

Abstract:

Objectives: Totally implantable central venous access ports (port-a-caths) are increasingly used for the safe administration of chemotherapy; however, their use is associated with complications. This study reviews patterns of complications, reasons for premature removal and the duration of the use of port-a-caths in patients receiving cancer treatment at Sultan Qaboos University Hospital (SQUH) and compares the infection rate with the literature and the researchers' experiences.

Methods: This retrospective follow-up study included patients who had received cancer treatment through a port-a-cath and were admitted to SQUH between January 2007 and April 2019. Demographic features, underlying diagnosis, clinical stage, treatment, duration of use and the cause of premature removal of the port-a-cath were recorded.

Results: A total of 516 port-a-caths were inserted in 482 cancer patients. The majority of devices were implanted by interventional radiologists (n = 459; 89.0%) and the right internal jugular vein was most frequently accessed (n = 396; 76.7%). The mean indwelling time of a port-a-cath was 288 days (range: 3-1,872 days) for patients with complications and 550 days (range: 7-3,123 days) for patients without complications. Port-a-cath-related infection was the main complication (n = 63; 12.2%). Patient age, gender, treatment intent, underlying diagnosis, clinical stage, chemotherapy regimen, number of treatment courses, operator implanting the port, the type of micro-organism isolated from the port-a-cath and body mass index were significant factors affecting catheter indwelling time (P <0.05). On multivariate analysis, however, none of the factors was found to be significant.

Conclusion: Infection was the most common complication necessitating port-a-cath removal. The infection rate was much lower than the researchers' previous experience and compares favorably with several published reports.

Reference:

D'Souza PC, Kumar S, Kakaria A, Al-Sukaiti R, Al-Baimani K, Hamid RS, Mittal AK, Al-Balushi M, Burney IA, Al-Moundhri MS. Complications and Management of Totally Implantable Central Venous Access Ports in Cancer Patients at a University Hospital in Oman. Sultan Qaboos Univ Med J. 2021 Feb;21(1):e103-e109. doi: 10.18295/squmj.2021.21.01.014. Epub 2021 Mar 15. PMID: 33777430; PMCID: PMC7968907.

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