

Case	(251) Retroperitoneal bleeding secondary to lumbar fracture in a polytraumatized patient
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CASE PRESENTATION

A 31-years-old man was admitted in to the emergency department after a high-impact trauma and anemization. A total body multidetector CT-angiography was performed, and the main findings were: extensive retroperitoneal hematoma with active bleeding point dependent on right L4 artery secondary to a comminuted vertebral body fracture (L4).

Other findings were bilateral pneumothorax and multiple bone fractures.

DISCUSSION

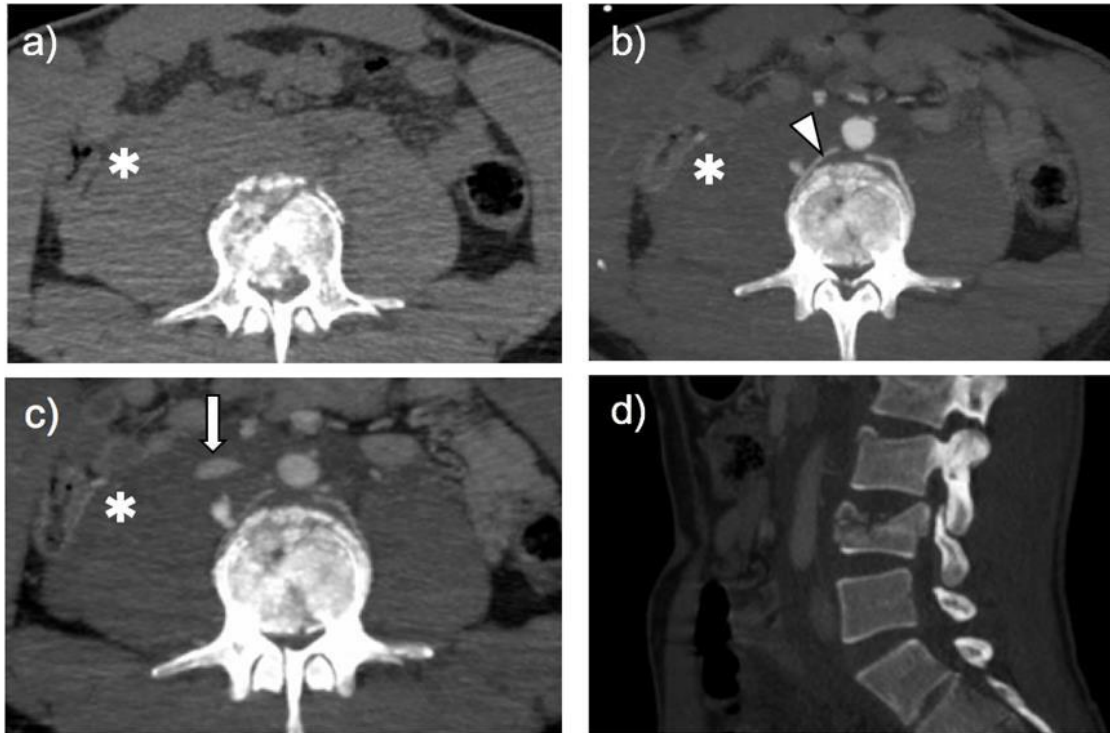
Retroperitoneal hematoma is an infrequent entity with a wide spectrum of clinical presentation that varies depending on the speed and amount of bleeding. It can be asymptomatic or present with hypovolemic shock. In a polytraumatized patient a retroperitoneal hematoma can may be secondary to the involvement of hollow viscera, solid organs, large vessels and/or the skeleton.

The most frequent cause is a pelvic fracture. Spinal fractures, although less frequently, can also produce paraspinal or retroperitoneal hematomas. Since many of these retroperitoneal bleedings are clinically occult, in most cases the diagnosis is essentially radiological.

CT is a fast and universally available technique that provides great information, with a high sensitivity for detection of a retroperitoneal hematoma. In addition, CT angiography allows to evaluate foci of active bleeding and may provide diagnostic information to guide management.

CONCLUSION

Due to retroperitoneal hematomas can be a threatening-life condition in polytraumatized patients and can remain occult to clinical examination, the radiologist figure has an important role to play in the diagnosis of this entity.



Axial non-enhanced CT (a), dual phase axial contrast material-enhanced CT (b, c) and sagittal reformation (d) show a retroperitoneal hematoma (*) with a focal area of high attenuation in the arterial phase that depends on the right lumbar artery (arrow head) and increases in the venous phase. The features are compatible with an active bleeding associated to an incomplete comminute fracture of L4 body. The inferior vena cava (arrow) is collapsed due to the hypovolemic shock.

BIBLIOGRAPHY

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