Mediastinal Gastroenteric Cyst with Vertebral Anomaly

Report of a Case

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GASTROENTERIC CYSTS WITH VERTEBRAL ANOMALY are found infrequently, but must be considered in the differential diagnosis of mediastinal masses. The first observation of a gastric lined cyst in the mediastinum was made by Staehlin and Burchardt in 1909. Prior to this, in 1881, Roth had observed the attachment of a mediastinal cyst to the vertebral column in a patient with a double ileum and an intra-mesenteric cyst, but did not mention the existence of gastric mucosa within the mediastinal cyst. These cysts belong to that heterogeneous group of embryologic abnormalities known as enteric duplications and apparently arise from defects in the development of the primitive foregut. They are characteristically found in the posterior mediastinum, near the pulmonary hilum, most commonly on the right, but may expand into either hemithorax. More cases are reported in boys than in girls, and most of them are detected during the first decade of life.

Not all such cysts are associated with vertebral anomalies, although 46 such cases have been published in the English literature since 1950.

Other cases have been reported where a spina bifida or a spur of diastematomelia was associated with the mediastinal cyst, but the most common vertebral anomaly has been either hemi- or bifid vertebrae, occurring usually in the cervical or upper thoracic region.

CASE REPORT

A 14-year-old boy was admitted to our hospital February 8, 1962, because of an incidental finding by x-ray of a smooth, rounded 6 x 6 cm. mass in his left posterior mediastinum between the levels of D3 and D6. On the spot films of his dorsal spine, it was noted that D3 and D4 appeared to be fused, and the upper segment of this union apparently represented a hemi-vertebra with three ribs attached to it on the right and two on the left. These defects had caused no symptoms. Figs. 1 and 2.

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MEDIASTINAL GASTROENTERIC CYST

Left thoracotomy was done, and a 6 x 6 cm. cyst was removed from his posterior mediastinum without difficulty. No communication between his cystic mass and his vertebral bodies was noted. An emphysematous bleb was found on the upper lobe of the left lung which was excised.

The specimen was reported as a gastroenteric cyst with parietal and chief cells in its mucosa.

DISCUSSION

These anomalies are usually found during the first decade of life, many times during the first year. They rarely are asymptomatic as in this case. The observable symptoms are usually respiratory: cyanotic attacks, dyspnea, repeated respiratory infections and stridor. The majority of these symptoms are attributable to erosion of the cyst into contiguous structures: lung, bronchi or esophagus.

Moore and Jahnke \(^5\) have presented a rather novel case in which a patient was first seen because of back pain. When spot films of his spine were made, he was found to have areas of radiolucency in two vertebral bodies. This was associated with a mediastinal cyst which by peptic erosion had managed to penetrate the marrow of these two vertebral bodies.

REFERENCES


INTERSTITIAL PULMONARY FIBROSIS

Thirty-four cases of interstitial pulmonary fibrosis are presented, 17 in which the diagnosis was proved by lung biopsy, and 17 in which the diagnosis was verified at necropsy. Predominant histologic findings were fibrosis and inflammation in the interstitial spaces with thickened alveolar walls. Epithelial proliferation, both alveolar and bronchiolar, was seen in all cases to varying degrees. X-ray findings consisted of diffuse uniform reticular mottling with symmetrical small nodulation predominantly in the lower lung fields. All 34 patients met the following criteria: histological study of lung biopsy specimen revealed changes consistent with the disease and negative for any other specific entity. The specimen did not show a culture or stain positive for a specific organism; there was a history of unremitting progression of dyspnea; chest roentgenogram disclosed diffuse reticular and/or fibronodular infiltrates consistent with pulmonary fibrosis; bronchoscopy was negative for gross abnormalities; sputum cultures were negative for significant pathogens; skin testing with histoplasmin, coccidioidin, blastomyein, and PPD was negative. (Nine of this group of patients had a positive PPD, but no histologic findings on lung biopsy to support the diagnosis of tuberculosis). Emphasis is placed on hypersensitivity to some agent or material as being pertinent in the genesis of this disease.

Fifteen of the 17 patients who had lung biopsies received corticosteroid therapy. Ten of these 15 patients had symptomatic improvement. On the basis of this improvement, it is recommended that corticosteroids be given a trial in all patients with this disease if a specific contraindication to such therapy does not exist.