

## **To examine whether the real-time ultrasound-guided venipuncture for implantable venous port placement is safer than the traditional venipuncture” Yıldırım et al (2018).**

### Abstract:

**AIM:** To examine whether the real-time ultrasound-guided venipuncture for implantable venous port placement is safer than the traditional venipuncture.

**METHODS:** The study analyzed the results of 2153 venous ports placed consecutively from January 2009 to January 2016. A total of 922 patients in group 1 and 1231 patients in group 2 were admitted with venous port placed using the traditional landmark subclavian approach and real-time ultrasound-guided axillary approach, respectively.

Sociodemographic characteristics of patients, early (pneumothorax, pinch-off syndrome, arterial puncture, hematoma, and malposition arrhythmia) and late (deep vein thrombosis, obstruction, infection, erosion-dehiscence, and rotation of the port chamber) complications and the association of these complications with the implantation method were evaluated.

**RESULTS:** There were no significant differences in the sociodemographic characteristics of the patients between the two groups. The overall and early complications in group 2 were significantly lower than those in group 1. Pinch-off syndrome only developed in group 1. Seven patients and two patients had pneumothorax in groups 1 and 2, respectively. Puncture number was significantly associated with the development of the overall complications.

**CONCLUSION:** The ultrasound-guided axillary approach may be preferred as a method to reduce the risk of both early and late complications. Large, randomized, controlled prospective trials will be helpful in determining a safer implantable venous port implantation technique.

### Reference:

Yıldırım, İ., Tütüncü, A.Ç., Bademler, S., Özgür, İ., Demiray, M. and Karanlık, H. (2018) Does

the real-time ultrasound guidance provide safer venipuncture in implantable venous port implantation? The Journal of Vascular Access. March 1st. .

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