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A RARE CAUSE OF MESENTERIC ARTERIAL OCCLUSION:

EMBOLUS DUE TO RUPTURED MYOCARDIAL HYDATID CYST

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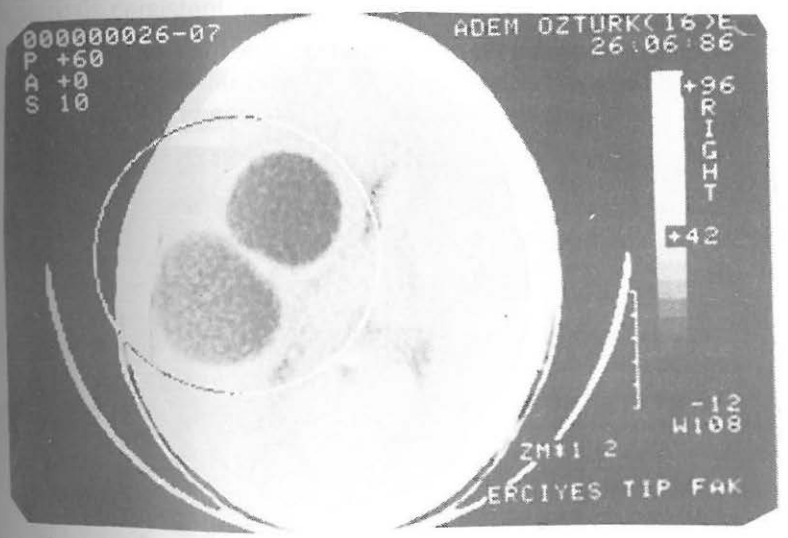
Summary: Acute superior mesenteric arterial occlusion is a rare but fatal clinical condition. The main causes of the occlusion are trombosis and trombotic emboli. Hydatid disease may be a very rare cause in special situation as it is in this case.An interesting aspect of the hydatid disease located in the left ventricule wall caused superior mesenteric arterial emboli as well es the cerebral arteries.

Acute superior mesenteric arterial occlusion is a rare clinical condition. ∂t is a cause of acute abdomen threatens the life with a 90 percent mortality rate (9). In general, it is reported that acute mesenteric arterial occlusion was diagnosed in 0.9 per cent of the patients admitted to emergency services with acute abdomen (4,9).



The primary lydatid agust located in the brain which had been treated in the first operation

Key Words: Mesenteric Artery, occlusion, hydatid cyst.

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Most of the mesenteric arterial occlusions develope as a result of mesenteric arterial trombosis or cardioaortic originated embolus (5).
In addition, external tumoral pressure, air and fat embolus and ruptured of a hydatid cyst to the arterial system were accepted the rare cause of mesenteric arterial occlusion (5,9).

Symptoms of acute mesenteric arterial occlusion are nonspesific and the differential diagnosis is guite difficult (9). The most common symptoms are abdominal pain, nausea, votimus, diarhoea and gastrointestinal tract bleeding. Physical findings are nonspesific such as hypotension, tachicardia, faver, hypovolemia and generalized peritoneal irritation (5,9). Hydatid disease is a common entity iin Turkey, so we have the chance to see every form of the disease, particularly in the rural area (12). In this paper, an interesting aspect of the disease is reported.

Case report

A twenty years old man was admitted to the neurosurgical clinics with sudden headache, nausea, dizziness, generalized urticeria and mild abdominal pain on 18th December 1989. He had been operated for cerebral hydatid cyst in July 1986 and he had been followed
for recurrent cysts by cerebral tomography intermittantly during the following last two yaers.
Eighteen months later multiple small sized cerebral cysts had been appeared causing to epilept∑c seizures which were managed by antiepileptic drugs.

