

Clinical Image

Open Access, Volume 4

Limb arterial thrombosis associated with *Mycoplasma pneumoniae***Takahiro Noda***; Yoshiyuki Sakai

Departments of Pediatrics, Hakodate Municipal Hospital, 1-10-1, Minato-cho, Hakodate, Hokkaido, Japan.

***Corresponding Author: Takahiro Noda**Departments of Pediatrics, Hakodate Municipal
Hospital, 1-10-1, Minato-cho, Hakodate, Hokkaido,
Japan.

Email: m42040081@yahoo.co.jp

Received: Nov 14, 2023

Accepted: Dec 13, 2023

Published: Dec 20, 2023

Archived: www.jcimcr.org

Copyright: © Noda T (2023).

DOI: www.doi.org/10.52768/2766-7820/2744

Keywords: *Mycoplasma pneumoniae* infection; Contrast computed tomography; Acute arterial thrombosis; Surgical thrombectomy.**Case description**

A 3-year-old girl was hospitalized after experiencing fever and cough for 1 week. The patient's body temperature was 38.8°C, and her oxygen saturation was 96% while breathing ambient air. Physical examination revealed coarse crackles. Laboratory analysis performed using particle agglutination test indicated increased titers of antibodies to *Mycoplasma pneumoniae*, with values of 1:320 (positivity considered at a titer of >1:40) at hospitalization and 1:10240 after 9 days. The patient developed pain and pallor in the left lower extremity 3 days after admission. Furthermore, contrast computed tomography angiography revealed a defect in the left iliac artery (Figure 1). Arterial thrombosis caused by *Mycoplasma pneumoniae* infection was suspected, and treatment with ampicillin and clarithromycin was initiated. A thrombectomy under general anesthesia restored perfusion (Figure 2). Autoantibodies, protein S, protein C, and lupus anticoagulant levels were normal. Recurrence of symptoms and sequelae were not documented at the 4-year follow-up.

Discussion

To the best of our knowledge, this is the first case report to describe the clinical consequences of surgical thrombectomy. Only four case reports have described cases of children diagnosed with acute lower-limb arterial thrombosis associated with *Mycoplasma pneumoniae* infection [1-4]. Of these reports, two case reported the treatment of patients with urokinase or anticoagulant agents without any complications, whereas the other two did not describe the administered treatment. Consensus on the appropriate treatment dose and duration of arterial thrombosis associated with *Mycoplasma pneumoniae* infection has not yet been established. Additionally, limb arterial thrombosis requires immediate reperfusion, as described in the present case. Thus, surgical thrombectomy can be an effective treatment of choice.



Figure 1: Computed Tomography (CT) angiography in a 3-year-old girl exhibiting a complete left iliac artery occlusion at the left lower extremity.



Figure 2: CT angiography conducted after the emergent thrombectomy showing a restored left iliac artery perfusion.

Declarations

Conflict of interest: The authors declare no conflict of interest.

Funding: None.

Informed consent: Informed consent for publishing the report was obtained from the patient's parents.

Author contributions: T.N. collected and analyzed the data, and drafted and revised the initial version of the manuscript. Y.S. interpreted all data and critically revised the manuscript for important intellectual content.

References

1. Fu Y, Zhang TQ, Dong CJ, Xu YS, Dong HQ, et al. Clinical characteristics of 14 pediatric mycoplasma pneumoniae pneumonia associated thrombosis: A retrospective study. BMC Cardiovascular Disorders. 2023; 23: 1.
2. Fleteau C, Asfalou I, Deman AL, Ficko C, Andriamanantena D, et al. Aortic thrombus and multiple embolisms during a *Mycoplasma pneumoniae* infection. 2013; 41: 867-873.
3. Liu J, He R, Wu R, Wang B, Xu H, et al. Mycoplasma pneumoniae pneumonia associated thrombosis at Beijing Children's hospital. BMC Infect Dis. 2020; 20: 51.
4. Fu Y, Zhang TQ, Dong CJ, Xu YS, Dong HQ, et al. Clinical characteristics of 14 pediatric mycoplasma pneumoniae pneumonia associated thrombosis: a retrospective study. BMC Cardiovascular Disorders 2023; 23: 1.