

spreads over and into the bone of jaw. From the gum it spreads into the inside of cheek and then through to the skin producing a large area of full thickness tissue loss. There may be sloughing away of the whole bone. This painful condition is associated with mixed aerobic and anaerobic infections.

Early intervention is necessary to prevent death and extensive tissue loss. Treatment of choice is with megadose of penicillin and metronidazole with or without aminoglycosides. High protein diet rich in vitamin helps in rapid recovery. In the acute phase local wound dressing with 5% sodabarbonate solution is useful. Plastic surgical repair after debriding all scar tissue is undertaken at the appropriate time with lined tube pedicle flap or osseomyocutaneous flaps with mouth wide open.

In South India, there is always a delay in seeking medical care during or after an attack of measles due to the strong belief that "measles will worsen if taken out of the house due to the wrath of Goddess". These cases constantly remind us of the continuing morbidity associated with measles despite increasing immunization coverage under Universal Immunization Programme in all developing countries.

Adequate nutritional support, immunization, early medical care and health education will prevent this post measles morbidity with extensive tissue loss.

#### REFERENCES

1. Krishnamurthy KA, Anantharam V. Measles: A dangerous disease. A study of 1000 cases in Madurai. *Indian Pediatr* 1974, 11: 267-271.
2. Sidiqi N, Ghosh S, Berry AM. The natural history of measles in a low income urban community in South Delhi. *Indian Pediatr* 1974, 11: 557-562.

3. Choudhury VP, Atmar M, Amin I, Aram GN, Ghani R. Effect of protein energy malnutrition on the immediate outcome of measles. *Indian J Pediatr* 1987, 54: 717-722.
4. Majumder H, Majumder M. Minocycline therapy in staphylococcal and other infections in children. *Indian Pediatr* 1974, 11: 711-718.
5. Kasper DL. Infection due to mixed anaerobic organisms. *In: Harrison's Principles of Internal Medicine*, 11th edn. Eds Braunwald E, Isselbacher KJ and Petersdorf RG. New York, McGraw Hill Book Co, 1987, pp 569-570.

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### Chylous Mesenteric Cyst: An Unusual Cause of Neonatal Intestinal Obstruction

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Mesenteric cysts present more often in adults than children, and very rarely in neonates. Of the mesenteric cysts, chylous cysts are most uncommon. We report a neonate who presented with intestinal obstruction due to a chylous mesenteric cyst.

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## Case Report

A 15-day-old male neonate weighing 2800 g, with no significant antenatal or perinatal history presented to us with complaints of bilious vomiting and refusal of feeds three days prior to admission. There was no history of constipation or any other complaints. On examination he was mildly dehydrated and had cleft lip. Abdominal examination revealed uniform distension, hyperperistalsis and no palpable abdominal mass. Our provisional diagnosis was intestinal obstruction due to a congenital gastrointestinal anomaly. Radiology of abdomen revealed multiple air fluid levels in the intestine with no gas shadow in the colon. At laparotomy a  $5 \times 4 \times 3$  cm multilocular mesenteric chylous cyst of the jejunum was discovered, having smooth walls, filled with whitish fluid with no communication with the intestinal lumen. Since the intestine was stretched over the mass and could not be separated, resection of 5 cm of jejunum with end to end anastomosis of the remaining segment was carried out. The baby had an uneventful recovery and has been followed up for the last 4 months and has a normal development.

Histopathological examination of same revealed a honeycomb, formed of large and small cystic spaces separated by thin fibrous septae. these spaces were lined by single layer of flattened endothelial cells. Scattered smooth muscle cells and lymphocytes were present in the interstitium. Few of these channels had thick muscular wall. Some of them contained lymphocytes or eosinophilic material.

