AN INTERESTING CASE OF PERICARDIAL EFFUSION
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Abstract:
We describe an interesting case of pericardial effusion. Patient was initially diagnosed as tuberculous pericardial effusion. She was started on antituberculosis drugs but didn't show any improvement. Hence thoracotomy was done and a tumor was identified at the root of main pulmonary trunk and incisional biopsy confirmed the diagnosis of haemangiopericytoma.

Keyword: Pericardial effusion, Haemangiopericytoma.

CASE REPORT:
35 Years old euglycemic , normotensive Female was admitted with chief complaints of breathlessness -45 days initially grade 1 gradually progressed to grade 4 breathlessness.H/O swelling of legs, distension of abdomen ,facial puffiness, decreased urine output ,low grade fever and cough was present. She was admitted in a private medical college and was on antituberculous drugs for past 1 month without any response.

Clinical examination revealed pallor, raised J.V.P, Facial puffiness, B/L pedal edema. Trachea was shifted to Right with use of accessory muscles of respiration. Vocal fremitus and vocal resonance was reduced in left mammary, infra axillary, infra scapular regions with stony dull note on percussion. Bilateral fine crepitations was present. Heart sounds were muffled. Abdomen was distended with hepatosplenomegaly. Provisional diagnosis was Pericardial effusion causing right heart failure with ascites and pleural effusion. Investigations revealed haemoglobin was low with raised E.S.R . Ecg showed sinus tachycardia with low voltage complexes.

Chest Xray showed cardiomegaly with bilateral pleural effusion.

ECHO showed Large Pericardial effusion with thickened pericardium, few calcific spots , normal LV systolic function , no pericardial tamponade ,no evidence of diastolic collapse of RV/RA, no pulmonary hypertension .Ascitic fluid analysis showed transudative fluid with protein of 1.9 gms /dl, sugar 101mgs/dl and acellular smear. Pleural fluid analysis from left side exudative fluid with protein of 5 gms/dl , sugar 96 mgs /dl with predominant lymphocytes. ADA of pleural and ascetic fluids were 10 and 5 u/l respectively. HIV ,Hbsag , Anti hcv, ANA , RA factor were negative. Ultrasound of abdomen showed hepatomegaly with serous Ascites.

CT SCAN OF THORAX
CT scan of thorax showed pericardial effusion with thickened pericardium.

Cardiologist opinion was obtained and they advised conservative management.As the patient had Pericardial effusion with thickened pericardium a provisional diagnosis of Sub effusive pericardial effusion was made.Anti –tuberculous treatment and oral prednisolone was continued .Patient’s clinical condition did not improve, inspite of conservative measure . Cardiotoracic surgeon’s opinion was obtained and Pericardietomy was planned after getting high risk consent.
Left anterolateral thoracotomy was done and 500ml of Haemorrhagic pericardial fluid was drained. Large bosselated tumor was present at the root of main pulmonary trunk which was not visualized on CT. Mass was adherent to Great vessels. In view of inoperability of tumour, incisional biopsy was taken. Pericardium anterior to left phrenic nerve was excised. Pleural space was drained and pericardial drain was inserted. Post op period was uneventful.

Biopsy showed well circumscribed lesion composed of spindle cells, arranged in intervening fascicles, bundles of small blood vessels of the size of capillaries. Areas of haemorrhage and Haemosiderin laden macrophages were noted. Focal areas of hyalinization was seen. No evidence of Giant cells, mitosis, necrosis or inflammatory infiltrate.

HISTOPATHOLOGICAL DIAGNOSIS:
Haemangiopericytoma of Mediastinum. Immunohistochemistry was done and shows positive response to antibodies against vimentin and type 4 collagen.

FINAL DIAGNOSIS:
Primary Mediastinal haemangiopericytoma with Local invasion and Malignant pericardial effusion.
Patient improved symptomatically after the surgical procedure and was referred to Medical oncology Department Govt General Hospital for further management.

DISCUSSION:
Haemangiopericytoma is a type of soft tissue sarcoma that arises from the pericytes of Zimmerman in the wall of capillaries. Most common sites are limbs, pelvis, Head and neck. Intrathoracic haemangiopericytoma arises from pericytes that surround the basement membrane of capillaries and small venules within lung parenchyma. Primary Mediastinal Haemangiopericytoma represents 6% of primary mediastinal tumours.

CONCLUSION:
Haemangio pericytoma is a very rare tumour. Immunohistochemically the tumor shows positive response to antibodies against Vimentin and type 4 collagen. Spontaneous bleeding into Pleura/pericardium leads to haemorrhagic pleural and pericardial effusion. Infiltration of Great vessels makes the tumour in operable. Malignant Haemangiopericytoma is characterized by increased mitotic rate, tumour size foci of necrosis and haemorrhage. Prognosis of malignant disease is poor.

REFERENCES: