pseudonodular structure of 11 mm that appears to depend on the superior wall of the vessel was visualized at the confluence of the internal jugular vein with the brachiocephalic vein.

The image was opaque with contrast inside. Possible diagnoses were aneurysm / laceration of the contained vein.

DISCUSSION

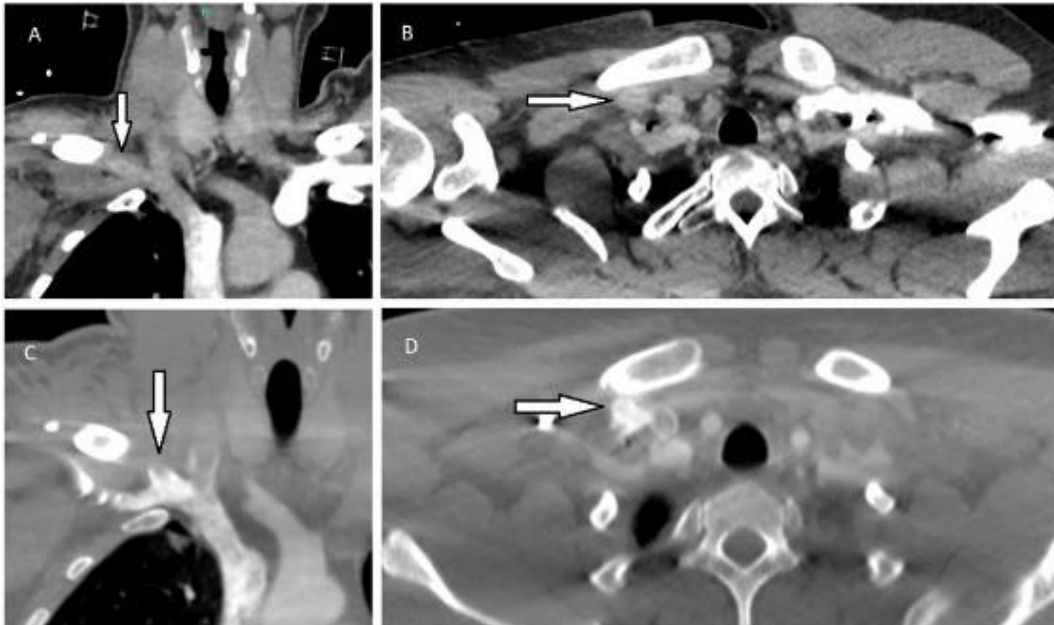
The findings suggest a subclavian vein aneurysm as the first possibility. Venous aneurysms are an infrequent pathology. Its management is controversial, its treatment is recommended in case of increase of size or symptomatology, having to individualize each case.

The morphology (saccular or fusiform) should also be evaluated, since the saccular ones tend to be more subsidiary of surgical treatment. Correct protocolization of the study is important to be able to visualize the subclavian vessels, a good option can be introducing the contrast by the ipsilateral arm and take an early phase to evaluate the vein with contrast in and taking a second phase to evaluate the artery.

Venography is probably the best study to confirm the diagnosis.

CONCLUSION

In the presence of clavicular fractures, the integrity of the adjacent vascular structures should be evaluated by carrying out studies with adequate protocolization.



Thoracoabdominopelvic CT with intravenous contrast (A and B) is performed due to the suspicion of post-traumatic pathology. A hematoma adjacent to the right clavicular fracture was visualized, with difficult assessment of the main vascular structures. A new chest CT scan was performed with a specific contrast protocol to assess the subclavian vessels (C and D). On the superior surface of the subclavian vein a pseudonodular lesion was seen, suggestive of aneurysm / venous laceration.

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