Catheter-related bloodstream infection is a major cause of mortality and morbidity in the intestinal-failure population. This study reports characteristics of CRBSI with implications for clinical management in parenteral nutrition-dependent children with intestinal failure. The researchers report the rate of central catheter infections, and the causative organisms, as well as identify risk factors in our intestinal-failure patients that would be amenable to preventive measures. The study is a retrospective review of the medical records of 101 patients with intestinal failure (IF), seen in the Intestinal Rehabilitation Clinic at Children’s Medical Center of Dallas from May 2005 to March 2007. Catheter-related bloodstream infections (CRBSIs) were categorized as nosocomial or community-acquired. Data collected for each episode include microorganisms isolated from blood and potential risk factors. Z test was done to compare the infection rates. There were 92 episodes of CRBSIs in 45 parenteral nutrition (PN)-dependent patients with central venous catheters (CVC) in place for a total of 13,978 days. Eighty-three percent \( (n = 76) \) of CRBSIs developed in the community at a rate of 7.0 per 1,000 days. Seventeen percent \( (n = 16) \) nosocomial CRBSIs were observed at a rate of 5.5 per 1,000 catheter days. CRBSI rate was not statistically different between the two groups \( (7.0 \text{ vs. } 5.5, p = .378) \). CRBSI in the intestinal-failure population is due to a wide variety of organisms with numerous risk factors. Education of CVC management with the
practice of consistent guidelines may reduce CRBSI incidence, thus reducing the morbidity and mortality in the intestinal-failure patients.