



## Artery Research

ISSN (Online): 1876-4401

ISSN (Print): 1872-9312

Journal Home Page: <https://www.atlantis-press.com/journals/artres>

---

### **Bilateral lower extremity arterial thromboembolism mimicking conversion disorder**

Umut Yucel Cavus, Mahmut Nedim Aytekin, Sema Avci, Macit Aydin, Mehmet Sait Dogan

**To cite this article:** Umut Yucel Cavus, Mahmut Nedim Aytekin, Sema Avci, Macit Aydin, Mehmet Sait Dogan (2013) Bilateral lower extremity arterial thromboembolism mimicking conversion disorder, Artery Research 7:2, 103–105, DOI: <https://doi.org/10.1016/j.artres.2012.11.003>

**To link to this article:** <https://doi.org/10.1016/j.artres.2012.11.003>

Published online: 7 December 2019



SHORT COMMUNICATION

# Bilateral lower extremity arterial thromboembolism mimicking conversion disorder

Umut Yucel Cavus<sup>a</sup>, Mahmut Nedim Aytekin<sup>b,\*</sup>, Sema Avci<sup>a</sup>, Macit Aydin<sup>a</sup>, Mehmet Sait Dogan<sup>c</sup>

<sup>a</sup> Department of Emergency Medicine, Diskapi Yildirim Beyazit Training and Research Hospital, Ankara, Turkey

<sup>b</sup> Department of Orthopedics and Traumatology, Yildirim Beyazit University, Ankara Atatürk Training and Research Hospital, Ankara, Turkey

<sup>c</sup> Department of Radiology, Mardin State Hospital, Mardin, Turkey

Received 6 August 2012; received in revised form 8 November 2012; accepted 22 November 2012  
Available online 2 January 2013

## KEYWORDS

Arterial thromboembolism;  
Conversion disorder;  
Arteriography

**Abstract** Thromboembolic causes of acute limb ischemia are not frequent; however, an immediate true therapy is needed to save the extremity. Here we presented a case with bilateral lower extremity arterial thromboembolism mimicking conversion disorder. Conversion disorder and acute arterial embolism can be confronted in different patterns. This case proved us that anamnesis can be misleading and manipulating to evaluate patients. Furthermore, our report may potentially highlight the inadequacies in the guidelines for diagnosis.

© 2012 Association for Research into Arterial Structure and Physiology. Published by Elsevier B.V. All rights reserved.

## Introduction

Thromboembolic causes of acute limb ischemia are not frequent; however, an immediate true therapy is needed to save the extremity. Although epidemiological studies are

insufficient, the incidence of acute peripheral arterial occlusion (APAO) is 14/100,000.<sup>1</sup> The cases are seldom bilateral (6%).<sup>2</sup> This disease may cause life-threatening complications besides loss of extremity. Literature reports 10%–25% mortality rate and 20% amputation rate.<sup>3,4</sup> Arterial emboli are the most common cause of acute peripheral arterial occlusions and mostly originate from the heart.<sup>5</sup> It is known that ischemic complications are more often seen in the cases treated after 8 h of occlusion.<sup>4</sup> We presented a case with anamnesis of conversion disorder and bilateral thromboembolism.

\* Corresponding author. Ankara Atatürk Eğitim ve Araştırma Hastanesi, Bilkent Yolu No: 3, Bilkent, Ankara, Turkey. Tel.: +90 505 2401436.

E-mail address: [nedimaytekin@hotmail.com](mailto:nedimaytekin@hotmail.com) (M.N. Aytekin).



**Figure 1** In arteriogram, there were filling defects at the distal part of the right common iliac artery (white arrow), and internal (short black arrow) and external (long black arrow) iliac arteries, whereas the appearance of the arteries were normal at the left side.

## Case report

A 42-year old female presented to emergency department complained of approximate 10 h of ongoing sciatic nerve tracing, right buttock pain radiating to leg, and nausea. The patient was assaulted and hit in the lower limb by her husband. Despite she was agitated nearby relatives, she was calm while alone. Besides, it was observed that she usually appealed to the emergency department with this kind of right sciatic nerve pain and crying spells.

