Case Series

Primary Splenic Hydatidosis: An Institutional Case Series and Review of the Literature

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ABSTRACT

Background: Primary splenic hydatidosis is an uncommon manifestation of cystic echinococcosis. Because of its rarity, most available evidence consists of small retrospective series, and the optimal extent of surgery remains debated.

Methods: We retrospectively reviewed 15 consecutive patients with primary splenic hydatidosis who underwent surgical treatment at our institution between 2010 and 2026. Demographic, clinical, radiological, operative, postoperative and follow-up data were collected. A focused narrative review of the literature was undertaken to contextualize the institutional experience.

Results: Fifteen patients were included, with a median age of 38 years; 9 (60.0%) were women. Three patients (20.0%) were diagnosed incidentally. Thirteen patients (86.7%) had solitary cysts and the median maximum cyst diameter was 7.9 cm. Histopathology confirmed hydatid disease in all 15 patients. Spleen-preserving surgery was performed in 11 patients (73.3%), while 4 (26.7%) underwent total splenectomy. Six patients (40.0%) developed a postoperative complication. Two patients (13.3%) developed recurrence during follow-up; both had initially undergone spleen-preserving cystectomy/enucleation with omentopexy, corresponding to 2/9 (22.2%) within that procedure group. These observations are descriptive and do not establish a causal or comparative effect of operative technique.

Conclusion: In this institutional series, spleen-preserving surgery was feasible in selected patients. Postoperative morbidity occurred in 6 of 15 patients (40.0%), and recurrence occurred in 2 of 15 patients (13.3%). Both recurrences followed cystectomy/enucleation with omentopexy, but the small retrospective and non-comparative design precludes attributing recurrence to the procedure.

Keywords: Primary splenic hydatidosis; splenic hydatid cyst; Echinococcus granulosus; spleen-preserving surgery; splenectomy; cystectomy; omentopexy

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INTRODUCTION

Hydatid disease (cystic echinococcosis) is a zoonotic infection caused predominantly by Echinococcus granulosus and remains endemic in several regions of the Mediterranean, Middle East, Central Asia and South Asia. The liver and lungs account for most human infections, whereas splenic involvement is distinctly uncommon. Primary splenic hydatidosis, defined as hydatid disease confined to the spleen without demonstrable involvement of another organ, is particularly rare[1–3].

Splenic hydatid cysts may remain clinically silent for prolonged periods because of their slow growth. When symptoms occur, they are generally nonspecific and include left upper quadrant pain, abdominal fullness, palpable splenomegaly and, less commonly, complications such as rupture, infection or fistulization[2,4]. Diagnosis relies on a combination of epidemiological history, ultrasonography and computed tomography, supplemented by magnetic resonance imaging in selected cases and serological testing. The sensitivity of serology may be lower for isolated extrahepatic disease, making imaging particularly important[2,4].

Historically, splenectomy was considered the standard surgical treatment because it removes the entire parasitic lesion and theoretically minimizes the risk of recurrence. Early series of primary splenic hydatidosis from India and Turkey reported almost universal splenectomy[3,5]. However, the recognition of the immunological functions of the spleen and the long-term risks associated with asplenia have

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encouraged spleen-preserving procedures in carefully selected patients. These include partial splenectomy, cystectomy or enucleation, deroofing with omentopexy, and other conservative techniques[4,6].

Akbulut et al. reported nine institutional cases and, separately, reviewed 27 published case series comprising 333 surgically treated splenic hydatid cases. Their review found no significant difference in recurrence between splenectomy and spleen-preserving surgery, although the authors emphasized the retrospective and heterogeneous nature of the available evidence[3]. More recent reports have further emphasized minimally invasive and spleen-preserving approaches, including a 2024 cohort of 18 patients with primary splenic hydatidosis and a 2024 literature review specifically examining partial splenectomy[7,8].

The present study describes our institutional experience with primary splenic hydatidosis over a prolonged period, with particular emphasis on clinical and radiological characteristics, operative management, postoperative morbidity and recurrence. A focused review of the literature is presented alongside the institutional series to describe the evolution of surgical management and the current evidence surrounding spleen preservation.

MATERIALS AND METHODS

Study design and setting

This was a retrospective institutional case series of patients who underwent surgical treatment for primary splenic hydatidosis between 2010 and 2026. Patients were identified from institutional surgical records and operative databases. The study was designed as a descriptive case series and was not intended as a comparative study of operative techniques.

Ethics approval and consent: Institutional Ethics Committee approval was not applicable because this was a retrospective case series based exclusively on review of hospital records and did not involve prospective intervention or alteration of patient care. Data were analyzed retrospectively from existing clinical records. Written consent was obtained from patients for use of the operative and radiological images. The images contain no patient-identifying information.

