Infusion Therapy Standards of Practice, 2024

Subcutaneous Anchor Securement System (SASS) Practice Recommendations

Section 36 – Vascular Access Device Securement

Subcutaneous anchor securement system (SASS): a securement device that anchors the VAD in place via flexible feet/posts that are placed just beneath the skin; these act to stabilize the catheter right at the point of insertion. A separate dressing is placed over the SASS. The SASS does not need to be changed at regular intervals when the dressing is changed; it can remain in place if there are no associated complications.

Standard

1. VADs are secured to prevent complications associated with VAD dislodgement and VAD motion at the insertion site.
2. Methods used to secure the VAD do not interfere with the ability to routinely assess and monitor the access site or impede vascular circulation or delivery of the prescribed therapy.

Practice Recommendations

A. Use a securement method in addition to the primary dressing, to stabilize and secure VADs. Inadequate securement can cause dislodgement and complications requiring premature removal.

1. Additional securement as an adjunct to the primary dressing reduces motion at the insertion site and associated complications. Adequate securement can reduce pain, fear, and anxiety and reduces health care costs associated with VAD replacement. (I)

C. Avoid use of sutures as they are not effective alternatives to a securement method; sutures are associated with needlestick injury, support the growth of biofilm, and increase the risk of catheter-associated bloodstream infection (CABSI). (III)

D. Evaluate the effectiveness of a combination of securement measures to reduce complication and failure. (III)

G. Use an ASD, ISD, SASS, or TA for peripherally inserted central catheters (PICCs) as an alternative to sutures; they are safer than sutures and reduce risk of complications, including infection and dislodgement. (I)

1. Small pilot and observational studies report improved outcomes when securement methods, including SASS, ISD, and TA, are used compared to ASDs. More powered clinical trials are needed to confirm the safety and efficacy of various securement methods in all patient populations.

H. Evaluate the potential for clinical and fiscal efficacy of SASS for PICCs and CVADs, including both tunneled, cuffed and tunneled, non-cuffed catheters in adult and pediatric patients. (III)

1. Studies comparing the use of ASD and SASS as effective and acceptable securement for PICCs; tunneled cuffed and tunneled non-cuffed CVADs are limited to one pilot RCT and several small descriptive studies. Single-center observational studies demonstrate SASS to be more effective than traditional sutures and ASD in preventing catheter failure, especially dislodgement in patients with altered skin integrity. Patient and clinician satisfaction with SASS has been favorable. (III)
2. The National Institute for Clinical Excellence (NICE) in the United Kingdom advocates improved patient safety and cost benefit of SASS, particularly for use greater than 15 days. (IV)

M. Assess the integrity of VAD securement with each dressing change and change the securement device according to the manufacturer's directions for use. Remove ASDs with each dressing change to allow for appropriate skin antisepsis and apply a new ASD. TA should be reapplied at each dressing change. A securement device designed to remain in place for the life of the VAD (eg, SASS) does not need to be removed and replaced regularly with each dressing change; however, it should be assessed during catheter care and management to ensure its integrity. (I)

N. Be aware of the risk of catheter-associated skin injury. (CASI)