Our data suggest that locking ports with normal saline every three months is not associated with an increased risk of lumen occlusion” Solinas et al (2017).

Abstract:
INTRODUCTION: Patients with cancer need stable venous access using central vascular devices like central venous ports and peripherally inserted central catheters that can be used for a wide range of indications. Numerous flushing protocols exist including different frequencies for catheter locking to maintain catheter patency. The aim of this retrospective study was to evaluate the incidence of lumen occlusion of central venous ports in a group of adult cancer patients, adopting a policy of locking with normal saline every three months.

METHODS: This is a single-center retrospective observational study. During follow-up, we analyzed adult cancer patients who had undergone port insertion from January 1st, 2007 to August 31st, 2014. Flushing and locking were performed every three months with a syringe containing normal saline.

RESULTS: We collected data from 381 patients with ports inserted in subclavian vein (379 patients) and in the right jugular vein (2 patients). Locking was performed during 3-monthly follow-up visits. Median follow-up was 810 days (90-2700 days). Among 381 ports, 59 were removed; the reasons for removal were: end of use (45 cases), catheter rupture (9 cases), dislocation (3 cases) and catheter-related bloodstream infection (2 cases). We had no reports of lumen occlusion.

CONCLUSIONS: Our data suggest that locking ports with normal saline every three months is not associated with an increased risk of lumen occlusion.

Reference:

Thank you to our partners for supporting IVTEAM

- Intraosseous administration of hypertonic saline case study
- Pediatric hypertonic saline use in emergency department
- Balanced crystalloids versus normal saline for fluid resuscitation in critically ill patients