

Case Series

Disseminated multiple hydatidosis at unusual location: Two rare case reports

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Abstract

Hydatid disease, a parasitic infection is caused by cestode tapeworm *Echinococcus granulosus* which is endemic in cattle grazing areas including India. Dogs are the definitive host. In human, commonly involved organs are liver and lungs. Peritoneal hydatidosis secondary to liver hydatid diseases is not uncommon but peritoneal hydatidosis herniating to inguinal canal mimicking irreducible inguinal hernia is rare. Patient on clinical examination appears normally with complain of progressive abdominal pain and distention and irreducible cystic swelling in the inguinal region. Patients also gave history of contact with animals. Laboratory findings were not constant. Imaging and investigation necessary for establishing diagnosis were done. There always choice between ultrasound and computed tomography. Treatment includes conservative and surgical intervention. In case of single, symptomatic and large cyst was surgically treated. Small asymptomatic cysts, some daughter cysts, and peritoneal secondary cysts and splenic cysts may also be effectively conservatively treated. We reported here two cases of multiple hydatidosis at unusual location. In all patients large and symptomatic cyst was excised and all patient recover clinically. This case series emphasized that current understanding of disseminated multiple hydatidosis etiology still very little known. Study for additional risk factor may be necessary.

Key words

Disseminated hydatidosis, Inguinal-retroperitoneal region, Cystic mass, CT scan, Excision of cyst.

Introduction

Disseminated multiple hydatidosis is uncommon clinical problem; most of patient has history of contact with animals. Intermediate host, the human ingests the eggs of tapeworm, which hatch into metacestodes, which infest the liver, lungs, muscles, and spleen of the intermediate host. It is more found in middle age and older person [1]. Organs affected by *E. granulosus* are the liver (63%), lungs (25%), muscles (5%), bones (3%), kidneys (2%), brain (1%), and spleen (1%) [2]. It presented with progressive abdominal pain and distention and irreducible cystic swelling in the inguinal region. Ultrasonography and computed tomography investigation of choice of disseminated multiple hydatidosis. Non-symptomatic hydatid disease presented with complications, unusual locations as well as multiple primary or secondary hydatid disease is special therapeutic challenges [3].

Case Reports

A review of two cases in hospital from 1st May 2015 to 30th July 2015 was done. Patients were treated at Dhiraj General Hospital. All cases had radiological evidence of multiple hydatid cysts with clinical symptoms present.

Case - 1

42 years male patient presented to our hospital with complain of abdominal pain and distention since 1 month and irreducible cystic swelling in left inguinal region. He also gave history of contact with animals. His laboratory finding was normal. (**Figure – 1**)

CT scan of abdomen and pelvis was done and suggested of multiple calcified hydatid cyst involving left inguinal region, retroperitoneal region, peritoneal cavity, spleen and liver. Inguinal swelling was symptomatic. (**Figure – 2**) So we decided to perform excision of inguinal cyst followed by histopathology which confirmed suspected diagnosis. (**Figure – 3**)

Patient was offered another laparotomy but patient refused for further surgery. Then we

started albendazole 400 mg and praziquantel 600 mg twice daily. Interestingly, patient started developing symptomatic relief within the first 2 months of the planned 12-month course.

Figure – 1: Abdominal distention, cystic mass with left inguinal swelling.



Figure – 2: Hydatid cyst involve retroperitoneal region, peritoneal cavity, spleen and liver.

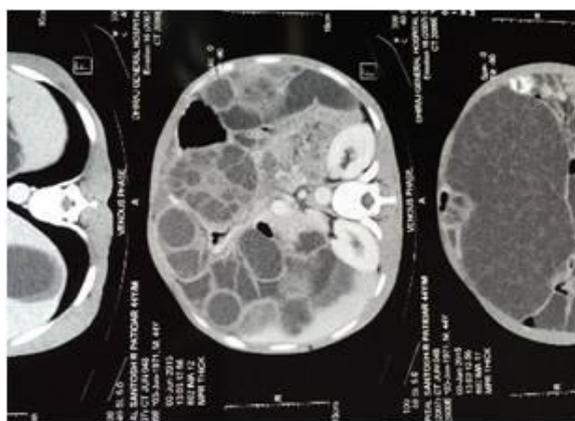


Figure – 3: Excision of inguinal calcified hydatid cyst.



Case – 2

30 years old female patient came to our hospital with complain of abdominal pain since 2 month. She also gave history of contact with animals. Her laboratory finding was normal.

Her ultrasonography suggested of cystic mass in liver and spleen and retroperitoneal. CT abdomen and pelvis was done which suggested of multiple hydatid cysts seen in spleen, liver and retroperitoneal. (**Figure – 4**) She was offered another laparotomy but patient refused for further surgery. Then we started Albendazole 400 mg and Praziquantel 600 mg twice daily. She came for follow up after 2 month and has symptomatic relief and planned 12 month course.

Figure – 4: Hydatid cyst seen in spleen, liver and retroperitoneal.



Discussion

Hydatid disease is often seen in areas where sheep breeding is common such as China, Mediterranean and Balkan counties, South America and Middle East [4]. It's not uncommon in Pakistan and use of ultrasonic imaging techniques made possible an earlier diagnosis prior to serious complications [5]. Common sites such as liver and lungs are involved in humans, hydatid cysts can present in unusual sites which include spleen, peritoneum, kidney, muscle, adrenal gland, ovary, pancreas, thyroid gland, pleura, diaphragm, uterus and brain [6]. Peritoneal hydatid disease represents an

uncommon occurrence and its diagnosis more accurate today due to the new imaging techniques [7]. Symptoms of hydatid cysts usually include hepatomegaly and abdominal palpable mass [8]. The principal treatment of hydatid cysts was conservative and surgical. Pre- and post-operative courses of Albendazole and Praziquantel should be considered in order to sterilize the cyst [9]. However it should be noted that in all two cases medical treatment was given before consultation by our department. Clinical symptoms, laboratory findings, imaging findings of all two cases are similar with some variation observed in abdominal pain characteristic and other clinical and laboratory findings. Symptomatic or large cysts should be surgically treated. In cases of suspected hydatid cyst of having peritoneal spillage, anti-helminthic drugs should be administered. Small asymptomatic cysts, some daughter cysts, and peritoneal secondary cysts and splenic cysts may also be effectively treated with Albendazole and Praziquantel which give complete relief from all disease and symptoms without any complication [10].

Conclusion

Disseminated multiple hydatidosis is a very rare disease which requires early intervention otherwise it can lead to many complications. In our two cases, symptomatic or large cysts were surgically treated. In cases of suspected hydatid cyst having peritoneal spillage, anti-helminthic drugs should be administered. Small asymptomatic cysts, some daughter cysts, and peritoneal secondary cysts and splenic cysts may also be effectively treated with conservative therapy. Patients usually get relief without morbidity and mortality. It is one of the best management options for disseminated multiple hydatid cysts.

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