INTRODUCTION

• Intussusception is the most common abdominal emergency in early childhood (1).
• It occurs commonly near the ileocecal junction (1).
• In intussusception, a proximal segment of bowel telescopes into a distal segment. Venous and lymphatic congestion may lead to intestinal edema, ischemia, perforation, and peritonitis (1).
• Patients present with intermittent abdominal pain and vomiting (1).
• Anesthetic considerations include hemodynamic instability, metabolic derangements, aspiration risk, and difficult IV access (1).

CASE REPORT

• A 1 year old otherwise healthy male was transferred from an outside hospital to our facility with concern for intussusception.
• 5 day history of diarrhea and 2 day history of vomiting and constipation.
• IV fluids were initiated prior to the patient's arrival to our facility.
• The patient was seen and evaluated by the pediatric surgery team. They decided that the patient required an open reduction.
• Before his transport to the OR, the patient’s IV was found to be infiltrated. There were multiple attempts to regain IV access without success.
• The ED team was able to obtain IO access. Resuscitation was started with Lactated Ringer’s.
• The patient was found to have extreme pain with the use of the IO catheter even though there was no clear evidence of infiltration.
• IV access was attempted by the anesthesia team prior to going to the OR without success.
• Routine monitors were used for the case.

DISCUSSION

• Intraosseous infusions have been used for the administration of fluid resuscitation in the pediatric population (2).
• There are a limited number of reports of the use of IO access in the operating room setting and less in situations where a rapid sequence induction is indicated (2, 3, 4).
• In animal models, the speed of action of succinylcholine IO is comparable to the IV route and superior to the IM route (5).
• Animal models have also demonstrated favorable intubating conditions with use of propofol through intraosseous device (6).
• Intraosseous access is a safe alternative when intravenous access is unobtainable and central venous access is not feasible (2).
• Further studies will need to be performed to determine optimal dosage through IO when performing rapid sequence induction in the pediatric population.

REFERENCES

7. www.cookmedical.com