ATRESIAS OF THE ALIMENTARY TRACT*
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Congenital anomalies are often multiple and occur in various combinations. Associated anomalies affect the management and prognosis of the primary defect. Atresias of the alimentary tract form a sizeable part of neonatal surgery and contribute as a major factor to mortality and morbidity in the newborn. As infections and birth injuries become increasingly rare, the proper recognition and management of these anomalies assume greater importance. Hence a study of atresias of the alimentary tract was undertaken to elucidate their usual symptomatology, mode of presentation and other diagnostic criteria. Emphasis was placed on the recognition of other associated anomalies.

Material and Methods

During the calendar year January 1969 to December 1969, we encountered 60 cases of atresias of the alimentary tract at Niloufer Hospital, Hyderabad. Gastrointestinal malformations other than atresias, e.g., pyloric stenosis, volvulus, omphalocele, meconium ileus and Hirschprung's disease etc., are excluded from the present analysis.

Observations

The cases were divided into the following groups:

- Total No. of cases......60 cases
- Total No. of lesions......65 ,,
  1. Oesophageal atresia... 5 cases
  2. Duodenal atresia...... 4 ,,  
  3. Jejuno-ileal atresia......7 ,,  
  4. Imperforate anus......49 ,,  

Two cases had atresias at three sites—oesophageal, duodenal and ano-rectal; and one baby had oesophageal atresia and imperforate anus.

Oesophageal atresia

All the 5 cases of oesophageal atresia were noted in low birth weight babies, birth weight ranging from 1400 to 2400 G. Clinical manifestations are shown in Table 1.

One baby was born in our hospital, whereas the rest were referred from other institutions, between 2 and 4 hours after birth. In one baby, respiratory distress was noted soon after birth and 2 cc. of clear fluid was aspirated from the upper oesophageal pouch. In other cases, manifestations were noted only after admission. None of the cases had been fed. In all the cases, a soft rubber catheter, passed into the oesophagus encountered resistance about 10 cm. from the lips.

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Table 1. Clinical manifestations

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<tr>
<td>1. Froth at the mouth</td>
<td>+</td>
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<td>2. Dyspnoea</td>
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<td>3. Cyanosis</td>
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<td>4. Crepitations in lungs</td>
<td>+</td>
<td>+</td>
<td>+</td>
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<td>5. Abdominal distension</td>
<td>-</td>
<td>-</td>
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<td>6. Obstruction to passage of catheter</td>
<td>+</td>
<td>+</td>
<td>+</td>
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<td>7. Meconium passed</td>
<td>*-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
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<tr>
<td>8. Birth weight</td>
<td>1400</td>
<td>2400</td>
<td>1780</td>
<td>2260</td>
<td>1700</td>
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*Thermometer introduced into the rectum was meconium stained.

Roentgenogram. Roentgenogram of the chest and abdomen were taken after introducing a few ml. of Dionosil aqueous through the rubber catheter. All the cases showed the usual form of oesophageal atresia (Type C) with a tracheo-oesophageal fistula. The blind upper pouch was outlined by Dionosil, and air in the gastrointestinal tract indicated a fistula between the lower oesophageal segment and the trachea.

In addition to oesophageal atresia and tracheo-oesophageal fistula two cases had duodenal atresia and imperforate anus. One had an imperforate anus (Fig. 1 Plate I).

Comment. In a study of 174 cases of congenital anomalies of the gastrointestinal tract, Bhasin and Mehdiratta (1968) noted five cases of oesophageal atresia all of which were of type C and only one had an associated imperforate anus. In our study, out of five cases of oesophageal atresia, three had other gastrointestinal atresias.

Duodenal Atresia

Duodenal atresia was noted in four cases. Two cases had associated oesophageal atresia and imperforate anus, whereas the other two were cases of isolated duodenal atresia.

Clinical manifestations. The cases with duodenal atresia only had bilious vomiting, epigastric distension and mild dehydration. Both of them passed meconium for three days after birth. Bilious projectile vomiting was noted on the first day in one and was delayed until the third day in the other. Both the cases weighed more than 2000 G. In the other two cases associated with oesophageal atresia and imperforate anus, manifestations have already been