

**Abstract:**

**BACKGROUND:** The clinical use of port catheters has become widespread because they provide a safe and easy vascular route. Such widespread use of vascular port catheters has revealed early and late complications.

**AIM:** This study was evaluated the early and late noninfectious complications and present precautions and pitfalls to handle these complications.

**METHODS:** The retrospective observational study comprised 801 vascular port catheters inserted into 782 adult patients for various reasons between 2010 and 2018. Patient demographic, indications for port catheter implantation, port catheter types, and insertion sides were noted. Port catheter implantation related early and late complications were recorded.

**RESULTS:** The subclavian vein was selected as a target vein in almost all of the interventions (98.9%). Similarly, right-sided veins were used in about 90% of patients. The most common problem was technical issues related to the interventions. If venous cannulation was challenging, ultrasonography and fluoroscopy guidance roadmap technique were used. Most serious complication was pneumothorax in 7 patients. In the late period, the most common problem was thrombotic occlusion of the catheter. In two-thirds of these patients, thrombolytic therapy for thrombosed port catheters may rescue some catheters and avoid secondary port catheter insertions.

**CONCLUSIONS:** Despite these benefits, port catheters are associated with various complications. However, most of these complications can be effectively prevented by proper techniques and easily applied precautions.

**Reference:**

Ince, M.E., Ozkan, G., Ors, N., Yildirim, A.K. and Doganci, S. (2020) Complications and pitfalls of central venous port catheters: experience with 782 patients with cancer. Irish Journal of Medical Science. March 19th. doi: 10.1007/s11845-020-02207-5. (Epub ahead of print).