



CASUISTIC PAPER

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Sciatic vessels – a case report

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ABSTRACT

Introduction. Sciatic vessels most often accompany the sciatic nerve. Sciatic vessels are very rare.

Aim. In this paper we determine the procedure in sciatic vessels surgical treatment.

Description of the case. We present the case of a 75-year-old patient with symptoms of acute right lower limb ischemia. The patient was discharged home in good condition, and remains in outpatient control to this day.

Conclusion. The popliteal artery proved to be available, but much deeper than usual.

Keywords. artery, sciatic vessels, surgical treatment

Introduction

Sciatic vessels most often accompany the sciatic nerve (nervus ischiadicus).¹⁻³ Sciatic arteries (arterial ischiadica) extend into the popliteal artery and then 2/3 of the distal lower limb draws blood from the internal iliac artery. In young mammalian embryos, the sciatic artery is still the main vessel of the free part of the lower limb and only in later periods of its development does it replace the femoral artery (arteria femoralis).^{4,5}

Aim

The aim of this study was to present a case of the acute vascular disease.

Description of the case

A 75-year-old office worker was admitted to the Department of Vascular Surgery with symptoms of acute right lower limb ischemia. In the history of tobacco smoker in the past diagnosed COPD/bronchial asthma, hyperthyroidism during thyrostatic treatment. On the day of illness, the following ailments appeared: sudden, severe right lower leg pain, cooling down, disturbed sensation of the lower leg and right foot. In addition, the patient gave limited mobility and hindered the ability to walk and load the right lower limb, which so far did not occur. In the physical examination: the skin appendages were symmetrical, veins of

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the right foot collapsed, venous return in more than 2 seconds. Shortly after the first symptoms appeared, the patient was taken to the Emergency Department of the Poviats Hospital, where basic laboratory tests with the coagulation system were taken and Duplex Doppler ultrasound was performed. Then the patient was transferred to the Admissions Room of the Vascular Surgery Ward, after analyzing the above information, acute ischemia was diagnosed - right lower limb arterial embolism. However, the etiology of its creation was unknown. Due to long-term nicotine use, arterial thrombosis seemed highly likely. An ultrasound examination was performed again confirming the lack of flow in the femoral vessels of the right lower limb. The patient was qualified for urgent surgery. Shortly after being admitted to the Department of Vascular Surgery, the patient was taken to the operating theater, where, after proper preparation, he was spinal anesthetized. Typical vessels were not seen in the properly dissected groin. Therefore, using the operating room with constant access to angiography through a deep vessel found in the groin not reminiscent of a typical femoral artery, arteriography was performed, which visualized the contrasting of vessels above the inguinal ligament in an unusual arrangement, the branches of the external iliac artery were contrasted with a small diameter, which had their end sections on the medial side of the thigh, while the internal iliac artery had a clearly enlarged trunk that suddenly ended.

There was a difficult question in surgery, what's next??

The next floor, where the cut appeared, was access to the popliteal artery above the right knee, because there was an outline of contrasting vessels, of a fairly large diameter.

Reasoning and treatment proved effective. The pulse on the left leg was well felt under the buttock. An interview was completed in which the patient reported that while sitting felt the pulse, he could not sit in the chair/armchair for a long time.

Discussion

The study found right-sided occlusion of the external iliac artery, femoral joint, deep femoral, superficial femoral artery, while the flow in the arteries below the knee was seen - like 'behind obstruction'. In the basic studies, no significant deviations were found, in the ECG examination without arrhythmias, the history of vascular malformations, including negative aneurysms. The popliteal artery proved to be available, but much deeper than usual. However, having access to a vessel with a di-

ameter of about 10 mm, it was possible to carry out further diagnostics that gave a specific answer.⁷⁻⁹

Conclusions

The initial diagnosis was confirmed - the acute vascular disease was caused by an embolism that arose in the aneurysmal altered "persistent sciatic artery", which is extremely rare as anatomical variability. After the saphenous vein was dissected, a bridge was made, while the sciatic artery was ligated above the anastomosis (cutting off the pathway to subsequent embolisms). We report herein the unique case. In most cases, the sciatic artery is the main dominant inflow vessel to the lower extremity and persistent sciatic artery is strongly associated with aneurysmal disease, with a high potential for thromboembolic events.

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