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Hydatid Cyst with Cervico-Vaginal Cyst

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Abstract:-

> Introduction and Significance:

Hydatid cyst is a parasitic infection, commonly affects liver folloed by lung and other peritoneal organs. They may not be diagnosed early because they remain asymptomatic at small sizes and reach large sizes at the time of diagnosis. In our case patient have large hydatid cyst in left upper quadrant abutting to mid pole of spleen. Patient also have bening fibroadenoma and cervico vaginal cyst, undervent surgical procedure of diaphragmatic muscle stripping with hydatid cyst with splenectomy with NDVH with cervico vaginal cystectomy.

> Case Presentation:

We report the case of a 47-year-old female who have history of abdominal pain along with abdominal fullness since 5 month. Patient also complain of constipation and weight loss. Diagnosis was confirmed by ultrasonography and CECT abdo + pelvis.

> Clinical Discussion:

Most patient remain asymptomatic in case of hydatid cyst though it may leads rupture of hydatid cyst and sever anaphylactic reaction. surgical intervention is the definitive treatment some may undergo medical management. There are different method of surgical intervention.

> Conclusion:

Echinococcus granulosus can lead to cystic lesions in various parts of the body. Proper diagnostic procedures are essential for accurate identification and for determining the appropriate treatment, which is primarily surgical..

Keywords:- Hydatid Cyst, Liver, Spleen, Peritoneal, Pelvic Organ Prolapse, Cervico-Vaginal Cyst, Echinococcus Granulosus.

I. INTRODUCTION

Cystic echinococcosis is a zoonotic disease caused by the larval stage of Echinococcus granulosus. Humans act as accidental hosts and do not contribute to the worm's biological cycle. Infection typically occurs through ingestion of food contaminated with dog feces or through direct contact with dogs. Commonly affected sites include the liver, lungs, muscles, bones, kidneys, spleen, peritoneum, and other organs.

Most cases are asymptomatic . the enclosed embryos are liberated in the duodenum and transported in liver . incubation period is highly variable. Since echinococcal cysts grow slowly , they may not show early symptoms and remain asymptomatic for years. In our case 47 year female patient have symptoms of abdominal pain and abdominal fullness.

Hydatid cysts can be diagnosed using radiologic imaging techniques such as ultrasonography (USG), computed tomography (CT), and magnetic resonance imaging (MRI). Treatment options include percutaneous interventions, surgical procedures, antiparasitic medications, and, in some cases, monitoring without active intervention.

In our case patient have hydatid cyst in liver along with spleen and cervico vaginal cystic swelling, patient underwent excision of hydatid cyst along with splenectomy and per vaginal hysterectomy along with excision of cervico vaginal cyst.

II. CASE REPORT

A 47 year old female patient presented with abdominal fullness since 5 month along with constipation, no any other symptoms present. patient came to civil hospital Rajkot from rural area. Onset was incidious and gradually progressive. patient is newly diagnosed case of diabetes mallitus also complain of lower abdominal pain . no history of itching.

Following the general examination, laboratory testing was done along with radiological investigations. Ultrasonography findings suggestive of large cystic swelling of size 92 75 mm well define with thick wall, heterogenous material with multiple dauther cyst noted within with calcification foci within it. Patient also have bening fibroid at uterine fundus.

The diagnosis of peritoneal hydatid cyst with cervico vaginal cyst was made by various investigation.

A laparotomy was performed, a exophytic cyst was noted adherent to left lobe of liver as well as diaphragm and the spleen. Cyst was separated from left lobe of liver and diaphragm . stripping of diaphragmatic muscle was done .

En mask removal of hydatid cyst along with spleen was done. Left side ICD insertion was done . excision of cervico vaginal cyst along with vaginal hysterectomy was done.



Fig 1: Intra Operative Picture Showing Attachment of Hydatid Cyst with Left Lobe of Liver and Diaphragm.



Fig 2: Separation of Cyst from Diaphragm with Stripping of Diaphragmatic Muscle

Vaginal hysterectomy was done along with excision of cervicovaginal cyst was done . by midline laparotomy adhesiolysis of hydatid cyst from left lobe of liver was done along with separation from diaphragmatic muscles with 2 layerd repair of diaphragm was done . and splenectomy with mass resection of hydatid cyst was done .

