

Abstract:

Purpose: Totally implantable venous access devices (TIVADs) currently have an important place in medical oncology practice; however, their long-term availability deserves further investigation, since they are usually required by patients for prolonged periods. This study aimed to evaluate long-term availability of TIVADs in adult cancer patients, in conjunction with complication/removal rates over time and associated risk factors during 7-year follow-up.

Methods: A total of 204 adult cancer patients who underwent TIVAD placement via subclavian vein using the Seldinger technique were included in this study. Medical data and catheter follow-up records were investigated retrospectively. Complications and port removals due to complications were evaluated over time.

Results: During median 21.9 (range, 0.7-82.9) months of follow-up, great majority of the patients did not require catheter removal due to complications (91.7%). During a total follow-up of 183,328 catheter days, 20 (9.8%) patients had complications with an incidence of 0.109 cases per 1000 catheter days and 18 (8.8%) of them required TIVAD removal (0.098 cases per 1000 catheter days). Most device removals due to complications (15/18, 83.3%) occurred within the first 24 months. Multivariate analysis identified left-sided device location as the only significant independent predictor of short device availability (OR, 3.5 [95% CI, 1.1-11.1], $p = 0.036$).

Conclusion: TIVADs in cancer patients appear to be safe and their availability appears to be high in the long term. A decision for early removal might be revisited. Opting for the accustomed side (right side in the present study) for implantations seems to be associated with better outcomes.

Reference:

Tumay LV, Guner OS. Availability of totally implantable venous access devices in cancer patients is high in the long term: a seven-year follow-up study. Support Care Cancer. 2020 Nov 5. doi: 10.1007/s00520-020-05871-6. Epub ahead of print. PMID: 33155092.