Arm ports are a safe option beside chest ports for adult patients with malignancy, especially in patients with head-neck cancer or breast cancer. Patients should be well informed of the advantages and disadvantages of different vascular access devices and provided a choice” Wu et al (2018).

Abstract:

AIM: To compare peripheral arm ports versus central chest ports in complication rates.

BACKGROUND: Late complications of arm ports versus chest ports, including catheter-related infection, venous thrombosis and catheter obstruction, remain controversial.

DESIGN: A meta-analysis conducted following the Cochrane handbook.

DATA SOURCES: Studies published between 1950 - August 2017 were searched through Pubmed, Embase, Web of science and Cochrane library.

REVIEW METHODS: Two authors independently searched the eligible studies and extracted the data. Studies reporting complications of arm ports compared with chest ports, published in full texts and abstracts, were included. The quality of the studies was assessed with the Newcastle-Ottawa Scale. We did subgroup analyses according to cancer type, age, follow-up and anticoagulant. Relative ratios were calculated with different models.

RESULTS: A total of 15 articles covering 3524 tumour patients met the eligibility criteria. There was no difference in catheter-related infection and catheter obstruction between arm ports and chest ports. After reducing the high heterogeneity, no difference was observed in thrombosis overall; however, arm ports had a lower thrombosis rate than chest ports in patients with head and neck cancer, while a higher thrombosis rate was observed in patients < 60 years old or follow up ≥ 1 year. Further studies are needed in venous thrombosis.

CONCLUSIONS: Arm ports are a safe option beside chest ports for adult patients with
malignancy, especially in patients with head-neck cancer or breast cancer. Patients should be well informed of the advantages and disadvantages of different vascular access devices and provided a choice.

Reference:
