Is Intussusception Common in Neonate?

Dr. Najia Alhojaili¹, Dr. IBRAHEM Kotbi², Dr. Attia Al Zahrani³, Dr. Laila Alabast³ and Jumana Masen Derar⁴

¹NICU Consultant, Maternity Children Hospital, Makkah, Saudi Arabia.
²NICU Consultant, Maternity Children Hospital, Makkah, Saudi Arabia.
³NICU Consultant, Head of Department, Maternity Children Hospital, MAKKAH, Saudi Arabia.
⁴Senour Pediatric Consultant, Maternity Children Hospital, MAKKAH, Saudi Arabia.
⁵Medical Student Makkah, Saudi Arabia.


ABSTRACT

Intussusception is a medical and surgical condition in which a part of the intestine folds into the section immediately ahead of it [1]. It typically involves the small bowel and less commonly the large bowel [1].

The causes of inter-suspension in the neonates may be due to sepsis, intestinal polyps. The recurrence rate is very high and family history in siblings is important.

Introduction

Intussusception is a serious condition in which part of the intestine slides into an adjacent part of the intestine. Intussusception is the most common cause of intestinal obstruction in children younger than 3 years old.

In our case the inter-suspension in 6 days old with severe dehydration and poor activities, vomiting and pass stool with blood (currant jelly stool). The diagnosis of inter-suspension is emergency by ultrasound abdomen and rectal enema and surgical intervention.

Signs and Symptoms

The infants will present with crying and pulling the legs to the chest interment crying.

Some infants present with projectile vomiting and diarrhea with mixed blood and severe metabolic acidosis and dehydration.

Some of them present with poor feeding and lethargy exactly like sepsis.

Differential diagnosis

1- Intestinal obstruction
2- Sepsis
3- Malrotation

Our Case

3 days old full term baby admitted to intensive care unit with vomiting and diarrhoea two days back, baby was product of full term, normal delivery with good APGAR Score 8,9,9 at 1,3,5 minute discharge with mother in good general condition, baby on breast feeding and formula, mother was noticed at 48 hours had crying and pulling the legs towered the chest with refusing to complete the feeding with vomiting and pass jelly current stool, brought him to hospital with severe dehydration and shock like symptoms.

The infant had dry skin with sucking eyes, pale severe dehydrated. Baby was tachycardia with heart Rate 190ppm, RR=60PPM Saturation was 88%.
Abdomen was rigid and there was mass felt around the umbilicus, and the infant was crying and hold the limbs to the chest, immediately blood was drowned for complete blood count which show leukocytosis and severe metabolic acidosis, blood culture and CRP was sent, O negative blood was reserved intubated in the Emergency department and called pediatric surgery to see the baby.

Ultrasound abdomen showed well-defined right paraumbilical doughnuts shaped measuring 2.5 X 1.5 cm and length about 4 cm suggest of ileocecal interruption.

Course and Intervention  
Baby was admitted to intensive care unit under mechanical ventilation. Resuscitation by normal saline to correct dehydration and to correct metabolic acidosis, blood culture was taken and stared antibiotic vancomycin and meropenium and surgical intervention which found Part of intestine insert to other part and forms inter-suspension with mild edematous of part of intestine as shown in the picture 1,2,3,4.

Discussion  
Interruption is surgical emergency need to be recognized and mange rapidly.

The history must be taken and examination of infants to roll out other disease, there was family history in the intussusception in previous sibling and there was increased incidence of intussusception in the same infants.

![Picture 1: Mild edema of part of intestine and inter-suspension.](image1)

![Picture 2: Surgeon tried to remove the inter-suspension part.](image2)
During operation noticed the edematous part of intestine prior to intussusception.

BLOODY STOOL initial presentation of infant’s current jelly stool.
The management is admission to the intensive care unit and all investigation must be taken and consult the paediatric surgery to come and see the infants.

Most babies with intussusception looks ill with severe pain and metabolic acidosis need urgent intervention by insertion of orogastric tube and aspirate all the contents of stomach to decrease the pressure and insertion of intravenous line to manage the metabolic acidosis dehydration and resumed antibiotic after taken all culture include blood culture, complete blood count and lumber puncture if baby stable and general condition allowed to do lumber puncture after that x-ray abdomen and urgent ultrasound abdomen, rectal enema and serial x-rays of abdomen were taken.

Urgent operation was taken out to reserve others part of intestine, and broad spectrum of antibiotic was started. After operation infant kept NPO for several days until feeding was allowed by surgeon. And when the feeding started by small amount and then increased gradually. Baby must observe because of recurrent of intussusception wasn’t rare.

**Reference**