This study aimed to evaluate the feasibility and safety of implantation of ultrasound (US)-guided TIVAPs via the right innominate vein (INV) for adult patients with cancer” Sun et al (2018).

Abstract:

BACKGROUND: Totally implantable venous access ports (TIVAPs) are widely used and are an essential tool in the efficient delivery of chemotherapy. This study aimed to evaluate the feasibility and safety of implantation of ultrasound (US)-guided TIVAPs via the right innominate vein (INV) for adult patients with cancer.

METHODS: This study retrospectively reviewed the medical records of 283 adult patients with cancer who underwent US-guided INV puncture for TIVAPs between September 2015 and September 2017. It also analysed the technical success rate, operation time, and short-term and long-term surgical complications.

RESULTS: Technical success was achieved in all patients (100%). The mean operation time was 28.31 ± 7.31 min (range: 23-39 min), and the puncture success rate for the first attempt was 99.30% (281/283). Minor complications included artery puncture during the operation in one patient, but no pneumothorax was encountered. The mean TIVAP time was 304.16 ± 42.54 days (range: 38-502 days). The rate of postoperative complications was 2.83% (8/283), including poor healing of the incision in one patient, catheter-related infections in three patients, port thrombosis in one patient, and fibrin sheath formation in three patients; no catheter malposition, pinch-off syndrome, catheter fracture, or other serious complications were observed.

CONCLUSIONS: TIVAPs are widely employed for chemotherapy. The present study found that the novel approach of using US-guided INV puncture to implant TIVAPs in adult patients with cancer is both short-termly feasible and safe for long-term central venous access.

Reference: