Liver Hydatid Cyst: The Advances

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Dear Sir:

Dramatic advances developed lately in Diagnosis and Treatment of Liver Hydatid Disease upon the understanding that it is a very wide spectrum entity, and not just a single Disease. The Diagnosis is based upon an ultrasound study showing a liver hydatid cyst or cysts combined with a positive immune-serological test for Antibodies against Echinococcus granulosus antigens. Once Diagnosis is made, it should always be followed by Staging(Classification) of the Cyst upon which the Treatment and Prognosis will depend. There are two staging systems, The Gharbi and the W.H.O. This liver hydatid cyst staging will unify the information for each stage and allow audit to be performed[1]. The Gharbi system classifies liver hydatid cysts as follows:

Stage-1: simple cyst contains pure hydatid fluid.
Stage-2: cyst with a detached germinal layer (water lily sign).
Stage-3: cyst contains daughter cysts (honey comb appearance).
Stage-4: cyst filled with amorphous mass (wheel spoke sign).
Stage-5: cyst with a thick calcified wall. The WHO staging reveals also whether the cyst is viable (infective), or non-viable (non-infective), or is in an intermediate stage between the two. In selected cases, CT scan which is 98% accurate and is very precise for anatomical localization may be used. It identifies intraperitoneal cysts. M.R.I. provides a much better view of liquid areas within tissues. Diffusion weighted M.R.I[2] is recently introduced. A Hydatid cyst will appear Hyperintense while a non-parasitic cyst will not. Intraoperative ultrasound: is crucial in radical liver hydatid cyst surgery to delineate cyst extent and its relations to major vessels and important structures to safeguard them.

Peri-Procedure Chemotherapy: Cyclical peri-procedure (open or laparoscopic surgery/per-cutaneous treatment-P.A.I.R.) Chemotherapy [3] is now standardized. Albendazole(Zentyl) 10-15 mg./kg./day in divided doses with or without Praziquantel(Biltricide) 40 mg./Kg/week for one month followed by two weeks of no treatment, and repeat for three cycles. Praziquantel if Added will Potentiate the Action of Albendazole(Zentyl). This cyclical treatment replaced the previously practiced continuous treatment after the proof that it is as effective with the advantage of having less side effects, more compatibility, and less drug resistance. Advantages of Peri-procedure chemotherapy in liver hydatid disease:- it reduces hydatid fluid volume, consequently intra-cystic pressure will decrease. this will make the
Dealing with the Cystectomy of the Parasitic Cyst + Laparoscopic Surgery

Cyst Surgery is the Following Match. Currently Practiced Liver and Laparoscopic Surgery Can Not Present, Large Number of Cysts is cannot match sites of liver Hydatid P.A.I.R. the cyst is complicated or not stages of liver hydatid cyst.

remains the major treatment modality for P.A.I.R. and of Liver Hydatid Cyst: In spite of chemotherapy group compared to 0% in the surgery + chemotherapy group. 0% in the surgery + chemotherapy group. A) Patient criteria: Age of patient; comorbidities; individual preferences; adherence of patient to long term monitoring. B) Cyst Criteria: Number of cysts; size; location; stage(type); complicated or not.

Conclusion

Liver hydatid cyst is diagnosed by an ultrasound view showing a liver cyst combined with a +ve serological test for Echinococcus granulosus. Once diagnosis is made, the next step is staging (classification) of the cyst according to Gharbi or W.H.O. staging systems. Treatment will be decided greatly by the stage of the cyst. Cyclical Peri-Procedure chemotherapy is now standardized and W.H.O. endorsed. It is started prior to the procedure and continued after the procedure in three cycles. Its Advantages have been Proved by Many Studies.

References

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