Abstract:

Central venous catheters (CVCs) are important for the treatment of patients with cancer, especially in the perioperative and palliative care settings. These devices not only allow for the administration of chemotherapy, parenteral nutrition, and other intravenous therapies, but they may also improve the patients’ quality of life by reducing the need for repeated peripheral venipunctures. Thrombotic and infectious complications are common, especially in the long-term use of CVCs. There are different types of thrombotic complications associated with CVCs, that is, a thrombotic occlusion of the catheter, a mural thrombus at the catheter tip and classical deep vein thrombosis, which occurs most frequently in the upper extremity where the majority of long-term catheters are inserted. Infections are common complications associated with CVCs. Patients with cancer who receive intensive chemotherapy and those patients who undergo hematopoietic stem cell transplantation have a markedly increased risk for insertion site and bloodstream infections. In this review, the epidemiology and risk factors that predispose patients to CVC-related thrombosis and infection are discussed. The diagnostic and therapeutic options according to the published data and the current guidelines are summarized and data for establishing primary and secondary preventative strategies are provided.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).