

These data suggest a benign course for such thrombi and that anticoagulation, catheter removal, thrombectomy, and thrombolysis may be unnecessary when catheter tip-associated thrombi are incidentally detected on echocardiography” Chick et al (2016).

Abstract:

PURPOSE: To explore significance, management, and outcomes of central venous catheter (CVC) tip-associated thrombi incidentally detected on echocardiography.

MATERIALS AND METHODS: Echocardiogram data from all patients with CVCs from October 2009 to June 2011 were reviewed (N = 170). Patients with CVC tip-associated thrombi were selected (n = 49). Echocardiograms were reviewed for ejection fraction, presence of patent foramen ovale (PFO), presence of other intracardiac shunts, and mean thrombus size. Management decisions, thrombus extension, pulmonary embolism, paradoxical emboli, and stroke within 3 months were recorded.

RESULTS: Mean thrombus size was 2.1 cm (range, 0.5-5.7 cm). Of patients with thrombi, 11 (22%) were already on anticoagulation, and there was no change in management. Anticoagulation was started without complications in 17 (35%) patients, the catheter was removed in 4 (8%) patients, and no new treatment was initiated in 17 (35%) patients. Of these 17 patients, 16 (94%) developed no complications. One (6%) patient with a PFO and right-to-left shunt experienced a stroke before PFO closure. After surgical closure of the PFO, the same patient developed catheter tip-associated thrombus without complication. There were no pulmonary emboli, strokes, or other detected embolic phenomena.

CONCLUSIONS: In this sample with CVC tip-associated thrombi but without PFO or other intracardiac shunts, no embolic or other complications were detected, regardless of anticoagulation status. These data suggest a benign course for such thrombi and that anticoagulation, catheter removal, thrombectomy, and thrombolysis may be unnecessary when catheter tip-associated thrombi are incidentally detected on echocardiography.

Reference:

Chick, J.F., Reddy, S.N., Bhatt, R.D., Shin, B.J., Kirkpatrick, J.N. and Trerotola, S.O. (2016)



Significance of Echocardiographically Detected Central Venous Catheter Tip-Associated Thrombi. Journal of Vascular and Interventional Radiology. September 19th. .

doi: 10.1016/j.jvir.2016.07.013.

Thank you to our partners for supporting IVTEAM