A rare case of Disseminated Hydatidosis - case report
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Abstract : Hydatid disease (Echinococcosis) is a parasitic infestation of humans by Echinococcus granulosus. We report a case of disseminated Hydatidosis involving lung, liver, mediastinum, peritoneum and spleen with chest skiagram, ultrasonography and Computed Tomography of thorax and abdomen.

Keyword : Echinococcosis, water Lilly sign, albendazole

Introduction: Echinococcosis is a parasitic infestation of humans by Echinococcus granulosus known as dog tape worm and rarely by E.multilocularis. The definitive hosts are dogs and some wild carnivores like foxes but humans are accidental intermediate hosts infected by handling soil, dirt or animal hair that contains eggs(1). we are presenting this case of disseminated hydatidosis involving multiple organs for its radiological features.

Case report: A 60 year old farmer presented with complaints of breathlessness of one month duration and abdominal distension of two weeks duration. Clinical examination revealed diminished breath sound in right lower hemithorax and mild hepatomegaly. Chest skiagram PA view showed a well-defined oval shaped homogenous mass in right lower zone (figure 1). Ultra sonogram abdomen showed multiple well demarcated cystic lesions with daughter cysts in right lobe of liver, peritoneum and spleen (figure 2). Computed Tomogram chest and abdomen were taken and multiple large cystic lesions with numerous daughter cysts were identified in right lung, mediastinum, peritoneum, liver and spleen with calcifications (figure 3, 4 & 5) suggestive of disseminated hydatidosis. Investigation includes RBS-121mg%, Sr. bilirubin 1.8mg/dl, SGOT-36IU/L, SGPT-28IU/L, ALP-208IU/L, blood urea- 34mg/dl, serum creatinine-0.9mg/dl, sputum for AFB - negative, HIV ELISA-non reactive. On detailed history evaluation, he told that he was handling two dogs on his house for past three years. Because of multi organ involvement, surgical procedure was deferred. Patient is on medical therapy with tablet albendazole 15 mg/kg/day in two divided doses.

Discussion: Liver (75%) and lung (15%) are the common organs of occurrence of Hydatidosis (2). Even though spleen is the third most common site of involvement, the incidence is 0.9% to 8%. Among abdominal Hydatidosis, peritoneal involvement is 13%. Clinical presentation depends on organs affected, size and number of the cysts, organ compression, blood flow and lymphatic obstruction, as well as rupture of the cyst. Diagnosis is by serology and radiological imaging. Radiological findings range from clear cystic lesions to solid masses. The "water lily sign" on ultrasonography is produced by complete detachment of the membranes inside the cyst. When daughter cysts are separated by the hydatid matrix, the “wheel spoke” pattern is noticed. The treatment of choice is surgical removal of the cysts combined with medical treatment using albendazole or mebendazole before and after surgery. If there is multi-organ involvement, surgery is not advisable. For inoperable cases like ours, medical treatment and/or PAIR (puncture-aspiration-injection-respiration)
is the alternative choices (6). Medical therapy with albendazole (15 mg/kg daily in two divided doses) alone for 4 to 6 months results in cure in 30% of cases and in improvement in another 50%. Recently studies are being conducted looking at possible vaccine candidates for an effective human vaccine against Echinococcosis. (7)

REFERENCES: