

Central venous catheter-associated thrombosis in the perioperative period: a frequent complication in cancer patients that can be detected early with Doppler examination

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ABSTRACT

Aims and background. The aim of the study was to determine the incidence of venous thrombosis in cancer patients with central venous catheters inserted perioperatively.

Methods and study design. A prospective analysis was performed with 68 patients in whom central venous catheters were placed perioperatively. Cancer patients with planned central venous catheters had prophylaxis with low-molecular-weight heparin. Patient characteristics, procedure-related complications and venous thrombosis related to central venous catheters were recorded. In order to detect the venous thrombosis, color Doppler sonography was used after removal of the central venous catheter.

Results. The median age of the 68 patients was 55 years (range, 24-83). The median duration of catheter placement in patients was 9 days (range, 1-24). Venous thrombosis was detected in 45 (66.2%) patients: at the superficial veins (jugular and subclavian veins) in 27 patients, stretching from superficial veins into the vena cava in 8 cases, in the vena cava in 2 cases, in the right atrium in 2 cases, and at more than one place in 6 patients. Total thrombosis was detected only in 3 patients.

Conclusions. Cancer patients have a high central venous catheter-related thrombosis risk perioperatively despite prophylactic anticoagulation. Color Doppler sonography is a rapid and noninvasive technique and it is accurate in the diagnosis of venous thrombosis. Early detection of venous thrombosis is important to prevent the systemic and fatal complication of the thrombosis. Free full text available at www.tumorionline.it

Key words: cancer, central venous catheter, venous thrombosis.

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