

Catheter-associated thrombosis (CAT) in patients with infected long-term central venous catheter (LTCVC) has been poorly studied” Galy et al (2016).

Abstract:

BACKGROUND: Catheter-associated thrombosis (CAT) in patients with infected long-term central venous catheter (LTCVC) has been poorly studied.

METHODS: We prospectively included patients with infected LTCVC and collected clinical data. Doppler ultrasound was systematically performed to screen for CAT. Outcome (death or infection relapse) was evaluated 12 weeks after infection diagnosis.

RESULTS: 90 patients were included and CAT was diagnosed in 27 (30%). Local signs suggesting infection were more frequent in patients with CAT than without (11/27 versus 8/63, $p = 0.03$). Outcome was similar in patients with and without CAT. However, median duration of antimicrobials was longer (18 versus 14 days, $p = 0.02$), catheter removal tended to be more frequent (24/27 versus 46/63, $p = 0.08$), and anticoagulant therapy more often prescribed (17/27 versus 6/63, $p < 0.01$) in patients with CAT than without. Patients with occlusive thrombosis were more likely to have *Staphylococcus aureus* infections (4/7 versus 1/17, $p = 0.02$) and prolonged positivity of blood-cultures (3/7 versus 1/15, $p = 0.02$), than patients with non-occlusive thrombosis.

CONCLUSION: CAT is associated with local signs suggesting infection. A more aggressive treatment in CAT cases allowed a similar outcome at 12 weeks between patients with and without CAT. Occlusive thrombosis represented a subgroup of patients at risk of delayed clearance of bacteremia. **KEY MESSAGES** 30% of patients with infected long-term central venous catheter had catheter-associated thrombosis (CAT) and 89% of patients with CAT had no symptom specifically suggestive of thrombosis. More aggressive treatment (catheter removal, anticoagulant therapy and prolonged antimicrobial therapy) in patients with CAT allowed a similar outcome at 12 weeks than in patients without CAT. Occlusive thrombosis represented a subgroup of patients at risk of delayed bacteremia clearance.

Reference:



Galy, A., Lepeule, R., Goulenok, T., Buzele, R., de Lastours, V. and Fantin, B. (2016) Presentation and impact of catheter-associated thrombosis in patients with infected long-term central venous catheters: a prospective bicentric observational study. *Annals of Medicine*. March 29th. .

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