

Gastroduodenal artery aneurysm — the Review of Literature and Case Report

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Abstract

Visceral arteries aneurysms aren't widespread pathology, but they may be dangerous because of a spontaneous rupture or a rupture under the influence of the minimal injuring factor as well as any aneurysms, especially of large sizes. The review of literature includes the data of pathogenesis and diagnostics of visceral arteries aneurysms which is illustrated by case report of a rare form of the combined vascular pathology, the aneurysms of a. gastroduodenalis, a. lienalis, a thrombosis of a. hepatica propria dextra affected by a widespread atherosclerosis of visceral arteries which were diagnosed in an out-patient hospital by means of a CT. Results of CT after successful surgery are also presented.

Key words: Aneurysm, Pseudoaneurysm, Visceral Arteries, Pancreas, Computed tomography, Contrast Enhancement.

References

1. *Vishnyakova M. V., Lobakov A. I., Lerman A. V. et al.* Aneurysms of splenic artery: possibilities of methods of radiologic diagnostics. *Antology of clinical medicine*. 2010. No. 22. P. 3–9 (in Russian).
2. *Lesnyak V. N., Kemezh Yu. V., Eremeicheva A. Yu.* CT-diagnostics of visceral branches of abdominal aorta aneurysms. *Russian Electronic Journal of Radiology*. 2011. T. 1. No. 3. P. 69–74 (in Russian).
3. *Milyukov V. E., Zharikov Yu. O.* Surgical Anatomy of pancreas. *Messenger of Experimental and Clinical Surgery*. 2014. T. VII. No. 1. P. 86–93 (in Russian).
4. *Ol'khova E. B.* The Viscerals pseudoaneurisms in the childhood: the variants of ultrasonography findings. *Radiologiya – Praktika*. 2013. No. 2. P. 32–40 (in Russian).
5. *Chiang Kun-Chun, Chen Tsung-Hsing, Hsu Jun-Te.* Management of chronic pancreatitis complicated with a bleeding pseudoaneurysm. *World Journal of Gastroenterology*. 2014. V. 20 (43). P. 16132–16137.
6. *Colak M. C., Kocaturk H., Bayram E., Karaca L.* Inferior pancreaticoduodenal artery false aneurysm: a rare cause of gastrointestinal bleeding diagnosed by three-dimensional computed tomography. *Singapore Med. J.* 2009. No. 50 (10). P. 346–349.
7. *Cordova A. C., Sumpio B. E.* Visceral artery aneurysms and pseudoaneurysms – should they all be managed by endovascular techniques? *Ann. Vasc. Dis.* 2013. V. 6. No. 4. P. 687–692.
8. *Harris K., Chalhoub M., Koirala A.* Gastroduodenal artery aneurysm rupture in hospitalized patients: an overlooked diagnosis. *World Journal of Gastroenterology*. 2010. V. 2 (9). P. 291–294.

9. *Ikhwan S. M., Mokhzani W. M., Norzila A. B. et al.* Ruptured gastroduodenal artery aneurysm presenting as upper gastrointestinal bleed. *IOSR-JDMS*. 2013. V. 5 (5). P. 39–41.
 10. *Jain K. S., Rajendran V., Jain M. K., Kori R.* Hemorrhagic pseudocyst of pancreas treated with coil embolization of gastroduodenal artery: a case report and review of literature. *Case Reports in Surgery*. 2015. ID 480605, 3 pages.
 11. *Jesinger R. A., Thoreson A. A., Lamba R.* Abdominal and pelvic aneurysms and pseudoaneurysms: imaging review with clinical, radiologic, and treatment correlation. *RadioGraphics*. 2013. No. 33. P. 71–96.
 12. *Razik R., May G. R., Saibil F.* Non-operative management of necrotic pancreatic collection and bleeding pseudoaneurysm communication with bowel lumen at multiple sites: a case report and review of literature. *J. Gastrointestinal Liver Dis*. 2016. V. 25 (1). P. 109–114.
 13. *Savage J., Hsee L.* Spontaneous gastroduodenal artery aneurysm rupture in acute surgery. *NZMJ*. 2012. V. 125. No. 1357. P. 155–157.
 14. *Shawky M. S., Tan J., French R.* Gastroduodenal artery aneurysm: a case report and concise review of literature. *Ann. Vasc. Dis*. 2015. V. 8. No. 4. P. 331–333.
 15. *Takei T., Sakai M., Suzuki T. et al.* Surgical resection of a ruptured pancreaticoduodenal artery aneurysm. *Am. J. Case Rep*. 2016. No. 17. P. 39–42.
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