

A Rare Case Of Solitary Diaphragmatic Hydatid Cyst

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Chief complaints

44 year-old male, Non-Smoker, No known comorbidities

Presented to us with : -

Diffuse chest pain since 2 months

Pain in the left hypochondriac region since 2 months

No history of fever, cough, dyspnoea, or weight loss

No gastrointestinal complaints

No significant past/family history

Clinical Examination



- General Physical Examination : WNL

- Vitals :-

Temp. : 98.1⁰ F

PR : 92 bpm, regular, good volume, all peripheral pulses well felt

RR : 18 breaths/min

BP : 120/70 mm Hg, right arm, supine position

SpO2 : 97% on room air

Clinical Examination

- **R/S** : Dull percussion note in the Left Mammary/Infra-Axillary area
Absent breath sounds in Left Mammary/Infra-Axillary area
- **CVS** : S1, S2 heard, no murmurs
- **P/A** : Soft, non tender, no organomegaly; bowel sounds normal
- **CNS** : No focal neurological deficit

Investigations

- Laboratory parameters – WNL
- Chest X-ray** – Normal study

Hb	14.5 g/dL	PT,INR	11.3, 0.9
TLC	6700/mic.L	apTT	24
Platelet	290,000/mic/L	T.Bil	0.6 mg/dL
Blood Urea	17 mg/dL	SGOT	20
Creat	0.77 mg/dL	SGPT	42
Sr. Proteins	8.1 g/dL	ALP	80

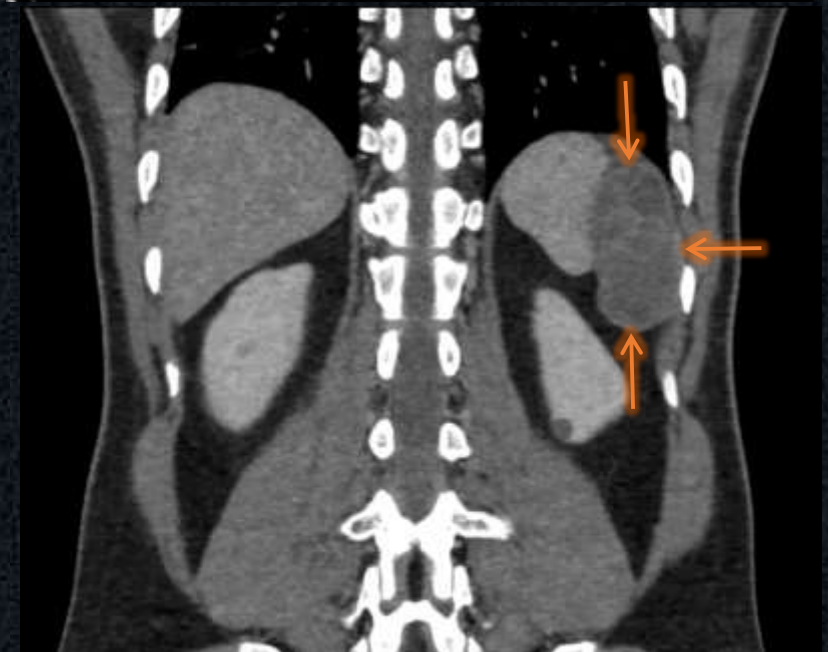
USG Thorax and Abdomen - *Multiloculated cystic lesion in the left hypochondriac region closely abutting the posterosuperior aspect of the spleen*

Investigations

CECT Thorax and Abdomen



Well-defined **mixed density peripherally enhancing lesion** measuring approx. **65 x 40 x 70 mm** in the **left lower hemithorax** in relation to the anterior surface of left 10th and 12th ribs causing inward displacement of adjoining diaphragm and lateral surface of spleen suggesting an **Intrathoracic, Diaphragmatic Hydatid cyst.**



Investigations

Serology study for Echinococcus IgG (Hydatid serology) was negative

Keeping in mind the possibility of anaphylactic reaction
as a complication



Ultrasound-guided Percutaneous Aspiration was done
with all due precautions



Clear watery fluid was aspirated

Investigations

On wet mount, it showed *scolices and hooklets* suggestive of *Echinococcus granulosus*



Hydatid cyst of diaphragmatic origin



Management

- The patient was treated with oral Albendazole 400mg twice daily for 28 days..
- CT was repeated after medical treatment which showed no significant resolution.
- Surgical excision was planned.
- But patient didn't want to undergo surgery and chose to continue conservative management.



After Percutaneous Aspiration and receiving medical treatment

Discussion

Isolated Diaphragmatic hydatid cyst is a rare clinical condition that poses a diagnostic challenge.

