

(Refer to page 110)**ANSWER: MORGAGNI HERNIA**

Fig. 1a: There is a homogeneous opacity at the right cardiophrenic angle causing obliteration of right heart border indicating a right mediastinal lesion. The right hemidiaphragm looks intact. The heart is enlarged.

Fig. 1b : The opacity seen on the chest radiograph is part of liver parenchyma (black star) that herniated through an anteromedially located right hemidiaphragmatic defect (paired black arrows). The normal diaphragm is labeled by dotted black arrow which discontinues medially. Part of air filled bowel is also seen (white star) anterior to the herniated liver part on sagittal view.

Morgagni hernia results from an anterior opening in the diaphragm and represents 5 % of congenital diaphragmatic hernia.¹ The most common presentation in infants are respiratory distress and respiratory infections. It is more common on the right side at the level of the seventh rib, but may occur on the left (Larrey hernia), midline or bilaterally.² The commonly herniated viscera are liver, spleen, colon, stomach and omentum.¹ Those detected in the neonatal period are associated with Down syndrome (14%), congenital heart defect (80%) and omphalocele (15%).¹ Symptoms are related to the size of the sac and contents in hernia sac.²

The chest radiograph usually reveals the hernia as a rounded mass in the right cardiophrenic angle.³ On lateral chest radiograph, it appears as a soft – tissue

-opacity lesion posteriorly.³ Computed tomography (CT) thorax is the best imaging modality which reveals the defect in the diaphragm as well as organ entrapment.^{2,3} Antenatally, ultrasound examination demonstrates herniated viscera with or without liver in the foetal thorax and stomach below the diaphragm.³ Colour flow doppler may show abnormal positioning of the umbilical and portal vein, indicating liver herniation and right sided hernias.³ Foetal magnetic resonance imaging (MRI) is useful to confirm the diagnosis of Morgagni hernia.³

The differential diagnoses are pleuropericardial cyst, pleural mesothelioma, mediastinal lipoma, thymoma, tumour or cyst of the diaphragm and anterior chest wall tumours.²

Complications include volvulus, small intestinal obstruction, incarceration and strangulation of the hernia. All Morgagni hernia should be repaired to avoid unnecessary patient morbidity. It can be repaired by laparotomy, thoracotomy, laparoscopy and thoracoscopy. Laparotomy is performed in patients with obstruction, incarceration, perforation and strangulation. Thoracotomy is not preferred due to need for chest drainage post-operatively. Laparoscopic approach is the gold standard for repair of uncomplicated Morgagni hernia. The benefits of laparoscopic repair is less tissue damage, good bilateral view and quick post-operative recovery.²

REFERENCES

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