Abstract:

Central venous catheter (CVC) ethanol locks may reduce catheter-related bloodstream infection (CRBSI). Four children with intestinal failure on home parenteral nutrition (HPN) were selected for 70% ethanol locks because of their high rate of CRBSI. The 70% ethanol locks were instilled at a volume equal to the estimated internal volume of the CVC. Two children (aged 4 and 11 years) received 70% ethanol locks as CRBSI prophylaxis; another 2 children (aged 10 and 11 years) received 70% ethanol locks as adjunctive treatment for CRBSI. All 4 children developed either visible thrombosis in the CVC or CVC occlusion. To the authors’ knowledge, this is the first report of CVC thrombosis associated with ethanol lock therapy in the pediatric HPN population. Although none of the CVCs were removed due to occlusion, these events raise serious concerns about the use of high-concentration ethanol locks.