On December 18 th 1989 he was sent to our department due the incease of abdominal pain forming muscular defence and rebound tenderness. The abdominal plane radiography and ultrasonography revealed a 2 cm cystic lesion in the lower pole of the

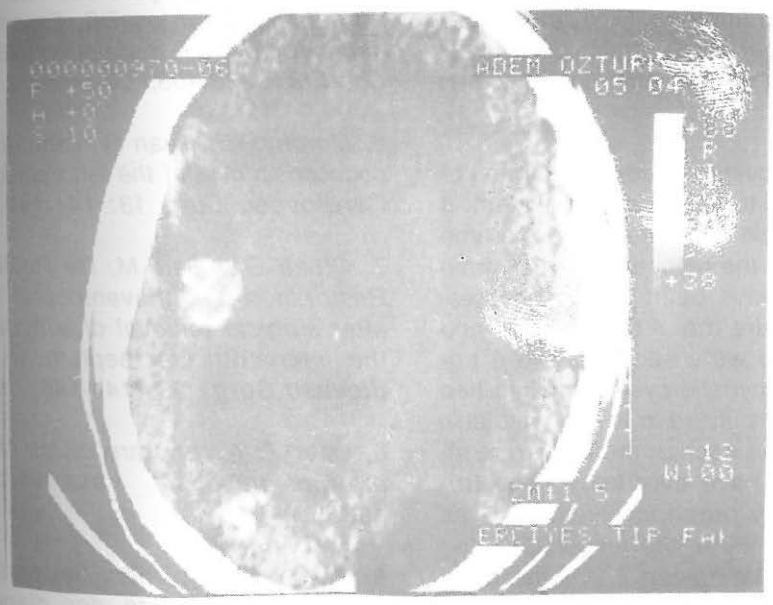
Extraction of the embolized daughter vesiula throughout the leocdır artery

spleen but nothing else. A mild cardiac murmur was recorded on the mitral focus. On the following day the patient submitted to echocardiography which revealed irreguler cystic cavitation on the left ventricular lateral wall.

On the same day is abdominal pathological findings progressed and he was operated for a probable mesenteric arterial occlusion due to an embolus from a ruptured myocardial hydatid cyst. A 160 cm segment of the distal small bowell was sianotic and pulseless, with abnormal thickening in the resembling mesenteric arterilal branches, though which two daughter hydatid cysts were exracted by a Fogarty catheter

After revascularization, in a 60 cm ileal segment the sianosis persistent, so that, it was receted. Splenectomy was performed for splenic hydatid disease wich had been diagnosed preoperatively. Albendazole (70 mg/kg) was started for the probable residual daughter cysts or scolices disseminated in the vascularity. He was sent home on the 17 th postoperative day.

The control echocardiography after 2 months Albendazole treatment showed no residual pathological image resembling the previouns myocardial cystic cavity. Whereas, on May 4th, 1990 he was admitted to the hospital for a new attack of headache, epileptic seizures and some neurological defects, CT revealed seven different cystic images in the brain (Figure 3).



The recurred lydatid wrts which have been removed in the second operation. The calutied lesions resembling previously treated hydatid wrts.

Which were removed surgically again. His general condition is well and he has no cardiac murmur but, a mild left hemiparezia already.

Discussion

However hydatid daughter vesicular embolisation into the mesenteric arteries is a possible entity, theoratically there is no such a report about a survived case yet except a few autopsy report (6,7,8).

As a hydatid cyst in the left ventricular wall is ruptured multipl embolisation is possible in thhe organs like the brain, the lung, the liver, the gastrointestinal system and the lower extremities (1,2,3,6,7,13). In this case, the cerebral and the arterial only mesenteric arterial embolisation have been occured, with no sign of embolisation in the other organs as a good chance. The case was diagnosed preoperatively and treated successfully by mesenteric embolectomy and craniotomy.

Primary hydatid cyst caused by E. granulosus can reside in to any tissue or system. It may attack multiple organ systems at a time (11). In this case the myocardium, the brain and the spleen have been attacted. However we are not sure that if the cerebral and the splenic lesion were secondary to a primary myocardial hydatid cyst that might had been previously fistulized in to the ventricule chamber. Whereas each of them are rare situations that we have ever know. The freguency of primary organ involvement is as follows: The liver 60%, the luhgs 30%, the peritoneum 9%, the spleen 3.2%, the brain 1.5%, the abdominal wall 1.6%, the retroperitoneum 1.4%, the muscles 1%, the kidney 0.4%, the pancreas 0.4% the mammaries 2% and the mycardium 0.5% (5,10).

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