



## Surgical management of the hydatid disease of the liver

### Hirurško lečenje hidatidne bolesti jetre

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**ABSTRACT.** The hydatid disease due to *Echinococcus granulosus* affects the liver predominantly. In this study we present our experience with 45 patients with hepatic hydatid disease managed surgically. The disease was solitary, mainly located in the right lobe (in two thirds). The extrahepatic spread rate was 24% and the recurrence rate was 6,6%. In 10 cases of the left lobe an atypical left hepatectomy, while in the remaining 35 cases of the right lobe partial cystopericystectomy, meticulous evacuation, and adequate drainage were performed. In 10 cases, because of assumed rupture, an operation on the biliary tree was added. There was not postoperative mortality. The morbidity was 11% including 4 biliary fistulas resolved spontaneously, and one high biliary stricture requiring operative reconstruction in conclusion, partial cystopericystectomy with drainage for cysts in the right lobe, and resection for cysts in the left lobe are safe and effective alternatives with satisfactory outcome.

**KEY WORDS:** liver, hydatid disease, surgical management.

The hydatid disease, which has been known since the time of Hippocrates, who described it as "liver full of water", is due to infestation with the dog tapeworm *Echinococcus granulosus*. Human is an intermediate host infested by ingestion of the ova contained in materials contaminated with dog feces. The dog (definitive host) becomes infected by eating sheep viscera containing hydatid cysts. The disease affects the liver predominantly (70 per cent), and seems common in some geographic areas, but its frequency tends to be decreasing with the improvement of sanitary conditions and the development of effective management procedures.

Although much progress has been made in the medical treatment of hydatid disease, the surgical management still remains the cornerstone. Several techniques have been performed ranging from simple puncture to liver resection. However, the most common used is total or partial cystopericystectomy (1), Chemotherapy with mebendazole, albendazole, and other benzimidazole compounds before and

**SAŽETAK.** Hidatidna bolest uzrokovana *Echinococcus granulosus*-om pogađa prevashodno jetru. U ovom radu je izneto naše iskustvo pri hirurškom tretmanu 45 bolesnika obolelih od hidatidne bolesti. U dve trećine slučajeva postojala je solitarna formacija u desnom režnju. Do ekstrahepatičnog širenja došlo je u 24% slučajeva a do recidiva u 6,6%. Kod 10 bolesnika sa obolelim levim režnjem izvršena je atipična leva hepatektomija, dok je kod ostalih 35 bolesnika rađena parcijalna cistopericistektomija, pažljiva evakuacija i adekvatna drenaža. Kako je kod 10 bolesnika posumnjano na rupturu bila je učinjena operacija na bilijarnom traktu. Nije bilo postoperativne smrtnosti. U 11% nastale su komplikacije, uključujući 4 bilijarne fistule koje su spontano zarasle, i jednu visoku bilijarnu strikturu koja je zahtevala operativnu rekonstrukciju. Iz datog proizilazi da su parcijalna cistopericistektomija sa drenažom ciste desnog režnja i resekcija ciste levog režnja sigurni i delotvorni načini lečenja sa zadovoljavajućim ishodom.

**KLJUČNE REČI:** jetra, hidatidna bolest, hirurško lečenje.

after operation could be helpful reducing or preventing recurrence, but not replacing it (2,3).

In this retrospective study we present our surgical experience of the hepatic hydatid disease (HHD), which was more or less common in our country previously.

### PATIENTS AND METHODS

Over the past ten year period (from 1984 to 1994) in our Surgical Department 45 patients with hydatid disease of the liver were operated on out of 5556 operations of General Surgery performed (0,8 per cent). They consisted of 19 males (42 per cent) and 26 females (58 per cent), with mean age 56+8 years (range of 28 to 77). The disease was primary in all, but 3 recurrences (6,6 per cent). The cystic lesion was solitary in 28 cases (62 per cent) and multiple in 17 cases (38 per cent). The location was in the right lobe in 30 cases (two thirds – 66,7%) including 5 cases posteriorly adjacent to the inferior vena cava (IVC), in the left lobe in 12 cases (26,7%), and in 3 cases (6,6%) it was bilobar. In 11 cases (24 per cent) an extrahepatic spread coexisted, as shown in TABLE 1.

Table 1 – Extrahepatic intraabdominal spread of the hydatid disease in 45 operated patients

1. Spleen	4 cases
2. Kidney	2 cases
3. Mesentery	2 cases
4. Disseminated	3 cases
Total	11 cases (24,4%)