## Discussion

Mesenteric cysts were first described in 1507 by the Florentine anatomist Benivieni(1). Of the three large series of mesen-

teric cysts reported in literature(2), Colodny has reported pediatric cases. Mesenteric cysts may be asymptomatic and detected on routine examination, or may present with abdominal pain, mass, distension, intestinal obstruction, failure to thrive in decreasing order of frequency(3). Etiologically, there may be development defects (chylous or serous), lymphatic, traumatic or embryonic (enteric cyst, dermoid) in origin. Chylous mesenteric cyst is postulated to be a developmental defect in mesenteric lymphatics creating closed spaces within which fluid accumulates. Chylous cysts are differentiated from serous cysts by their cloudy appearance, uni- or multiloculated appearance and an endothelial lining which is always present. They are usually thin walled and flabby and therefore difficult to palpate(4). Diagnosis can be made by contrast radiographic examination of the gut, ultrasonography and CT scan of the abdomen(5). The differential diagnosis includes ovarian cyst, pancreatic cyst and enteric duplication. The therapy is surgical excision(6) either by enucleation, local excision or wide excision with resection anastomosis. The prognosis is usually excellent with no significant morbidity or mortality.

## REFERENCES

1. Whittlesey RH, Heidorn GH, Huntley WB. Mesenteric cysts and chylous ascites. *Arch Pediatr* 1960, 77: 357-362.
2. Farrell WJ, Grube P. Intra abdominal cystic lymphangiomas. *Am J Surg* 1964, 108: 790-793.
3. Colodny AH. Mesenteric and omental cysts. *In: Pediatric Surgery*, 4th edn, Vol 2. Chicago Year Book Medical Publishers, 1986, pp 921-925.
4. Handelsman JC, Ravitch MM. Chylous

cysts of the mesentery in children. *Ann Surg* 1954, 140: 185-193.

5. Haller JO, Schneider M, Kassner EG, Slovis TL, Perl LJ. Sonographic evolution of mesenteric and omental masses in children. *Am J Roentgenol* 1978, 130: 269-274.
6. Gross RE. Omental cysts and mesenteric cysts. *In: The Surgery of Infancy and Childhood*, Philadelphia, WB Saunders Co, 1953, pp 377-383.

### Third Generation Cephalosporins in Multi-Drug Resistant Typhoid Fever

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Enteric fever caused by *Salmonella typhi* (*S. typhi*) is still rampant in most developing countries. Chloramphenicol, cotrimoxazole and amoxycillin have been the standard first line drugs for this disease(1). The continuing emergence of antibiotics resistance of these drugs has been causing considerable concern amongst microbiologists and physicians. The recent emergence of multi drug resistant *Salmonella typhi* (MDRST) strains has necessitated a reappraisal of therapeutic options,

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in such cases. We report our experience with use of third generation cephalosporins-ceftriaxone and cefotaxime in such cases.

#### Material and Methods

Eleven bacteriologically confirmed cases of typhoid fever admitted in the pediatric wards of our Institute constituted the study group. In all these cases the *S. typhi* isolates had *in vitro* resistance to chloramphenicol, co-trimoxazole and amoxycillin, compelling the treating pediatrician to opt for cefotaxime or ceftriaxone as the therapeutic alternative. These strains accounted for 95% of total isolates during this period. The duration of antimicrobial therapy was based on standard recommendation pertaining to their use in enteric fever(1). Statistical analysis was done using Student's 't-test'.

#### Results

The clinical profile of these patients is detailed in *Table I*. There were 8 males and 3 females and their ages ranged from 1.5 years to 11 years with a mean of 5.2 years. All these children presented with remittent, moderate to high grade fever of durations ranging from 1 to 30 days (mean 14.7 days). All, except one of these patients had previously received one or more antimicrobials (ampicillin, amoxycillin, chloramphenicol, co-trimoxazole, cephalothin, gentamicin) for suspected enteric fever. Failure to respond or an inadequate therapeutic response necessitated referral. The disease had remained uncomplicated even though the duration of symptoms was over 2 weeks in nearly 50% of the cases. The salient characteristics of the therapeutic options chosen are tabulated in *Table II*.