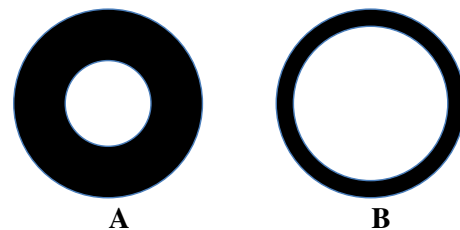


## Totally Implantable Venous Access Devices: Efforts Are Needed to Standardize Procedures to Avoid Complications

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We read with interest the article by Biacchi and colleagues published in the 2016 February issue of the Journal [1]. Their retrospective study compared the causes of long-term explantation in cancer patients who had totally implantable venous access devices (TIVADs) inserted using two techniques. The study was well conducted and analyzed the approaches to implanting a TIVAD as the cause of long-term failure. To date, this aspect of such implantation has not been clarified. We have undertaken the surgical technique using the cephalic vein and have demonstrated that in patients who are not at risk do not need prophylactic antibiotic administration [2]. Currently, any cost that could be avoided is welcome because health systems have become more and more expensive worldwide. As Biacchi et al. described, they used a 6.5-Fr silicone catheter in adults. Usually, this size is used in children, although it may also be used in adults. Silicone catheters are more flexible than polyurethane catheters, but the lumen is smaller (Fig. 1). This difference is important when an 8-Fr catheter is placed, but it becomes fundamental when a 6.5-Fr catheter is used because the catheter's small lumen poses a risk of occlusion and, consequently, thrombosis of the vessel. In effect, their Table 2 showed that there were venous thromboses/



**Fig. 1** Difference in the lumens between silicone (a) and polyurethane (b) catheters used for placing totally implantable venous access devices

occlusions in 22 of 38 cases using the surgical technique and in 6 of 29 cases using percutaneous puncture. If the authors had used 8 Fr (especially polyurethane) catheters, there may have been fewer complications. Also, although not significant (0.03), their results in the surgical technique group could be considered as a bias of the study.

When the cephalic vein is not available, the external jugular vein or the axillary vein could be used for the approach—depending on the anatomy and the situation of the patient—before choosing the subclavian vein [3]. These techniques are less risky than the percutaneous approach, especially if done without ultrasonography guidance. A blind technique to cannulate the subclavian or jugular vein should not be accepted in 2016.

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