

Popliteal artery embolism by *Ascaris lumbricoides*: a case report

Askaris lumbrikoidese baęlı gelişen popliteal arter embolizmi: Olgu sunumu

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Arterial occlusive diseases are highly prevalent and constitute the leading overall cause of death. Adverse events are due to the effects of impaired circulation on critical end organs, namely the brain, heart, abdominal viscera or extremities. Acute thromboembolism remains a major surgical challenge. Even with optimal surgical management, acute lower extremity ischemia resulting from thromboembolic ds continues to cause significant morbidity and mortality. We report a case of thromboembolism of the left popliteal artery by an *Ascaris* worm in a patient with oriental cholangiohepatitis.

Key Words: Arterial embolism; ascaris; popliteal artery.

Arteriyel oklüzif hastalıklar, oldukça yaygındır ve ölümlerin en büyük nedenini oluşturmaktadır. İstenmeyen olaylar; beyin, kalp, karınsal organlar veya ekstremiteler gibi yaşamsal hedef organlardaki bozulmuş dolaşımın etkilerine baęlıdır. Akut tromboembolizm, majör bir cerrahi sorun olarak kalmaya devam etmektedir. Optimal cerrahi tedaviyle bile, tromboembolik olaylardan kaynaklanan akut alt ekstremitte iskemisi, önemli morbidite ve mortaliteye neden olmaya devam etmektedir. Biz, oriyent kolanjiyohepatiti bulunan bir hastada *Ascaris solucanı* ile oluşan sol popliteal arter tromboembolizmi olgusunu sunuyoruz.

Anahtar Sözcükler: Arteriyel embolizm; ascaris; popliteal arter.

CASE REPORT

A 52-year-old male married with four children was admitted with complaints of recurrent abdominal pain for the last two months and weakness in the left lower limb (LLL) for the last two hours. Ultrasonography (USG) of the abdomen revealed two small liver abscesses in the right lobe of the liver with right hepatic duct calculi, with round worms in the common bile duct (CBD) and common hepatic duct (CHD). The gallbladder was loaded with round worms. Local examination of the LLL revealed that the left limb was colder than the right below the knee. Capillary refill was more than 3 seconds compared to 2 seconds in the right limb. Left femoral pulse was distinctly palpable. The left popliteal artery was faintly palpable. Distal pulses in the LLL, namely the dorsalis pedis (DPA) and posterior tibial (PTA) arteries, were absent.

Echocardiography showed mild mitral regurgitation and aortic regurgitation with vegetations on the mitral valve. There was no congenital cardiac anomaly. A diagnosis of oriental cholangiohepatitis with acute thromboembolism of the LLL was made.

Urgent embolectomy was decided, and the patient was taken to the operating room. After exposure of the popliteal artery up to the bifurcation, arteriotomy was done, which showed a whitish "thrombus" occluding the artery. Retrieval of the thrombus revealed a 10 cm in length *Ascaris* worm occluding the distal popliteal artery extending into the PTA. The origin of the anterior tibial artery was occluded by the apposition of the anterior tibial ostial lips by the girth of the worm. The worm was removed and Fogarty catheterization of the left femoral artery retrieved a 10 cm long thrombus (Fig. 1a, b). Distal catheterization of the anterior and posterior tibial arteries did

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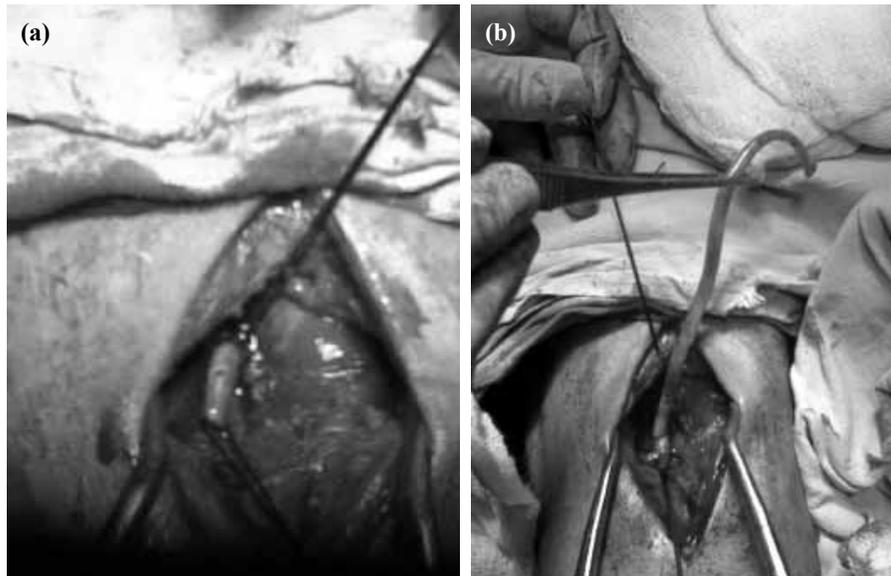


Fig. 1. (a) Initial arteriotomy, **(b)** worm being removed.

not show any thrombus. The arteriotomy was closed, and distal flow was ensured.

Histopathologically, the worm was determined to be *Ascaris lumbricoides*. The patient was subsequently operated, and cholecystectomy with choledochojunostomy was done after clearing the CBD of ascaris worms and drainage of two hepatic abscesses by a surgical gastroenterologist. Postoperatively, the patient recovered well and is under follow-up.

DISCUSSION

Vascular thrombosis by *Ascaris lumbricoides* is rare, having been reported in only a few cases. *Ascaris* has been found to cause embolism in the splenic artery,^[1] femoral artery,^[2] pulmonary artery circulation,^[3] and the mesenteric artery.^[4] Our case is one among only a few cases to have an arterial throm-

bosis caused by an *Ascaris* worm. To the best of our knowledge, acute popliteal artery thrombosis caused by *Ascaris lumbricoides* has not been reported previously, and thus the current case is remarkable as the first report of its kind.

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