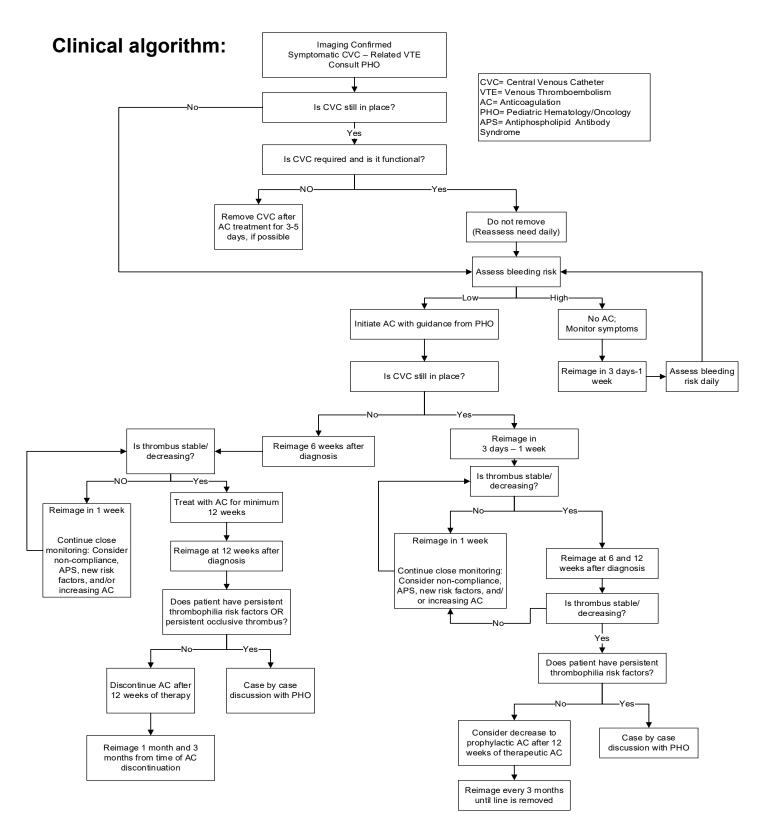


Clinical Pathways Program

Guideline: Pediatric Central Venous Catheter (CVC)-related Venous Thromboembolism (VTE), INPATIENT

Updated: January 28, 2021



Clinical guideline summary

CLINICAL GUIDELINE NAME: Pediatric Central Venous Catheter (CVC)-related Venous Thromboembolism (VTE)

PATIENT POPULATION AND DIAGNOSIS: Pediatric patients with a venous thromboembolism at the site of a central venous catheter

APPLICABLE TO: Helen DeVos Children's Hospital

BRIEF DESCRIPTION: This guideline aims to provide guidance on the management of symptomatic CVC-related VTE.

OVERSIGHT TEAM LEADER(S): Rebecca Veele, Chi Braunreiter

OWNING EXPERT IMPROVEMENT TEAM (EIT): Peds VTE Expert Improvement Team

MANAGING CLINICAL PRACTICE COUNCIL (CPC): Children's Health CPC

CPC APPROVAL DATE: 1/28/2021

OTHER TEAM(S) IMPACTED (FOR EXAMPLE: CPCs, ANESTHESIA, NURSING, RADIOLOGY): Nursing, Pediatric Hospitalists, Pediatric Sedation, Critical Care

IMPLEMENTATION DATE: 12/15/2020

LAST REVISED: 1/28/2021

FOR MORE INFORMATION, CONTACT: Rebecca Veele

Clinical pathways clinical approach

TREATMENT AND MANAGEMENT:

The algorithm should be initiated in patients with symptomatic CVC-related VTE confirmed with appropriate imaging. The algorithm first walks a provider through evaluation of the CVC and provide guidance on whether the CVC should remain in place or removed. The second portion assesses bleeding risk and the need for anticoagulation. The final portion addresses ongoing monitoring with imaging and when we can consider discontinuing anticoagulation treatment.

References:

- Goldenberg NA, Abshire T, Blatchford PJ, Fenton LZ, Halperin JL, Hiatt WR, Kessler CM, Kittelson JM, Manco-Johnson MJ, Spyropoulos AC, Steg PG, Stence NV, Turpie AG, Schulman S; Kids-DOTT Trial Investigators. Multicenter randomized controlled trial on Duration of Therapy for Thrombosis in Children and Young Adults (the Kids-DOTT trial): pilot/feasibility phase findings. J Thromb Haemost. 2015 Sep;13(9):1597-605. doi: 10.1111/jth.13038. Epub 2015 Aug 11. PMID: 26118944; PMCID: PMC4561031.
- Jaffray J, Goldenberg N. Current approaches in the treatment of catheter-related deep venous thrombosis in children. Expert Rev Hematol. 2020 Jun;13(6):607-617. doi: 10.1080/17474086.2020.1756260. Epub 2020 Apr 22. PMID: 32290724.
- Lim W, Le Gal G, Bates SM, Righini M, Haramati LB, Lang E, Kline JA, Chasteen S, Snyder M, Patel P, Bhatt M, Patel P, Braun C, Begum H, Wiercioch W, Schünemann HJ, Mustafa RA. American Society of Hematology 2018 guidelines for management of venous thromboembolism: diagnosis of venous thromboembolism. Blood Adv. 2018 Nov 27;2(22):3226-3256. doi: 10.1182/bloodadvances.2018024828. PMID: 30482764; PMCID: PMC6258916.
- Tarango C, Schulman S, Betensky M, Goldenberg NA. Duration of anticoagulant therapy in pediatric venous thromboembolism: Current approaches and updates from randomized controlled trials. Expert Rev Hematol. 2018 Jan;11(1):37-44. doi: 10.1080/17474086.2018.1407241. Epub 2017 Dec 17. PMID: 29183221; PMCID: PMC5909970.