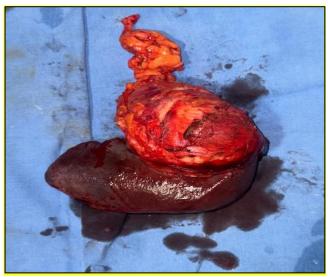


Fig 3. Hydatid cyst with spleen



Fig 4: Cervico vaginal Cyst (Pelvic Organ Prolapse)



Fig 5: En- mass Removal of Hydatid Cyst along with Splenectomy

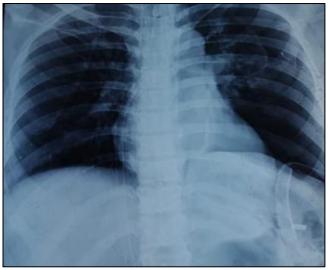


Fig 6: Post-Operative X-Ray with ICD in Situ.

In the case of our patient, we undervent for laparotomy to removed hydatid cyst. surgery is consider as the best option having potential to removed the cyst and complete cure. Recurrence of hydatid cyst may occur either from spillage of hydatid fluid during the surgical procedure or from any reinfestation of the patient.

Our patient excision of cervicovaginal cyst along with vaginal hysterectomy by gynecologist in lithotomy position and then under went for midline laparotomy for removal of hydatid cyst. Adhesiolysis of cyst from left lobe of liver was done and from diaphragm it was separated and then en mass resection of hydatid cyst with spleen was performed, 28fr ICD was placed in left side chest, post operative recovery was uneventfull.

III. DISCUSSION

Hydatid cysts are especially prevalent in rural areas and are caused by the parasite **Echinococcus**. The parasite spreads through the bloodstream, allowing cysts to form in various parts of the body. The liver is the most commonly affected site (63%), followed by the lungs (25%), muscles (5%), bones (3%), kidneys (2%), spleen (1%), and other less frequent locations (1%). Infection is typically acquired and often remains asymptomatic. Cysts may present as solitary or multiple lesions.

Hydatid cysts are often discovered incidentally. When symptoms do occur, they are typically caused by the growth of the cyst, which exerts pressure on the affected organ and nearby structures. In symptomatic cases, clinical presentations can vary significantly, influenced by: a) the organ involved, b) the size and location of the cyst, c) interactions between the expanding cyst and surrounding tissues, and d) complications arising from cyst rupture.

In our case, 47 year old female patient presented with symptoms of abdominal pain along with fullness, constipation . no any other respiratory symptoms are found. patient complain of lower abdominal pain.

Pre-operative diagnosis of cystic echinococcosis is mandatory to prevent anaphylaxis or local occurance. ultrasonography should be the first imaging choice in abdominal hydatid cyst with sensitivity rates between 93% and 97%. Computerized tomography should also be done. Moderate eosinophilia 6% or more is usually present which is non -specific. Serological studies play an important role in the diagnosis of echinococcosis.

In our case by patient history, physical examination, laboratory investigation as well as radiological investigation like USG, CECT abdomen plus pelvis we have confirmed the diagnosis of hydatid cyst enclosing left lobe of liver, spleen and diaphragm along with cervicovaginal cyst.

Hydatid cyst can be treated by surgical or medical intervention. Surgical intervention is the cornerstone for the treatment of hydatid cyst. However, medical theraphy is indicated in patients with liver, lung, two or more organ involvement and peritoneal cysts. Albendazole (400mg BD) and mebendazole are the two effective chemotherapeutic agents approved for the treatment of hydatid cysts. PAIR treatment is successfully applied in smaller hydatid cyst. to prevent further complication surgical intervention is required.

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IV. CONCLUSION

E. granulosus can cause cystic lesions anywhere in the body thus any patient with cystic swelling shoud be evaluated for hydatid cyst, appropriate investigation have to be performed in order to prescribe a specific treatment, Surgery is the mainstay of treatment.

- Registration of research studies: N/A.
- Author contribution: Dr Manisha nakum, Guarantor

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