
Abstract:

Purpose – This study was designed to compare central venous ports (CVP) from two different routes of venous access ‘the subclavian vein and arm vein’ in terms of safety for patients with head and neck cancer (HNC).

Methods – Patients with HNC who underwent image-guided implantations of CVPs were retrospectively evaluated. All CVPs were implanted under local anesthesia. Primary outcome measurements were rates and types of adverse events (AEs). Secondary outcomes included technical success and rate and reason of CVP removal.

Results – A total of 162 patients (subclavian port group, 47; arm port group, 115) were included in this study. Technical success was achieved in all patients. The median follow-up period was 94 (range, 1-891) days. Two patients in the subclavian port group experienced periprocedural complications. Postprocedural AEs were observed in 8.5 and 22.6% of the subclavian port and arm port group patients, respectively (P = 0.044). Phlebitis and system occlusions were observed only in the arm port group. The rate of infection was not significantly different between the two groups. The CVP was removed in 34 and 39.1% of the
subclavian port and arm port patients, respectively.

Conclusions - Both subclavian and arm CVPs are feasible in patients with HNC. AEs were more frequent in the arm port group; thus, the arm port is not recommended as the first choice for patients with HNC. However, further experience is needed to improve the placement technique and the maintenance of CVPs and a prospective analysis is warranted.