RETROSPECTIVE SEARCH FOR CARDIAC INVOLVEMENT IN 368 CASES WITH ECHINOCOCCOSIS - ECHOCARDIOGRAPHIC FEATURES

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The aim of this study is to report a retrospective search from the hospital records for cardiac involvement in patients with echinococcosis in our institution for the period 1994-2001.

The search was performed within 368 cases with echinococcosis. In three patients cardiac involvement was suspected by thransthoracic(TTE) and confirmed by transoesophageal(TEE) echocardiography. In all the patients radiography of thorax, abdominal echo and CT of abdomen and thorax were performed. In the first two cases solitary hydatid cysts in the right ventricle outflow tract were verified by TEE. In first patient X-ray and CT revealed multiple pulmonary parasitary cysts. In the second patient despite of the absence of pulmonary engagement two hydatid cysts in the liver were verified by echo and CT. Both the patients were successfully operated (resection of the RVOT cysts) without complications. After 6 months in the first case cyst relapse was observed on the follow up TEE. Two years later a suspicion of pulmonary embolism was raised by follow-up TEE data and patient history, subsequently confirmed by CT and scintigraphy. The third patient had a multiple hydatid cysts in brain, liver, mediastinum, a cyst in left atrium and an epicardial cyst infiltrating the cardiac apex. After five consequent surgical interventions the cysts from the brain and liver were successfully removed. This patient was prescribed permanent chemotherapy regimen with albendazole and after two years follow up CT and TEE revealed reduced dimensions and fibrosis of the mediastinal and cardiac cysts.

Conclusions: Cardiac involvement in echinococcosis is rare[1,2] (0.81% incidence in our institution, 0.02-2% incidence reported in the literature) but lifethreating complication of echinococcosys. Prompt diagnosis and treatment are crucial. TTE is a reliable screening technique. TEE is possibly the best diagnostic approach for diagnosis of cardiac involvement in echinococcosis. Hydatid cysts can be localized in both the left and right chambers and/or epicardially with a possible predilection to right ventricle outflow tract. Surgery is a primary treatment for cardiac hydatide cysts. Medical treatment is supplementary to surgery. If surgery is not performed chemotherapy is the one and only treatment of choice. Occasionally despite of surgical treatment and use of chemotherapy late relapses are observed. Cardiac echinococcosis is a rare but possible source of embolism and parasitary dissemination.

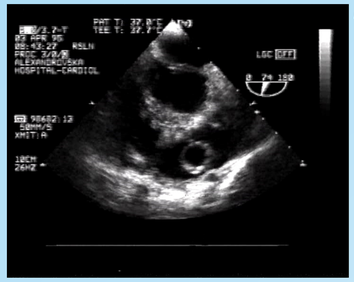

Fig. 1 TEE: Hydatid cyst in RVOT.

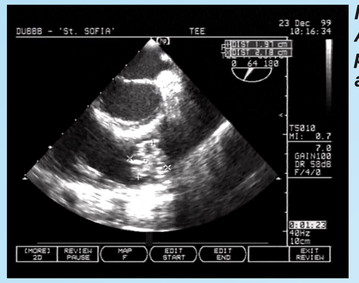

Fig. 2 TEE: Hydatid cyst relapse. After treatment with albendazole prominent fibrosis of the cyst is apparent.

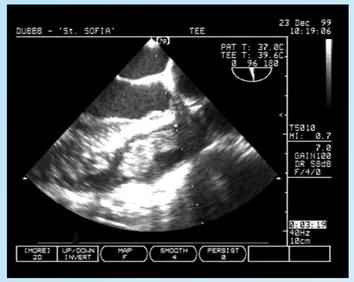

Fig 3. TEE: Thrombus just attached to the fibrosed cyst.

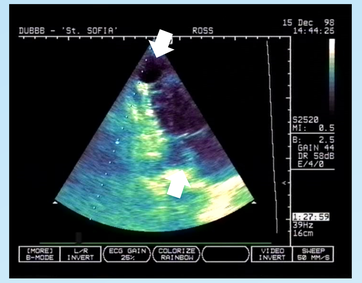

Fig 4. TTE: Hydatid cysts in the apex and LA.

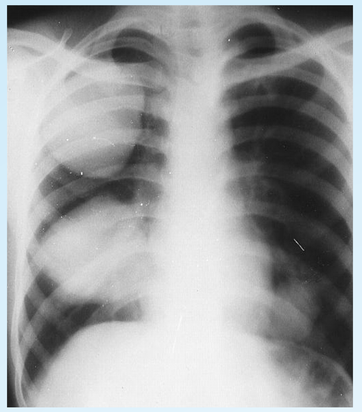

Fig 5. AP radiograph: multiple pulmonary hydatid cysts.

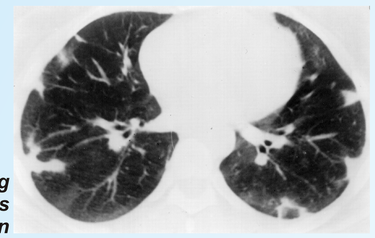

Fig 6 and 7. CT and scintigraphy revealing multiple pulmonary infarcts due to symptomatic embolisation

Reference:

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