The physical examination revealed no pathological findings on initial evaluation. Peripheral arterial pulses were palpable in both lower extremities. Pallor, motor-sensory loss, swelling, deformity, redness, and tenderness were not observed. A normal sinus rhythm was available in electrocardiography, and blood tests were normal.

After about 1 h, the right leg was cold and no pulses were found. In the left lower extremity, none of coldness, pallor, and pain was observed, and peripheral arterial

pulses were weak. Pelvic arteriography was performed, and bilateral acute arterial occlusion of the lower extremity was diagnosed.

In arteriogram, there were filling defects at the distal part of the right common iliac artery, and at the internal and external iliac arteries, whereas the appearance of the arteries were normal at the left side. The arteriogram also showed poor filling of the right superficial femoral and popliteal arteries (Fig. 1). However, there were filling defects at the tibioperoneal trunk, proximal part of the peroneal artery and anterior tibial artery (Fig. 2a and b). The posterior tibial artery was patent, and the poor filling of the peroneal artery was observed. However, there were no flow at the right crural arteries and the left anterior tibial artery except the proximal part of the left anterior tibial artery (Fig. 3a and b).

Later, the patient was operated on, and an embolectomy was performed on the right leg, while medical treatment was enough for the left side. The origin of embolus was not found, and the patient was discharged after 10 days of operation.

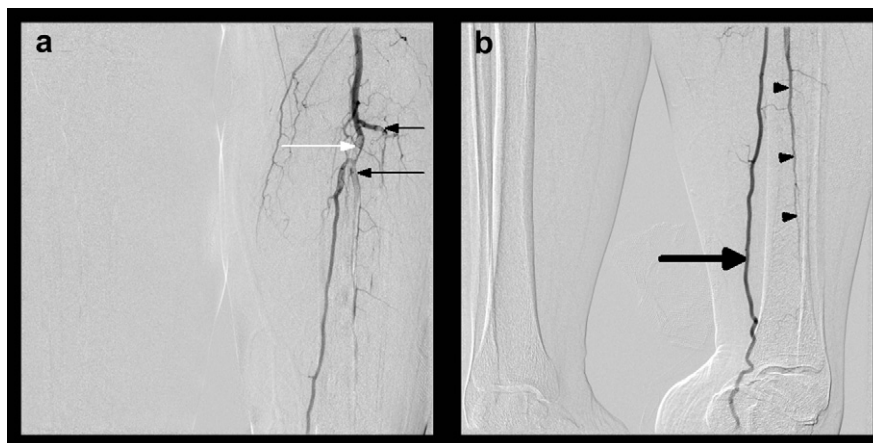
## Discussion

Conversion disorder, usually following severe stress, manifests itself with various nonspecific symptoms such as paralysis, aphonia, dyskinesia, presyncope, pseudoseizures, and so on. Thus, conversion disorder mimicks many organic pathologies. It is reported that a significant number of patients with organic pathologies (2%–50%) are misdiagnosed with conversion disorder.<sup>6,7</sup> Our case, diagnosed with APAO, had a story of emergency department presence with complaints of agitation, crying, being beaten, and a post-assault increase in the patient's pre-existing sciatic pain. She became calm while alone despite the agitated nearby relatives. Therefore, conversion disorder was considered first.

"6P" findings (pallor, pulselessness, perishing cold, pain, paresthesia, and paralysis) have a significant role in APAO.<sup>3</sup> Findings in the cases presented included sudden severe pain in the leg, numbness, coldness, paleness, and pulselessness.<sup>8,9</sup> However, the main APAO symptoms and findings were not present in our case when the patient presented to the emergency department.



**Figure 2** a and b. Arteriogram showed poor filling of the right superficial femoral artery (a) and popliteal artery (b) (arrows).



