To evaluate the usefulness of a negative D-dimer in peripheral or central venous blood to screen for asymptomatic catheter-related thrombosis in cancer patients” Nañez-Terreros et al (2018).

Abstract:

Objectives: To evaluate the usefulness of a negative D-dimer in peripheral or central venous blood to screen for asymptomatic catheter-related thrombosis in cancer patients.

Methods: D-dimer was measured in blood from central venous catheter and peripheral venous samples in 48 patients with cancer. Asymptomatic catheter-related thrombosis was identified via Doppler ultrasound. Bland and Altman’s limits of agreement analysis was used to compare sample sites. Sensitivity and specificity of D-dimer was calculated.

Results: Overall, 33 of the central samples and 32 of the peripheral samples had D-dimer levels below the cutoff (≥0.3 mg/l). Mean central D-dimer was 0.31 ± 0.35 mg/l; peripheral 0.24 ± 0.22 mg/l (p = 0.5). Bland-Altman plot showed that the two sample sites were not equivalent. Catheter-related thrombosis was demonstrated in five patients, and there were three false negatives. Peripheral D-dimer had a negative predictive value of 90.9%.

Conclusions: A negative D-dimer may be useful for screening asymptomatic catheter-related thrombosis in patients with cancer, but the central and peripheral sample sites are not equivalent.

Reference:

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