Safety and outcomes of percutaneous endoscopic gastrostomy tubes in children

Fareed Khdair Ahmad, Dina Younes, Mohamed Besher Al Darwish, Malina Abu Aljubain, Murad Dweik, and Yazan Alda`as
The University of Jordan – Amman, Jordan

Abstract

Gastrostomy tube feeding is indicated for children who require prolonged enteral tube feeding. Different techniques for gastrostomy tube insertion exist and include percutaneous endoscopic gastrostomy (PEG) tube insertion. Outcomes from PEG tube insertion were reported in children with nutritional and feeding problems associated with a wide range of diseases. Our primary goal was to review the indications, associated complications, and outcomes from PEG tube insertion in children treated in our institution. Our secondary goal was to assess possible risk factors for the associated complications. This was a retrospective chart review study. It involved children who had received PEG tubes between 2017 and 2019. Data collected included demographics, indications for PEG placement, associated co-morbidities, minor and major complications encountered, and patients’ outcomes after PEG placement. Statistical analysis was performed to determine possible risk factors for predicting the encountered complications. A total of 25 PEG tubes were placed during the study period. There were 14 females (56%), and the average age of the patients was 43.8 months (range: 1-188 months). The most common indication for PEG placement was failure to thrive (40%), followed by feeding problems (32%) and recurrent aspiration (28%). Neurological conditions (84%) were the most common associated comorbidity, followed by hematological (44%) and genetic (24%) conditions. A very small percentage (4%) experienced one major complication, and about 32% of the patients experienced at least one minor complication. The most common minor complication was PEG tube site infection. No risk factors could predict the encountered complications. PEG tube placement continues to be a safe technique in children. The most common indication of PEG placement is failure to thrive. PEG tube site infection continues to be the most common minor complication associated with PEG placement. No specific risk factors were found to predict the encountered complications.

Biography

Fareed Khdair Ahmad is an assistant professor of pediatric gastroenterology, hepatology and nutrition at the University of Jordan - School of Medicine. He earned his medical school degree from the University of Jordan, and then he did his training in the United States of America. He is American board certified in general pediatrics, pediatric gastroenterology, and liver transplant.