**Figure 3** a and b. Arteriogram showed that there were filling defects at the tibioperoneal trunk (white arrow), at the proximal part of the peroneal artery (long black arrow), and at the anterior tibial artery (short black arrow). The posterior tibial artery was patent (thick arrow) and the poor filling of peroneal artery was shown (arrowheads). However, there was no flow at the right crural arteries and the left anterior tibial artery except the proximal part of the left side.

Peripheral nerves and skeletal muscles are the tissues most sensitive to ischemia. Irreversible changes take place as a result of 6 h exposure to anoxia at the room temperature.<sup>3</sup> In the cases when the length of time from the beginning of the complaints is less than 12 h, the extremity conservation rate is 93% and the death rate is 19%. In the cases when the length of time is more than 12 h, the extremity conservation rate is diminished to 78% and the death rate escalates to 30%.<sup>10</sup> In our case, it raised a suspicion of the anamnesis because the initial examination revealed no APAO findings although it was reported that 10 h had passed since the symptoms started. In the physical examination repeated after 1 h, the typical findings were observed to have developed.

## Conclusion

Conversion disorder and acute arterial embolism can be confronted in different patterns. This APAO case proved us that anamnesis can be misleading and manipulating to evaluate patients. In differential diagnosis, physical examination should be done carefully without the influence of history. Furthermore, our report may potentially highlight the inadequacies in the guidelines for diagnosis.

## References

1. Davies B, Braithwaite BD, Birch PA, Poskitt KR, Heather BP, Earnshaw JJ. Acute leg ischaemia in Gloucestershire. *British Journal of Surgery* 1997;**84**:504–8.
2. Keçeligil HT, Küsdül M, Gökgözoğlu G, Saraç A, Kolbakır F, ve ark AH. Akut periferik arteriyel tıkanıklıklar: 179 olgunun sunumu. *Türk Göğüs Kalp Damar Cer Derg* 1999;**7**: 319–23.
3. Ege T, Canbaz S, Sunar H, Çıkırıkçioğlu M, Halıcı Ü, Duran E. Surgical Treatment for Acute Arterial Occlusion. *Balkan Medical Journal* 2002;**19**(2):89–95.
4. İriz E, Kalaycıoğlu S, Sinci V. Gecikmiş Arteriyel Emboliler: Embolektomi yapılmalı mıdır? *Cerrahpaşa Tıp Dergisi* 2004; **35**(3).
5. Dereli Y, Özdemir R, Kayalar N, Ağrıç M, Hoşgör K, Özdiş AS. Acute peripheral arterial occlusion: a review of 137 cases. *Turkish Journal of Thoracic and Cardiovascular Surgery* 2012; **20**(2):260–4.
6. Weitz JI, Byrne J, Clagett GP, Farkouh ME, Porter JM, Sackett DL, et al. Diagnosis and treatment of chronic arterial insufficiency of the lower extremities: a critical review. *Circulation* 1996;**94**:3026.
7. Hirsch AT, Haskal ZJ, Hertzner NR, Bakal CW, Creager MA, Halperin JL, et al. ACC/AHA 2005 Guidelines for the management of patients with peripheral arterial disease (lower extremity, renal, mesenteric, and abdominal aortic). *Circulation* 2006;**113**:e463.
8. Ertürk M, Sanosmanoğlu N, Hazan E, Dicle O, Açıkel Ü, Oto Ö. Akut arteriyel tıkanıklık tedavisinde trombolitik tedavi sonrası Periferik arteriyel bypass. *GKDC Dergisi* 1998; **6**:41–4.
9. Nart D, Yılmaz F, Yüce G, Posacıoğlu H, Ertan Y. Femoral arter embolisinin ilk semptom olduğu sol atrial miksoma: Olgu Sunumu. *Ege Tıp Dergisi* 2005;**44**(1):59–62.
10. Greenberg RK, Ouriel K. Arterial thromboembolism. In: Rudherford RB, editor. *Vascular Surgery*. 5th ed. Philadelphia: W. B. Saunders; 2000. p. 822–35.