

Short Communication

Algorithmic Approach to the Treatment of Liver Hydatid Cyst

Fatin R. Polat*

Division of General Surgery, Namik Kemal University, Turkey

*Corresponding author

Fatin R. Polat, Division of General Surgery, Namik Kemal University, Turkey, Tel: 905323961224; Email: polat22@hotmail.com

Submitted: 11 January 2017

Accepted: 22 February 2017

Published: 25 February 2017

ISSN: 2373-9282

Copyright

© 2017 Polat

OPEN ACCESS

Abstract

Hydatid liver disease is endemic in certain parts of the world. Treatment can be either medical with anti-helminthic drugs, percutaneous drainage or surgical (conventional, or laparoscopic intervention). This review is summarized the algorithmic approach to treatment of liver hydatid cyst.

ABBREVIATIONS

PAIR: Percutaneous Aspiration Injection Reaspiration; OC: Intra-Operative Cholangiogram; ERCP: Endoscopic Retrograde Cholangiography; ES: Endoscopic Sphincterotomy; Mo-CAT: Modify-Catheterization.

INTRODUCTION

Aim of treatment options for hydatid liver cysts are treatment of symptomatic and active cysts, prevention and treatment of complications. Treatment options are done according to gharbi classification (Schema 1) [1-3]. This review is summarized algorithmic approach to the treatment of liver hydatid cyst.

Treatment of the liver hydatid cyst

Algorithmic approach to the treatment of liver cyst hydatid disease is important. Because;

1. Avoid surgical operations,
2. What kind of treatment method is applied,
3. What kind of the surgical method is going to be applied.

Schematic approach the hydatid cyst is reduced unnecessary surgical treatment and prevent potential complications.

Treatment Options for Hydatid Liver Cysts (Schema 2)

1. Cysts which do not require treatment; watch and wait (any case medical only a short time),
2. Approach of cysts that require treatment:
 - a) Medical with anti-helminthic chemotherapy. All typ cysts (according gharbi) should be taken adjuvan and neo-adjuvan chemotherapy. Albendazol is a anti-helminthic drug, It is administered orally at 800 mg (10-15 mg/Kg) per day in two

divided doses [4].

b) Percutaneous drainage (PAIR, Catheterization and mo-CATH).

c) Surgery (conventional or laparoscopic intervention). During this option; any communication between cyst and bile ducts should be investigated. If there is a communication between cyst and bile duct (before or during the surgical operation), conventional surgery should be applied and also OC should be done (Schema 3) [3,5]. If it is determined after surgical operation (post-operative), ERCP (ES) or nasobiliar drainage should be done [3-7]. Laparoscopic surgery, for patients with unique, small-sized, superficially located cysts, will yield a surgical success similar to the conventional open surgery, with the advantage of minimal-invasive procedures [1,2].

Aim of treatment

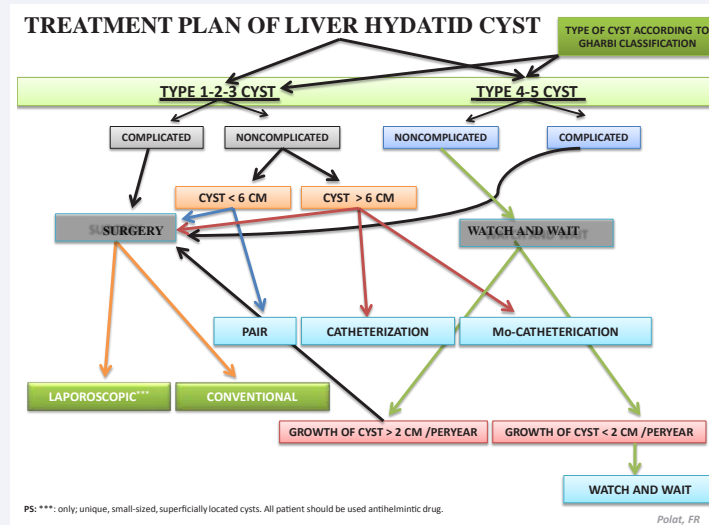
- a) Treatment of symptomatic and active cysts
- b) Prevention and treatment of complications

HYDATID CYST CLASSIFICATION (ACCORDING USG-GHARBI CLASSIFICATION)

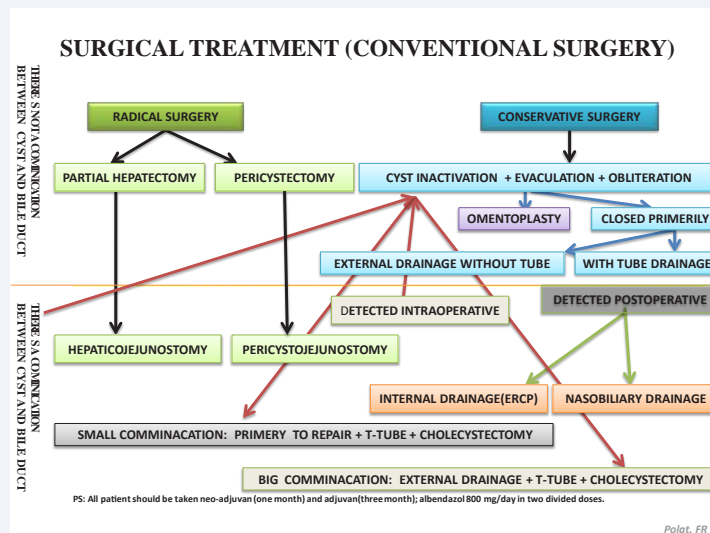
- **Type I:** Hydatid sand sign; +,
- **Type II:** Lotus flower sign (floating membrane); +,
- **Type III:** Honeycomb sign (daughter cysts); +,
- **Type IV:** Fluid have granuler cavity,
- **Type V:** There are calcifications on the cyst wall.

Polat, FR

Schema 1 Gharbi classification [4].



Schema 2 Treatment plan of liver hydatid cyst.



Schema 3 Surgical treatment plan of liver hydatid cyst.

REFERENCES

- Polat FR. Hydatid Cyst: Open Or Laparoscopic Approach? A Retrospective Analysis. *Surg Laparosc Endosc Percutan Tech.* 2012; 22: 264-266.
- Polat FR, Polat S, Sultanoglu E. Laparoscopic treatment of hydatid cyst of the liver: a case report. *JSLs.* 2005; 9: 245-246.
- Schwartz SI. Liver. In: Schwartz SI, editor. ed. *Principles of Surgery.* Seventh ed. New York: McGraw-Hill International Inc; 1999; 1395-1435.
- Meshikhes AW. Surgical treatment of hydatid cysts of the liver. *Br J Surg.* 2004; 91: 510-511.
- Barnes SA, Lillemoed KD. Liver abscess and hydatid cyst disease. In: Zinner MJ, editor. ed. *Abdominal Operations.* Tenth ed. London: Prentice Hall International Inc; 1997; 1513-1545.
- Khoury G, Geagea T, Hajj A, Jabbour-Khoury S, Baraka A, Nabbout G. Laparoscopic treatment of hydatid cysts of the liver. *Surg Endosc.* 1994; 8: 1103-1104.
- Bickel A, Loberant N, Shtamler B. Laparoscopic treatment of a liver hydatid cyst. *Br J Surg.* 1994; 81: 627.

Cite this article

Polat FR (2017) Algorithmic Approach to the Treatment of Liver Hydatid Cyst. *Ann Clin Pathol* 5(2): 1105.