To evaluate the safety, technical feasibility, and complications of totally implanted central venous access ports (TIVAPs) in the upper arm, for comparison with trans-jugular chest ports in patients with breast cancer” Yang and Ahn (2018).

Abstract:

BACKGROUND: To evaluate the safety, technical feasibility, and complications of totally implanted central venous access ports (TIVAPs) in the upper arm, for comparison with trans-jugular chest ports in patients with breast cancer.

METHODS: In total, 223 consecutive female breast cancer patients who received a TIVAP in the upper arm or chest between July 2014 and February 2016 were included. All procedures were performed via a sonographic and fluoroscopic-guided approach using the Seldinger technique under local anesthesia. We reviewed the medical records to determine technical success, pain scale, early (≤30 days), and late (>30 days) complications.

RESULTS: In total, 231 devices were implanted in the upper arms (n=176, 76%) and chests (n=55, 24%) of the patients. The mean age was 51.6±10.7 years (range 23-78 years; upper arm, 52.1±11.0 years; chest, 50.1±9.7 years, P>0.05). The mean implantation time for TIVAPs was 181.7±109.2 days (range, 9-460 days; upper arm 175.2±102.7 days; chest, 202.4±126.6 days, P>0.05), with 41,974 catheter-days. The technical success rate was 100%. Fourteen complications (6.1%) occurred in 14 patients (0.33/1000 catheter-days).
There was no significant difference in complication-free survival for patients with upper arm TIVAPs and those with trans-jugular chest TIVAPs. The mean amount of 2% lidocaine, used as local anesthesia, was 3.3±1.7 ml and 14.5±4.1 ml for upper arm and chest TIVAPs, respectively. (P<0.001).

CONCLUSIONS: Implantation of TIVAPs in the upper arm is a safe procedure with a low rate of complications. Upper arm TIVAPs can be implanted with less pain compared with trans-jugular chest TIVAPs.

Reference: