population; sun exposure, atmospheric pollution, skin pigmentation, dietary and genetic factors are important determinants for it [3]. Various disorders like malabsorption syndromes, chronic kidney and liver disorders and drugs can also lead to vitamin D deficiency [4]. Recommended daily allowance (RDA) for vitamin D in children 1-13 years of age is 600 IU/day [5]. Poor dietary habits can lead to severe vitamin D deficiency and its consequences even in the absence of pathological causes. The need of the hour is to suspect vitamin D deficiency in motor delay or muscle weakness and its prompt treatment.

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# Intestinal Obstruction due to Accidental Ingestion of Hygroscopic Foreign Body

A 1½-old girls presented with history of bilious vomiting for two days. There was no history of incessant cry or bleeding per rectum. On examination, the child had some dehydration. Abdomen was distended and an ill defined mass was palpable just to the right of umbilicus. The clinical suspicion was that of an intussusception, and the child was admitted and intravenous fluids were administered. *X*-ray abdomen revealed a single dilated bowel loop suggestive of small intestinal obstruction. Ultrasound abdomen showed a thin walled clear cystic lesion of size 3 x 3 cm in the ileum with proximal dilated loops suggestive of a cystic duplication of ileum with intestinal obstruction.

The child was kept nil per orally and placed under observation. The distension progressively increased and *X*-ray abdomen after 6 hours showed increasingly dilated bowel loops, which necessitated an emergency laparotomy. During surgery, a clear cystic lesion of size 3x3 cm was found intraluminally in the jejunoileal junction causing complete intestinal obstruction. The affected portion of bowel was resected and a primary end to end jejunoileal anastamosis was done. Post-resection, the specimen bowel was opened and a firm translucent foreign body (***Fig.* I**) densely adherent to bowel was found in the lumen with focal discoloration and thinning of the resected bowel.

Subsequent questioning of parents revealed the presence of similar objects at their residence, bought from free market for their hygroscopic properties, which explained the possibility of accidental ingestion. The child had an uneventful postoperative period and was discharged home after six days.

Superabsorbent polymer (SAP) beads causing intestinal obstruction was first reported in in 2012 [1]. A similar case of ingestion of Superabsorbent crystal jelly in an infant causing intestinal obstruction requiring surgery and subsequent mortality was published subsequently from Pakistan [2]. The toys involving these SAP beads are banned in Malaysia, UK and Italy. The objective of presenting this unique case is to alert the pediatricians to the existence of such toys in the market, and alert them to

**FIG. 1** *Hygroscopic foreign body inside the small bowel.*

educate the general public to watchfully avoid such toys till a ban is enforced in India.

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# Indigenously Designed Meconium Aspirator

Meconium stained amniotic fluid (MSAF) complicates delivery in approximately 8% to 25% of live births. Approximately 5% of neonates born through MSAF develop meconium aspiration syndrome (MAS), and approximately 50% of these infants require mechanical ventilation. Meconium aspiration before or during birth can obstruct airways, interfere with gas exchange and cause severe respiratory distress [1], leading to high morbidity and mortality. Neonates who are born through MSAF and are apneic will require tracheal suction with meconium aspirator [2].

Meconium aspirator, recommended in Neonatal resuscitation guidelines is neither freely available nor routinely used in our settings. This stimulated us to develop an indigenous aspirator that is cheap, easily made and can be effectively used as meconium aspirator. This device can be made with the help of an 8 cm long piece of 1.25 cm diameter transparent simple plastic pipe (available as 1/2" pipe in market), two adaptors of endotracheal tubes and one disposable needle (***Fig.* 1**). Create a small hole over junction of anterior one-third and posterior two-third of plastic pipe using red hot iron nail. This anteriorly placed hole in the pipe will allow a firm grip as well as easy occlusion of hole by thumb (***Web Fig.* 1**). Push posterior part of needle (needle's anterior part removed) into hole to create a port. Attach two adaptors on both side of the pipe (size as required). Attach endotracheal tube on one side and suction point on other side. Occluding the hole will create suction in endotracheal tube ( ***Web video* 1**).

**FIG.1** *Indigenous meconium aspirator.*

This device has an advantage of being transparent as it helps in viewing the color, consistency, and amount of material – not possible in case of commercially available meconium aspirators. This device can be sterilized with 2% glutereldehyde (Cidex) solution or Ethylene oxide. We have successfully used this indigenously designed meconium aspirator for resuscitation in many neonates and found it to be useful.

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