

Review of: "Unilateral Posterior Spinal Cord Ischemia due to a Floating Thrombus: a case Report"

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Potential competing interests: No potential competing interests to declare.

This short report deals with a rare variant of spinal cord ischemia restricted to unilateral posterior cord. This is a rare but well-described topography, usually unilateral as it was here observed due to bilateral posterior arteries.

Mechanism of ischemia is supposed to be related with a floating thrombus in the ascending aorta and diffuse atheroma (in a formerly heavy smoker patient).

By contrary with the title, we cannot be sure that the aortic lesion is related the spinal ischemia: it is technically possible that part of the thrombus migrated the vertebral artery, but the probability seems low: thrombus is adherent to the lower part of the aortic wall, whereas ostium of brachial artery is on the contralateral wall: therefore the laminar blood flow is more expected to wash the thrombus away than to convey it on the other side wall.

Is it a thrombus or a plaque? Since the floating thrombus did not change over time, we have to consider the hypothesis that could be a plaque.

Lastly, right vertebral artery atheroma is probably not involved in the left spinal cord infarction, supposing an embolus from a left radicular artery.

Finally, we cannot avoid the hypothesis that diffuse atheroma may also involve (small and invisible) left radicular arteries which seems to be a more probable mechanism of lesion.

Discussion should also envision these questions:

What are the chance of a floating thrombus to persist as it is? Is this case, is there pathological proof of the thrombus? In case of lower aortic wall lesion, what are the risk of embolisation into the arterial trunk opening on the contralateral arterial side? In case of unilateral posterior spinal cord ischemia, what are the common mechanisms?