the equivocal case. The early use of corticosteroids (hydrocortisone 1-2 mg/kg/24h) will prevent intussusception and other complications.

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Prenatal Diagnosis of Bochdalek's Type of Diaphragmatic Hernia

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Definitive diagnosis of fetal diaphragmatic hernia has become possible with the help of antenatal ultrasonography. This case illustrates the typical echo features of this anomaly which was detected in the early third trimester and later confirmed at emergency neonatal surgery.

Case Report

A 24-year-old second gravida was referred for ultrasound scanning because of over distended uterus compared to her period of amenorrhea. Her first pregnancy was normal and there was nothing relevant in the past history.

On scanning, the placental echo texture and thickness were normal. She had polyhydramnios surrounding an active fetus whose biometry showed a growth of 30 weeks. There were no features of craniospinal anomaly or gastrointestinal tract atresia.

Thoracic scanning at the level of the four chamber view of the heart showed antero lateral displacement of the cardiac shadow by the presence of a sonolucent area between it and the spine (*Figs. 1 & 2*). This was occupying the lower medial left thoracic cavity reducing the volume of the left lung. The appearance of the lung parenchyma was normal. The stomach shadow was visualized under the left dome of the diaphragm. Repeated scanning showed changing contour of the above described transonic area suggestive of peristalsis. These findings were in favour of the diagnosis of diaphragmatic hernia associated with polyhydramnios.

Discussion

Embryologically the diaphragm is formed by the fusion of 4 components

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Received for publication: December 2, 1991; Accepted: March 4, 1992

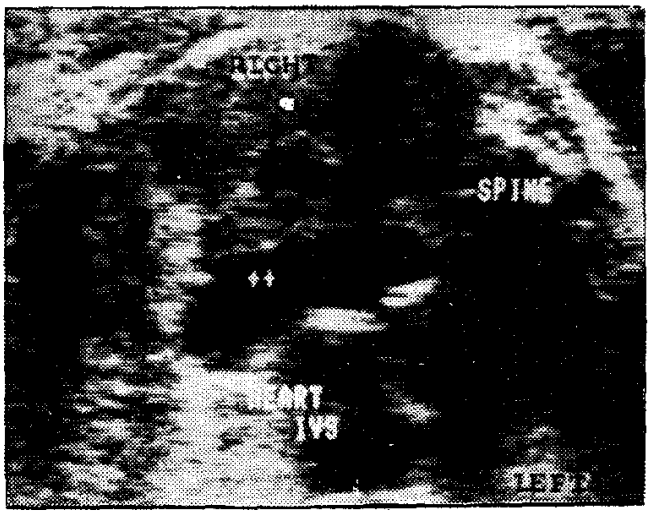

Fig. 1. Transverse section of the fetal abdomen at the level of the heart showing the herniated bowel loop (++) medial to the heart (IVS–inter ventricular septum).

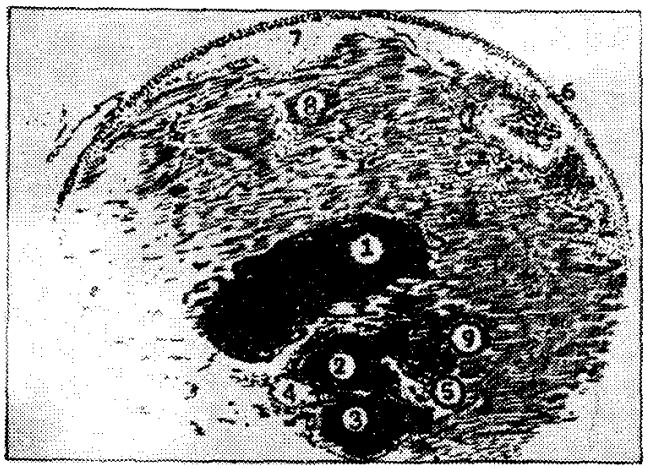

Fig. 2. Schema showing the details of the organs in Fig. 1.
1. Herniated paracardiac bowel loop; 2. Right ventricle; 3. Left ventricle; 4. Inter ventricular septum; 5. Base of the heart; 6. Spine (posterior thoracic wall); 7. Right side thoracic wall; 8. Right side lung shadow. 9. Left side of chest. 8. Right side lung shadow.

namely transverse septum, dorsal esophageal mesentry, pleuroperitoneal membrane and body wall. The delayed fusion of these structures or a persisting primary defect in the diaphragm results in congenital diaphragmatic hernia of which the postero-lateral defect (Bochdaleck's type) is the commonest (90%). The other rare types are the sternocostal (Morgagni's), septum transversum defects and hiatal hernias.

The reported incidence of diaphragmatic hernia varies from 0.012 to 0.05% of births(1,2). The occurrence of the Bochdeleck's postero lateral type is 1 in 3000 births(3).

The condition is diagnosed by the following criteria: (*i*) paracardiac/paraspinal sonolucent structure in the chest which may show peristalsis or rugae(4), (*ii*) shift of the cardiac shadow, (*iii*) small abdominal circumference, (*iv*) paradoxical movement of the diaphragm, (*v*) absence of stomach shadow from the upper abdomen if it has herniated, and (*vi*) polyhydramnios(2,3).

In the differential diagnosis the conditions to be considered are mediastinal or pericardial cysts anterior meningocele and duplication of the esophagus(4). If the presence of peristalsis or rugae could be demonstrated it confirms the diagnosis of diaphragmatic hernia. Though these can occur on either side of the thorax, the commonest site for postero lateral type is on the left as in this case. Since, the stomach was seen at its usual site the possibility was for the small intestinal herniation; which is the usual content.

Numerous other conditions are described in association with congenital diaphragmatic hernia. It is also frequently seen in various chromosomal aberrations(5,6). The prognosis is worse when there are associated anomalies. Any insult to the normal development of the lungs which occur in the fifth week or later period of intrauterine life leads to these consequences(7,8).

This baby was taken up for immediate

surgical correction after birth, as there was no other anomaly. However, the baby died on the third postoperative day due to pulmonary complications.

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Gastric Teratoma Revealed by Gastrointestinal Hemorrhage

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Gastric teratoma, a very rare tumor of infancy usually presents with abdominal distension, palpable lump or vomiting(1). Its presentation as gastrointestinal bleeding is quite rare(2). We are reporting such a case because of its unique nature.

Case Report

A 10-year-old male neonate was admitted with complaints of abdominal distention since birth and malena of 2 days duration. There was no history suggestive of drug intake, trauma or perinatal stress.

Examination of child revealed a 3 kg neonate with severe pallor. Otherwise the general physical and systemic examination did not reveal any significant finding. Abdominal examination revealed an irregular surfaced lump, firm in consistency occupying epigastrium, left and right hypochondria and part of umbilical area. Rectal digital examination revealed malena.

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Received for publication: February 11, 1992; Accepted: March 11, 1992