

Health information is crucial to health behavior and resulting change in attitudes leading to a healthy lifestyle(3). The success of the Health Care System depends on community participation which requires appropriate health education. Health education and health delivery systems should run parallel and not in isolation of each other. Health education imparted to school children has a three-fold impact; on the child, on the family and community at large and on the next generation too. It is worth investing in a sound school health education programme, and making children partners in community health programmes.

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### Jejunal Diaphragm

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Atresias in the jejunoileal area are an important cause of intestinal obstruction during infancy. Stenosis, a partial intraluminal occlusion, resulting, in incomplete intestinal obstruction accounts for about 5% of cases of jejunoileal obstruction(1).

Out of these, the incidence of stenosis is 75% in the duodenum, 20% in the ileum and only 5% occur in the jejunum(2). Diaphragm (web) in the jejunum leading to obstruction is still rare. We report a 2½-year-old male child who presented with features of intestinal obstruction and at laparotomy a thin diaphragm (web) was detected in the mid-jejunum. Excision of the web was curative. The late presentation of membranous obstruction or web in the jejunum prompted us to document this case.

#### Case Report

A 2½-year-old male child was admitted with history of intermittent episodes of bilious vomiting, episodic abdominal pain and distention for the last 2 weeks. Past history was noncontributory and examination revealed a child who weighed 9 kg (normal 13 kg) and had a height of 85 cm (normal for age).

Abdominal examination revealed a distended abdomen with visible peristalsis above the umbilicus. No definite abdominal lump could be palpated. There was no organomegaly. There was no evidence of dehydration. General physical and rest of the systemic examination was unremarkable.

Investigations revealed a normal hemogram and serum electrolytes. Upright abdominal X-ray revealed dilated small bowel loops. A barium meal follow

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Fig. Barium meal follow through showing complete obstruction in the jejunum.

through showed dilatation of the duodenum and proximal jejunum with a distal cut off (Fig.).

On exploratory laparotomy a narrow part of the mid jejunum was detected, below the dilated proximal jejunal loops and an enterotomy was done. A thin diaphragm (web) with a central hole of 7 mm diameter was detected. The web was excised and the enterotomy was closed.

Histopathology of the excised web revealed normal mucosal lining. No muscular tissue was identified in the web.

The child is asymptomatic after the excision of the web and has regained weight to optimum on follow up of 1 year.

## Discussion

Jejunioleal atresias have been classified

into 4 types(3). The present case fits into type I in which there is a membrane or diaphragm with the bowel wall in continuity. In this type the proximal bowel is markedly dilated, the mesentery is intact and the total bowel length is normal.

The pathogenesis of this intestinal lesion may be explained by the vascular theory of fetal ischemic necrosis(4). This vascular-ischemic theory is mainly held responsible for various types of jejunioleal atresias. For the duodenal obstructive lesions the failure of complete recanalization during early weeks of life is mainly held responsible.

The onset of clinical symptoms is variable and is reportedly proportionate to the diameter of the web. The treatment for jejunal webs remains surgical. Endoscopic laser therapy has been successfully tried for duodenal webs(5) but we are not aware of any such report for jejunal webs.

Jejunal web or diaphragm remains an uncommon entity but it should be considered in the differential diagnosis of intestinal obstruction even in an older child.

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## De Novo Deletion of Chromosome 9 (9p-) in a Child with Multiple Congenital Anomalies and Psychomotor Retardation

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Numerical aberrations (trisomy 21, 13, 18) resulting from aneuploidy due to nondysjunction (meiotic or mitotic) are one of the major chromosomal abnormalities in multiple congenital anomalies. Deletion (loss of genetic material) is the most frequently observed structural abnormality in humans. Deletion has been reported for all 22 pairs of autosomes and sex chromosomes, X and Y resulting in varying degree of phenotypic abnormalities and pathogenesis(1,2). Though some manifestations are common in majority of deletion syndromes, some features are characteristic of

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a particular chromosome region and can be delineated as a definite "clinical entity".

Alfi and coworkers reported the first case of deletion (9p-) syndrome(3). More than 80 cases of this syndrome have been documented in different populations. However, no confirmed case of 9p- has been reported in our population(4). The prevalence of Alfi's syndrome is not well established. However, the prevalence is much lower than trisomy-21. Application of banding techniques, particularly high resolution technique will help in detecting the minor deletions like 9p-. An underestimate of the prevalence of this well delineated syndrome cannot be excluded.

### Case Report

The probed, a 8-month-old male child, is the first and only child of healthy, non-consanguineous parents. Family history was unremarkable. He was suspected to have Down's anomaly by a pediatrician and was referred for chromosome analysis. On examination at 8 months he had marked trigonocephaly, prominent forehead, flat occiput, upslanting palpebral fissures, ocular hypertelorism, flat nasal bridge, anti-verted nostrils, long philtrum, mild micrognathia, high arched palate, low set ears and short neck widely spaced nipples (*Fig 1*). There was profound hypotonia with reduced reflexes. The genitals were hypoplastic and the gonads were small and undescended. Dermatoglyphics showed simian crease. The child had marked developmental retardation.

*Radiological investigations revealed: (i) Skull: Normal sutures. Antero-posterior diameter was smaller compared to vertical diameter. Pituitary fossa was normal. Petrous temporal bone and orbital margins*