Definition of primary splenic hydatidosis

Primary splenic hydatidosis was defined as hydatid disease confined to the spleen, without radiological or operative evidence of hydatid cysts in other organs. Patients with demonstrable extra-splenic hydatid disease were excluded. Diagnosis was assessed using compatible ultrasonographic and/or computed tomographic findings, hydatid serology, operative findings and histopathological examination of the excised cyst wall or specimen. The presence or absence of histopathological confirmation and serological results was extracted from the institutional records.

Data collection

Demographic and clinical variables included age, sex, presenting symptoms and incidental diagnosis. Radiological variables included cyst number, maximum cyst diameter, Gharbi classification and WHO-IWGE stage. Cyst sublocation within the spleen was recorded where available. Perioperative variables included albendazole therapy and its timing and duration where documented, surgical approach, operative procedure, intraoperative spillage, use of scolicidal agents, drain placement and postoperative vaccination where applicable. Postoperative complications, Clavien–Dindo grade, hospital stay and follow-up information were extracted from the records. Recurrence was defined as development of a new clinically or radiologically documented hydatid lesion after treatment.

Surgical management

Surgical treatment was individualized according to cyst size, location where documented, number, relationship to the splenic parenchyma and hilar structures, and feasibility of preserving functioning splenic tissue. The retrospective records did not contain a uniform decision algorithm or a prespecified size-based threshold, so the exact surgeon-specific indication for each procedure could not be reconstructed for every patient. Total splenectomy was used when preservation was considered technically unsafe; partial splenectomy when a localized cyst could be removed while retaining a viable splenic remnant; and cystectomy/enucleation with omentopexy when the cyst could be removed while preserving substantial splenic parenchyma. These decisions were based on surgeon judgment and were not randomized. Deroofing was not performed in the final cohort. Operative records were reviewed for cyst spillage and use of scolicidal agents. During spleen-preserving surgery, the tissues surrounding the cyst were packed with povidone-iodine-soaked gauzes

to reduce the risk of spillage. When documented, 10% povidone-iodine was used as the scolicidal agent; the exact contact duration was not consistently recorded. The residual cavity was managed with omentopexy. In this manuscript, cystectomy/enucleation refers to removal of the cyst wall/pericystic tissue while preserving the remaining splenic parenchyma, as described in published spleen-preserving splenic hydatid surgery; this is distinguished from cystotomy/deroofing, in which the cyst is opened and its contents evacuated while the residual cyst wall is left in situ[3,10].

Follow-up and outcomes

Follow-up was calculated from the date of surgery to the most recent documented clinical or radiological assessment. Because this was a retrospective study, surveillance was not protocolized. Available clinical and radiological follow-up records were reviewed for evidence of recurrence. The imaging modality and timing of surveillance were recorded where documented. Complications were graded according to the Clavien–Dindo classification where sufficient information was available.

Focused literature review

A focused narrative review was undertaken to contextualize the institutional findings. A final PubMed search was performed on 1 September 2026 using combinations of the terms "primary splenic hydatidosis," "splenic hydatid cyst," "splenic echinococcosis," "splenectomy," "spleen-preserving surgery," "partial splenectomy," "cystectomy," "enucleation," "deroofing," "omentoplasty" and "omentopexy." Reference lists of key relevant publications were also considered. Particular attention was given to studies reporting primary/isolated splenic hydatidosis, surgical technique, postoperative morbidity, recurrence and follow-up. The literature review was narrative rather than systematic and was not intended to provide a pooled estimate of treatment effect.

Statistical analysis

Continuous variables are presented as median with interquartile range (IQR), and categorical variables as frequencies and percentages. Given the small sample size and the descriptive, non-comparative design, no inferential statistical analysis was used to claim superiority of one operative procedure over another.

RESULTS

Patient characteristics

Fifteen patients with primary splenic hydatidosis underwent surgical treatment between 2010 and 2026. There were 9 females (60.0%) and 6 males (40.0%). The median age was 38 years (IQR, 34–44.5). Three patients (20.0%) were diagnosed incidentally, while 12 (80.0%) presented with symptoms, most commonly left upper quadrant pain. Thirteen patients (86.7%) had solitary cysts and two (13.3%) had multiple cysts. Hydatid serology was positive in all 15 patients, and histopathology confirmed hydatid disease in all 15. The median maximum cyst diameter was 7.9 cm (IQR, 6.2–9.8; range, 2.2–17.1 cm).

