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CASE REPORT

CHYLOTHORAX

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Abstract: This is a case report of chylothorax in an adult man. The clinical features were pain in the right hypochondrium, fever and hepatomegaly. The chest X-ray showed right sided pleural effusion. Bio-chemical examination of aspirated fluid confirmed it to be CHYLE. A laparotomy and biopsy of mesenteric lymph node confirmed it to be tuberculous.

Introduction

Chylothorax is the collection of chyle or lymph in the pleural cavity due to leakage from the thoracic duct or bronchomediastinal lymphatics. It is one of the chylour syndromes, the others being CHYLOURIA, CHYLOUS ASCITES and CHYLOPERICARDIUM. CHYLE is recognized by its "MILKY-WHITE" appearance.

CHYLOTHORAX may be idiopathic or follow blunt or penetrating trauma. It may occur after cardiac, esophageal and pulmonary surgery. Unless surgery or trauma can be clearly related tuberculosis and malignancy should be suspected.

Case Report

Mr. M.J. aged 27 years, from Abbottabad presented with right hypo- chondrial pain, fever and malaise for three months. He was well nourished and of normal build. Pulse 100/m, T 100F and B.P. 140/80 Hg. On clinical examination, there was rigidity and tenderness in right hypochondrium. Liver was enlarged but not tended.

Investigation

1.	**ESR**	-	**68 mm/hour**
2.	**DLC**	-	**L 40% E 3%**
3.	**X-Ray Chest**	-	**Right Pleural Effusion**

About 600 ml of milky-white fluid was aspirated from the right plural space. Bio-chemical examination showed:

Triglycerides : 225 mg%		Cholesterol	110 mg%
L—97, P-3%		TLC	8.250 mn
No Malignant Cells	No AFB		

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An exploratory laparotomy was done. The hepatobiliary system was normal but the whole mesentery was studied with lymph nodes. A biopsy of lymph nodes was taken and sent to AFIP, Rawalpindi. It confirmed "Tuberculous Mesenteric Lymph-Adenitis".

Management

The patient was put on anti-tuberculous drugs. He was advised fat free diet and increased carbohydrate and protein intake.

Follow Up

The patient again reported after a month with dyspnoea at rest. X-ray chest showed massive right sided pleural effusion. A wide bore chest tube was passed which kept draining for a week.

Discussion

Chylothorax presents like pleural effusion due to any other cause. However, fluid is milky-white. Tuberculous chylothorax accumulates slowly. Acid fast bacilli may be seen in chyle. There may be evidence of pulmonary tuberculosis.

Chylothorax due to malignancies recur rapidly and malignant cells may be seen in the fluid. The total fat content of pleural fluid is elevated and ranges from 0.5— 5.5 mg% while cholesterol is less than 200 mg%. Chylothorax must be distinguished from pseudochylous effusion which occur in long standing rheumatoid or tuberculous effusions, pseudochlous effusions have high concentration of cholesterol (up to 4.5 gm%) while chylous effusion have less.

Chylothorax should be managed conservatively by fat free diet, high protein and cardohydrate intake and aspiration. If it recurs, pleurodesis by Talc or tetracyclines is done. Surgery is indicated if conservative treatment fails or there are nutritional and electrolyte imbalance.
Surgery is ligature of thoracic duct.

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