

# Title:

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# Management of hydatid cyst in a centre with high prevalence. Descriptive series

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Dear Editor,

Hydatidosis is caused by the larval stage of the genus Echinococcus. Humans are an accidental intermediate host. The main organ affected is the liver (70%)<sup>1</sup>. The incidence increases in endemic regions such as North Africa, Eastern Europe and South America<sup>2</sup>. The aim is to present a descriptive series of cases treated in our hospital in the last 5 years.



A retrospective descriptive study of patients operated on for hepatic hydatidosis in the last 5 years (2018-2023) is performed. Demographic variables were considered; preoperative variables such as the presence of comorbidities (hypertension, type 2 DM, obesity, etc.) and scolicidal treatment. Concerning the characteristics of the cyst, the symptom of debut, location, extension and size were recorded, as well as its radiological classification. The type of intervention, the presence of intraoperative and postoperative complications, as well as reinterventions are described. In addition, readmission rates and length of hospitalisation were collected.

Fourteen patients were included (**TABLE1**), 50% were women and the mean age was 50.69 years (SD 15.76). Regarding origin, 57.1% were from North Africa, followed by Eastern Europe (21.4%) and Spain (21.4%). Regarding the characteristics related to the hydatid cyst, the predominant debut symptom was abdominal pain in 71.4%. In 57.1% of cases it was located in the right hepatic lobe, 35.7% involved the left lobe exclusively, and one patient (7.1%) had bilobar involvement. The extension was exclusively hepatic in 11 patients (78.6%). The mean maximum diameter was 9.13cm (SD 4.28).

According to radiological classification, 57.1% were classified as CE2, CE3B 28.6% and CE3A 14.3%. 71.4% had a single hydatid cyst and 28.6% had multiple locations. All patients received albendazole prior to surgery except one patient in whom it was contraindicated due to ITP. Cystoperichistectomy was performed in 35.7%, total cystorresection in 14.3% and subtotal cystoperichistectomy in 50%. Eight (57.1%) postoperative complications were recorded. The readmission rate was 35.7%.

Hydatid cyst surgery is indicated in cysts larger than 10cm in diameter, complicated cysts or cysts with daughter vesicles (CE2,CE3b), and also in cysts smaller than 10cm if there is a risk of rupture. Morbidity rates range between 12-84%, and mortality rates between 0.5 and 6.5% depending on the series<sup>1-3</sup>.

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Table 1: Results of descriptive series. Demographic variables, cyst characteristics, preoperative variables and postoperative results.





DEMOGRAPHIC CHARACTERISTICS	N = 14
	50,69 (SD 15,76)
Age: mean (SD)	
Sex: women (n)	50% (n=7)
Origin: % (n)	24 40/ ( 2)
Spain North Africa	21,4% (n=3)
North Africa	57,1% (n=8)
Eastern Europe	21,4% (n=3)
Comorbidities: % (n)	57,1% (n=8)
Hypertension	42,90%
Type 2 DM	21,40%
AMI	7,10%
Obesity	14,30%
Debut symptom	
Abdominal pain	71,4% (n=10)
Palpable mass	7,1% (n=1)
Obstructive jaundice	7,1% (n=1)
Abdominal infection	14,3% (n=2)
CHARACTERISTICS HYDATID CYST	N = 14
Location: % (n)	
Right	57,1% (n=8)
Left	35,7% (n=5)
Both	7,1% (n=1)
Extension: % (n)	
Hepatic	78,6% (n=11)
Hepatic + Peritoneal	7,1% (n=1)
Hepatic + Splenic	7,1% (n=1)
Hepatic + Ovarian	7,1% (n=1)
Number: % (n)	
Single	71,4% (n=10)
Multiple	28,6% (n=4)
Maximum diameter: cm (SD)	9,13 (SD 4,28)
WHO Radiological Classification: % (n)	
CE2	57,1% (n=8)
СЕЗА	14,3% (n=2)
CE3B	28,6% (n=4)
Fistulization to bile duct: % (n)	21,4% (N=3)
SURGICAL CHARACTERISTICS	N = 14
Type of surgery: % (n)	
Total cystopericystectomy	35,7% (n=5)
Subtotal cystolithopericystectomy	50% (n=7)
Liver resection	14,3% (n=2)
Complications: % (n)	14,570 (11 2)
Intraoperative	7,1% (n=1)
Postoperative	57,1% (n=8)
Abscess/collection	21,4% (n=3)
Pleural effusion	7,1% (n=1)
Biliary fistula	14,3% (n=1)
-	7,1% (n=1)
Haemoperitoneum Evitus	
Exitus  Clavion Dindo: % /n	7,1% (n=1)
Clavien-Dindo: % (n)	44.20/ (- 2)
CD	14,3% (n=2)