

DEEP VEIN THROMBOSIS ASSOCIATED WITH ANTITHROMBIN III DEFICIENCY IN A 35-YEAR-OLD MALE: A CASE REPORT AND REVIEW OF RECENT THERAPEUTIC ADVANCES

SADIQUR RAHMAN SADAB¹, KHALED MAHBUB MURSHED¹, KAZI ALI AFTAB¹, MD. HASHIBUL HASAN SHAWON¹, MD. ABUL KALAM AZAD¹

Deep vein thrombosis is an important cause of venous thromboembolism, mainly affecting the lower legs. Unprovoked DVT in young adults indicates underlying thrombophilia. A 35-year-old male presented with recurrent right lower limb pain, swelling, and redness after activity for over 1.5 years. Patient has no provoking factors. Duplex ultrasonography of the right lower limb showed right superficial femoral and great saphenous venous thrombosis. Incompletely recanalized right common femoral and popliteal veins with valvular incompetence. Anti-Thrombin (III) activity was severely decreased (31%; normal 75–125%), but other thrombophilia tests were negative. Treatment started with LMWH, transitioned to warfarin, then apixaban (due to epistaxis), with an impressive response at 1.5 months. Unprovoked DVT in youth requires thrombophilia screening. A diagnosis of hereditary ATIII deficiency guides anticoagulation; recent research supports the use of DOACs in most scenarios.

Keywords: Deep vein thrombosis, Hereditary antithrombin III deficiency, Thrombophilia, Unprovoked DVT, Direct oral anticoagulants, Venous thromboembolism.

Date of submission: 11.04.2026

Date of acceptance: 30.04.2026

DOI: <https://doi.org/10.3329/bjm.v37i20.89392>

Citation: Sadab SR, Murshed KM, Aftab KA, Shawon MHH, Azad MAK. Deep Vein Thrombosis Associated with Antithrombin III Deficiency in a 35-Year-Old Male: A Case Report and Review of Recent Therapeutic Advances. Bangladesh J Medicine 2026; Vol. 37, No. 2(1): pp. 275

Affiliation:

1. Department of Internal Medicine; Bangladesh Medical University, Dhaka, Bangladesh