

The objective of this study was to assess the incidence of upper-extremity deep vein thrombosis (UEDVT) in patients with breast cancer to determine whether the risk of UEDVT was higher with chest versus arm ports, as well as to determine the importance of previously reported risk factors predisposing to UEDVT in the setting of active cancer” Tippit et al (2018).

Abstract:

Most of the patients undergoing treatment for cancer require placement of a totally implantable venous access device to facilitate safe delivery of chemotherapy. However, implantable ports also increase the risk of deep vein thrombosis and related complications in this high-risk population. The objective of this study was to assess the incidence of upper-extremity deep vein thrombosis (UEDVT) in patients with breast cancer to determine whether the risk of UEDVT was higher with chest versus arm ports, as well as to determine the importance of previously reported risk factors predisposing to UEDVT in the setting of active cancer. We retrospectively reviewed the medical records of 297 women with breast cancer who had ports placed in our institution between the dates of December 1, 2010, and December 31, 2016. The primary outcome was the development of radiologically confirmed UEDVT ipsilateral to the implanted port. Overall, 17 of 297 study subjects (5.7%) were found to have UEDVT. There was 1 documented case of associated pulmonary embolism. Fourteen (9.5%) of 147 subjects with arm ports experienced UEDVT compared with only 3 (2.0%) of 150 subjects with chest ports ($P = .0056$). Thus, implantation of arm ports as opposed to chest ports may be associated with a higher rate of UEDVT in patients with breast cancer.

Reference:

Tippit, D., Siegel, E., Ochoa, D., Pennisi, A., Hill, E., Merrill, A., Rowe, M., Henry-Tillman, R., Ananthula, A. and Makhoul, I. (2018) Upper-Extremity Deep Vein Thrombosis in Patients With Breast Cancer With Chest Versus Arm Central Venous Port Catheters. *Breast Cancer*:



Basic and Clinical Research. April 20th. .

doi: 10.1177/1178223418771909.