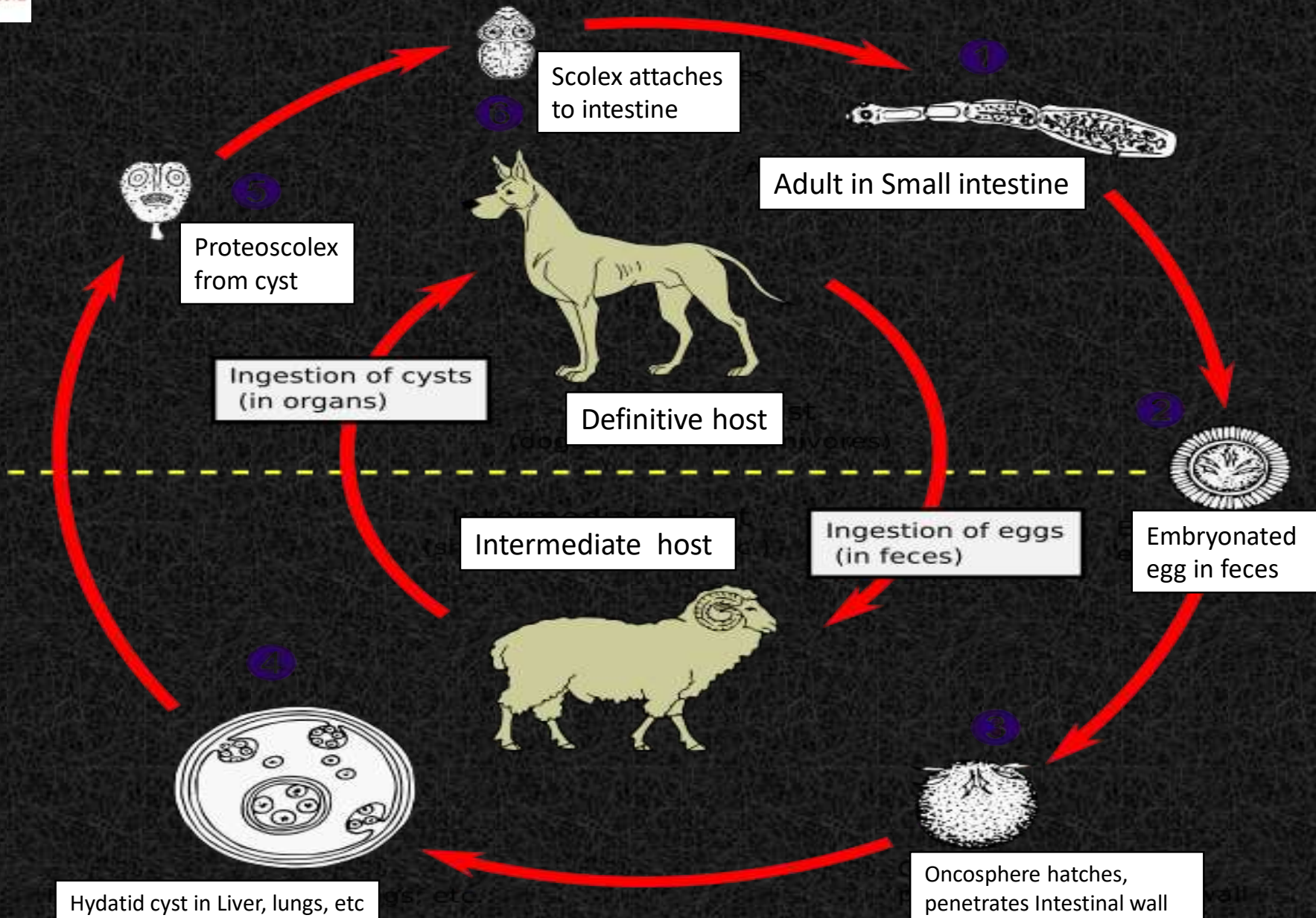
The early stages of the primary infection are usually asymptomatic and can remain so for years

Symptoms usually start when the cyst is large enough to cause compression symptoms.

The exact pathogenesis of the diaphragmatic hydatid cyst is unknown.

Discussion

Life Cycle of E. granulosus



Discussion

Liver is most common site (60-70%) followed by lung (20%)

The exact percentage of site involvement varies and the exact incidence of unusual locations is difficult to ascertain.

Diaphragmatic localization is very rare with the incidence of around 1%, and is usually associated with hepatic involvement

In our patient this disease was solely diaphragmatic, without evidence of liver, lung or splenic involvement.

Discussion



Diagnosis and Treatment



Ultrasound, MRI, and CT may be used in conjunction with a CXR to detect the location of hydatid cyst.

Sensitivity of hydatid disease serological testing is 64- 87% and therefore has a low negative predictive value.

Medical therapy with benzimidazoles is useful in disseminated disease and in cases of intraoperative spillage of hydatid fluid.

Surgery is the curative treatment for hydatid cyst disease and is the therapy of choice.

Clinical Pearls

The primary diaphragmatic hydatid cyst poses a diagnostic challenge and requires a high index of suspicion.

Differentials include Diaphragmatic tumor like Cystic Lymphangioma, Fibroma, Splenic cyst.

Only one other case of Solitary Diaphragmatic Hydatid cyst has been reported in India.

Primary Hydatid Cyst of the Diaphragm Mimicking Diaphragmatic Tumour:
A Case Report

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Acknowledgement



Department of Radiodiagnosis and Imaging

THANK YOU