

CASE REPORT

When Infection Triggers Thrombosis: A Case of Extensive DVT in a Young Male

Vinit Kumar¹, Goonja Bhattacharya², Priya Govil³, Kishalay Datta⁴

HOW TO CITE THIS ARTICLE:

Vinit Kumar, Goonja Bhattacharya, Priya Govil et. al, When Infection Triggers Thrombosis: A Case of Extensive DVT in a Young Male. Ind J Emerg Med. 2026; 12(3): 155-157.

ABSTRACT

Deep vein thrombosis (DVT) in young individuals without classical risk factors is uncommon and warrants evaluation for underlying causes. We report a case of a 19-year-old male presenting with acute left lower limb swelling and pain, later diagnosed with extensive lower limb DVT associated with enteric fever and carbapenem-resistant *E. coli* urinary tract infection. The patient was managed with catheter-directed thrombectomy and anticoagulation, showing favorable recovery.

KEYWORDS

- Deep Vein Thrombosis • Enteric Fever • Young Patient • Hypercoagulability
- Thrombectomy • Multidrug-Resistant Infection

INTRODUCTION

Deep vein thrombosis is a significant cause of morbidity and mortality, often associated with risk factors such as immobility, surgery, malignancy, or inherited thrombophilia. However, infectious etiologies like enteric fever can rarely predispose to hypercoagulable states. This case highlights an unusual

presentation of extensive DVT in a young patient with concurrent systemic infection.

CASE PRESENTATION

Patient Information

- Age/Sex: 19-year-old male
- No significant past medical history reported

AUTHOR'S AFFILIATION:

¹ Resident, Department of Emergency Medicine, Max Super Speciality Hospital, Shalimar Bagh, New Delhi, India.

² Resident, Department of Emergency Medicine, Max Super Speciality Hospital, Shalimar Bagh, New Delhi, India.

³ Principal Consultant, Department of Emergency Medicine, Max Super Speciality Hospital, Shalimar Bagh, New Delhi, India.

⁴ Director and HOD, Department of Emergency Medicine, Max Super Speciality Hospital, Shalimar Bagh, New Delhi, India.

CORRESPONDING AUTHOR:

Vinit Kumar, Resident, Department of Emergency Medicine, Max Super Speciality Hospital, Shalimar Bagh, New Delhi, India.

E-mail: goonjabhattacharya@gmail.com

➤ Received: 08-05-2026 ➤ Accepted: 13-06-2026



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the Red Flower Publication and Open Access pages (<https://www.rfjpl.co.in>)

Presenting Complaints

- Swelling of left lower limb (1–2 days)
- Pain in left lower limb

History of Present Illness

The patient presented to the emergency department with acute onset swelling and pain in the left lower limb for 1–2 days.

There was **no history of**:

- Fever
- Cough
- Shortness of breath
- Chest pain
- Syncope
- Abdominal pain
- Vomiting
- Loose stools
- Burning micturition

Examination Findings

- Unilateral limb swelling
- Likely tenderness along venous distribution
- Local rise in temperature
- Distal pulses- Posterior tibialis and dorsalis pedis were palpable

Investigations

Imaging

- **CT Venogram:**

Complete thrombus involving:

- Left external iliac vein
- Common femoral vein
- Superficial femoral vein
- Popliteal vein

Laboratory Findings

- Culture-positive **enteric fever**
- Urinary tract infection due to **carbapenemase-producing *E. coli***

Diagnosis

- Extensive **left lower limb deep vein thrombosis (DVT)**
- Enteric fever
- Multidrug-resistant urinary tract infection

Management

Procedural Intervention

- **Penumbra aspiration thrombectomy with stenting** performed

Medical Management

- Anticoagulation:
 - Apixaban (Eliquis)
- Supportive therapy:
 - Intravenous fluids
 - Paracetamol (as needed)
 - Antiemetics (Ondansetron, Domperidone)
- Antibiotics:
 - Ceftazidime/ Avibactam and Clindamycin were administered.

Outcome and Follow-Up

The patient showed clinical improvement following thrombectomy and anticoagulation therapy. He was discharged in stable condition with advice for continued anticoagulation and follow-up.

DISCUSSION

This case is notable for:

- Occurrence of extensive DVT in a **young patient**
- Association with **enteric fever**, which may induce a hypercoagulable state
- Presence of **multidrug-resistant infection**, complicating management

Possible mechanisms include:

- Infection-induced endothelial injury
- Systemic inflammation leading to hypercoagulability
- Dehydration and reduced mobility

Early imaging and prompt intervention (mechanical thrombectomy + anticoagulation) are crucial in preventing complications such as:

- Pulmonary embolism
- Post-thrombotic syndrome

CONCLUSION

Young patients presenting with acute limb swelling should be promptly evaluated for DVT, even in the absence of classical risk

factors. Infectious causes like enteric fever may act as precipitating factors. Early diagnosis and aggressive management can significantly improve outcomes.

Source(s) of support: None

Conflicting Interest: There is no conflict of interest to declare. This article was written without any sponsorship and so the authors have no financial disclosures.

REFERENCES

1. Kearon C, Akl EA, Ornelas J, et al. Antithrombotic therapy for VTE disease: CHEST guideline and expert panel report. *Chest*. 2016;149(2):315–352.
2. Konstantinides SV, Meyer G, Becattini C, et al. 2019 ESC Guidelines for the diagnosis and management of acute pulmonary embolism. *Eur Heart J*. 2020;41(4):543–603.
3. Centers for Disease Control and Prevention (CDC). Typhoid and Paratyphoid Fever. Available from: CDC Typhoid Overview
4. World Health Organization (WHO). Typhoid vaccines: WHO position paper. *Wkly Epidemiol Rec*. 2018;93:153–172.
5. Schafer AI. Hypercoagulable states and thrombosis. *N Engl J Med*. 2004;350:121–131.