Table 1. Demographic and clinical characteristics

Characteristic	n (%) / Median (IQR)
Patients	15
Age, years	38 (34–44.5)
Female	9 (60.0)
Male	6 (40.0)
Incidental diagnosis	3 (20.0)
Symptomatic	12 (80.0)
Solitary cyst	13 (86.7)
Multiple cysts	2 (13.3)
Positive serology	15 (100)
Maximum cyst diameter, cm	7.9 (6.2–9.8)
Follow-up, months	30 (23–44)

Radiological characteristics

Gharbi classification and WHO-IWGE stage were available for all patients. Gharbi Type II was the most frequent morphology, occurring in 8 patients (53.3%), followed by Type I in 6 (40.0%) and Type III in 1 (6.7%). WHO-IWGE CE3a was the predominant stage (8 patients, 53.3%), followed by CE1 (6, 40.0%) and CE2 (1, 6.7%). Both systems were retained because Gharbi classification is widely represented in the historical splenic hydatid literature, whereas WHO-IWGE staging provides a standardized description of cyst activity. Classifications were extracted from archived radiological records; the retrospective database did not consistently distinguish prospectively assigned from retrospectively assigned classifications. Representative computed tomography images from the present series are shown in Figures 1–3.

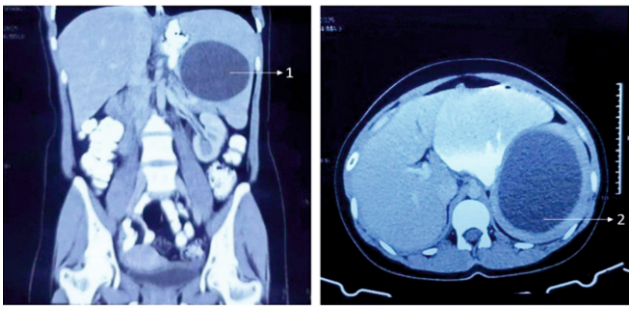


Fig. 1: Coronal and axial contrast-enhanced CT images demonstrating a large cystic lesion within the spleen (arrows).

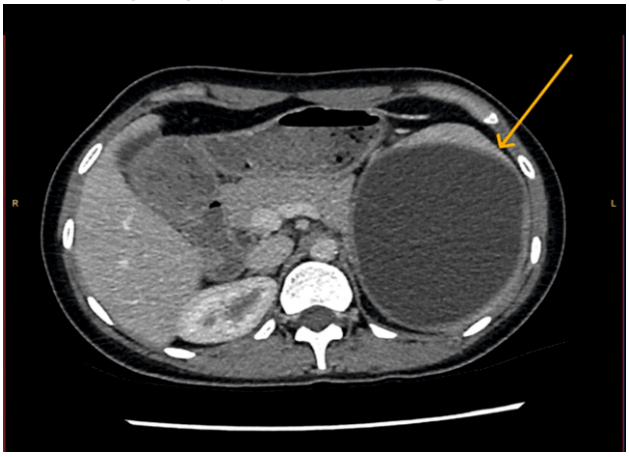


Fig. 2: Axial contrast-enhanced CT image demonstrating a large cystic lesion occupying the spleen (arrow).



Fig. 3. Contrast-enhanced CT images in axial and coronal planes demonstrating a large splenic cystic lesion with internal septations/membranous structures (arrows).

Table 2. Radiological classification of splenic hydatid cysts.

Classification	n (%)
Gharbi Type I	6 (40.0)
Gharbi Type II	8 (53.3)
Gharbi Type III	1 (6.7)
WHO-IWGE CE1	6 (40.0)
WHO-IWGE CE2	1 (6.7)
WHO-IWGE CE3a	8 (53.3)

Surgical management

Nine patients (60.0%) underwent laparoscopic surgery and six (40.0%) underwent open surgery. Four patients underwent total splenectomy, two underwent partial splenectomy and nine underwent spleen-preserving enucleation/cystectomy with omentopexy. Overall, 11 patients (73.3%) underwent spleen-preserving surgery. The median maximum cyst diameter was descriptively larger in the total splenectomy group (11.9 cm; range 9.7–17.1) than in the cystectomy/enucleation group (7.2 cm; range 4.9–8.7), illustrating potential treatment-selection confounding. Intraoperative cyst-content spillage occurred in two patients (13.3%). A scolicidal agent was documented in 13 patients (86.7%); in these cases, the recorded agent was 10% povidone-iodine with a 15-minute contact period. Both patients with documented intraoperative spillage had this cavity treatment recorded. All patients had drain placement. Vaccination was documented in 14 patients (93.3%), including all four patients who underwent total splenectomy.

Table 3. Surgical management.

