Paediatric Radiological Features of Hydatid disease in the Liver

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Introduction:

- Sonography predominantly as a screening tool.

- Sonar specificity (97%) and sensitivity (100%) according to a large Argentinian study.

- CT has a sensitivity rate approaching 94%

Structure

- Three layers:
  - Pericyst: Fibrous protective layer
  - Ectocyst: Middle membranous layer-acellular
  - Endocyst: Inner germinal layer-live scoleces (larva)

Sonographic features
Classification

Gharbi classification:

- Type I - pure cyst;
- Type II - fluid collection with a split wall;
- Type III - daughter cysts (with or without degenerated solid material);
- Type IV - heterogeneous echo pattern;
- Type V - calcified wall
TYPE I
Type II
Type III
Different types
TYPE IV
Type I-V
Treatment

SONAR

Complicated (ruptured /anaphylaxis) C/I to PAIR

- surgery

Uncomplicated

- >5cm
  - PAIR + Albendazole
  - F/U sonar 3/12
    - No Response consider surgical intervention
    - Respond then continue Rx

- <5cm
  - Albendazole
N=15 (9M:6F)

Type I-12
Type II-2
Type III-1
Type IV-1

PAIR-5
Medical Rx- all
Surgical-3

 Fluid-positive live scoleces
 Negative live scoleces

**Outcomes:**
- Complete Resolution-5
- Ongoing treatment-6
- Lost to follow up-2
- Progression of Disease-2
Conclusion

• Salient sonographic features can help diagnose and affect treatment approach.

• Review the role of using only medical Rx in pt with cysts > 5cm despite WHO recommendations.

• In a tertiary institution, sonar is a reliable diagnostic method for hydatid disease.
Thank you

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References:

- Uptodate
- https://doi.org/10.1148/radiology.139.2.7220891