

Conventional cytogenetic analysis can identify reciprocal chromosomal translocation t(15;17) in upto 90% of cases with APL. The remaining 10% cases lacking t(15;17) stay associated with the cryptic insertion of the PML/RAR α fusion gene [4,5]. FISH analysis and RT-PCR are the valuable tools to identify the PML/RAR α hybrid transcript in a cytogenetically negative APL patient. The routinely used dual-colored break apart probes that are used in FISH are not sensitive enough to hybridize with such small cryptic insertions and therefore do not produce a signal as in our case. However, these small cryptic insertions can be amplified and detected by RT-PCR. These RT-PCR positive cases for hybrid PML/RAR α transcript classify a new cytogenetic subgroup of APL.

We suggest that RT-PCR should be performed at baseline to detect this small subset of t(15;17) negative APL cases, with cryptic or masked insertions.

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Vitamin D Deficiency: An Uncommon Cause of Quadripareisis

Vitamin D deficiency can present with neuromuscular symptoms at all ages from floppiness in infancy, delayed motor milestones in toddlers and acquired proximal muscle weakness in adolescents and young adults. Proximal limb myopathy associated with rickets is well known but truncal weakness is rare [1].

A 6-year-old girl presented with progressive weakness of body for six months and inability to get up from bed for two months. She was a vegetarian and had an aversion to milk and milk products. She received vigorous physiotherapy from a local hospital. At presentation, child had stable vitals and had pallor. Her weight was 17.5 Kg, The muscle bulk was normal, and power was MRC scale 3/5 at shoulder and hip joints and 4/5 at distal joints. Truncal and neck muscles were severely involved. Deep tendon reflexes were elicitable. There were no signs of sensory involvement, meningeal irritation, cerebral dysfunction or cranial nerve involvement. Wrist joints

were widened. X-ray knee joint showed cupping and fraying of lower end of femur, upper end of tibia and fibula, and fracture of upper part of both fibulae; severe osteopenia was present. Serum calcium was 7.0 mg/dL, phosphorus 3.1 mg/dL and alkaline phosphatase 2375 IU/L. Serum 25(OH) vitamin D levels were 5 ng/mL (normal 40-60 ng/mL) and Parathormone level was 70 pg/mL (normal 13-66 pg/mL). Serum electrolytes, renal and liver function tests, thyroid function test and anti-tissue transglutaminase antibody levels were within normal limits. Electromyography (EMG) could not be performed as patient was not cooperative; Nerve-conduction in lower limbs was done which was normal. She was given intramuscular injection of 600,000 IU of vitamin D and started on calcium supplements (200mg/kg/day). Within a week child started getting up from bed, and next week she was able to walk without support.

Vitamin D probably exerts its actions on muscles through two pathways. The genomic pathway affects calcium uptake, phosphate transport and phospholipid metabolism as well as myoblast differentiation and division involving *de novo* protein synthesis. Non-genomic pathway affects calcium transport and contractility apparatus [2].

Vitamin D deficiency is highly prevalent in Indian

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 anastomosis was done. Post-resection, the specimen bowel was opened and a firm translucent foreign body (**Fig. 1**) 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.