

Vertebral artery aneurysm rupture: An autopsy case

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SUMMARY

Vertebral artery aneurysm rupture is a rare cause of sudden death. The presented case was 31-year-old woman who was found dead in her bedroom. Family members stated that she had history of one year duration childhood epilepsy treatment. Autopsy investigation revealed 5 mm in diameter aneurysm, ruptured in 1 mm area, localized on the trunk of the right vertebral artery. We described an autopsy case of sudden unexpected death due to ruptured vertebral artery aneurysm.

Keywords: vertebral artery – aneurysm – death – autopsy.

Ruptura aneurysmatu arteriae vertebralis - popis případu

SOUHRN

Náhlé úmrtí v důsledku ruptury aneurysmatu vertebrální arterie je v literatuře uváděno jako vzácné. Popisovaný případ se týká ženy stáří 31 let, která byla nalezena mrtvá ve své ložnici. Rodinní příslušníci udávali anamnesticky jeden rok trvající léčení epilepsie v dětství. Při pitvě bylo nalezeno aneurysma v průměru 5 mm s rupturou v rozsahu 1 mm lokalizované na pravé vertebrální arterii.

Klíčová slova: vertebrální arterie – aneurysma – smrt – pitva.

Soud Lek 2013; 58(4): 55–56

Vertebral artery aneurysm is not common pathology (1,2). Radiological investigations for explaining the origin of subarachnoid hemorrhage and MR examination indicating localization of aneurysm were presented as valuable investigative methods (3). Early identification of ruptured vertebral aneurysm and immediate surgical intervention was reported to be life-saving procedure (1,2). Neurosurgical arterial clamping techniques were indicated to be useful procedures in unilateral aneurysms (4). We aimed to discuss vertebral artery aneurysm rupture as a rare cause of sudden death from medicolegal aspect of view.

CASE REPORT

A 31-year-old woman was found dead in her bedroom. The cause of death was unknown; a forensic autopsy was performed after local prosecutors investigation. According to family members statements she had history of one year duration epilepsy treatment during childhood period. Beside her husband claimed that she had been medically evaluated for headache complaints, in public hospital one week ago, where was administered medical treatment, and it was explained that on radiological investigation there were



Figure 1. Macroscopic appearance of vertebral artery aneurysm (arrow).

no sign of subarachnoid hemorrhage on cranial computed tomograms. The body was 165 cm in height and 65 kg in weight. The forensic autopsy external examination revealed no severe trauma, there was only 6x3 cm bruise on the dorsum of the right hand. In the postmortem autopsy investigation brain was 1350 gr in weight, excessive distension of meningeal veins, prominent and widespread subarachnoid hemorrhage on the basal part of the brain, around the brain stem, and cerebellar hemispheres were detected. Ongoing dissection revealed 5 mm in diameter aneurysm, rup-

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