Operative characteristic	n (%)
Total splenectomy	4 (26.7)
Partial splenectomy	2 (13.3)
Enucleation/cystectomy + omentopexy	9 (60.0)
Spleen-preserving procedures overall	11 (73.3)
Laparoscopic approach	9 (60.0)
Open approach	6 (40.0)
Intraoperative spillage	2 (13.3)
Scolicidal agent used	13 (86.7)
Drain placement	15 (100)



Fig 4. Intraoperative appearance of a large splenic hydatid cyst during surgical management in the present series

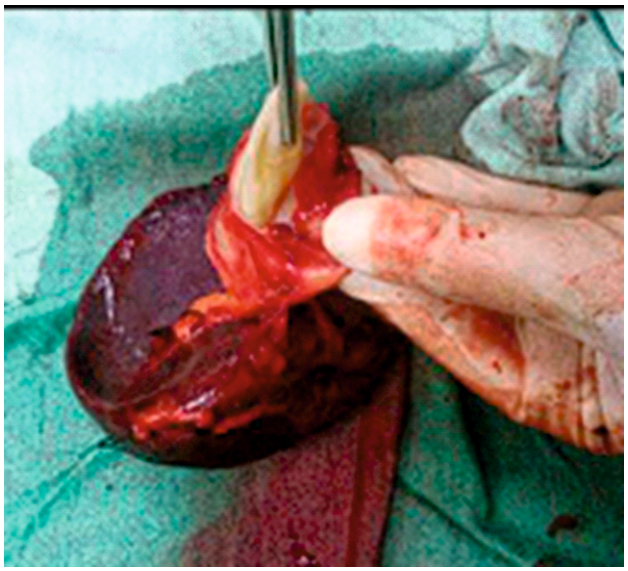


Fig. 5. Intraoperative view of a splenic hydatid cyst during surgical dissection in the present series.

Postoperative outcomes

The median postoperative hospital stay was 6 days (IQR, 5–7). Six patients (40.0%) experienced at least one documented postoperative complication. Three patients (20.0%) developed atelectasis, two (13.3%) developed postoperative collections and one (6.7%) developed a surgical-site infection. No postoperative hemorrhage, 30-day readmission or 30-day mortality was recorded. Recorded complications were Clavien–Dindo grade I or II.

Table 4. Postoperative outcomes.

Outcome	n (%)
Any postoperative complication	6 (40.0)
Postoperative collection	2 (13.3)
Atelectasis	3 (20.0)
Surgical-site infection	1 (6.7)
Postoperative hemorrhage	0
30-day readmission	0
30-day mortality	0
Median hospital stay, days	6 (5–7)

Outcomes according to operative procedure

Procedure-specific outcomes are presented descriptively because the cohort was small and treatment selection was individualized. Postoperative collections occurred in 2/9 patients (22.2%) after cystectomy/enucleation with omentopexy and in 0/4 patients after total splenectomy and 0/2 after partial splenectomy. Any complication occurred in 4/9 (44.4%) after cystectomy/enucleation with omentopexy, 2/4 (50.0%) after total splenectomy and 0/2 after partial splenectomy. These figures are not intended as comparative estimates of risk because cyst size, anatomy, operative complexity and surgeon selection differed between groups. Median follow-up was 28 months (range 6–60) after cystectomy/enucleation, 34 months (30–48) after total splenectomy and 16 months (8–24) after partial splenectomy.

Table 5. Postoperative outcomes according to operative procedure. Values are descriptive; no inferential comparison was performed because of the small, non-randomized groups.

Outcome	Total splenectomy (n=4)	Partial splenectomy (n=2)	Cystectomy/ enucleation + omentopexy (n=9)
Any complication	2/4 (50.0%)	0/2 (0%)	4/9 (44.4%)
Postoperative collection	0/4 (0%)	0/2 (0%)	2/9 (22.2%)
Atelectasis	2/4 (50.0%)	0/2 (0%)	1/9 (11.1%)
SSI	0/4 (0%)	0/2 (0%)	1/9 (11.1%)
Hemorrhage	0/4 (0%)	0/2 (0%)	0/9 (0%)
Recurrence	0/4 (0%)	0/2 (0%)	2/9 (22.2%)
Median LOS, days	5.5	4.5	6.0
Median follow -up, months	34 (30–48)	16 (8–24)	28 (6–60)

Follow-up and recurrence

The median follow-up duration was 30 months (IQR, 23–44; range 6–60), with documented follow-up in all 15 patients. Two patients (13.3%) developed recurrence in the overall cohort. Both had initially undergone spleen-preserving cystectomy/enucleation with omentopexy, corresponding to 2/9 patients (22.2%) within that procedure group. Patient 3 developed peritoneal recurrence at 24 months and had a total follow-up of 50 months; the original cyst measured 5.9 cm, was Gharbi Type III/WHO-IWGE CE2, and the operation was laparoscopic with documented spillage and 10% povidone-iodine cavity treatment for 15 minutes. Patient 13 developed an omental recurrence at 18 months; the original cyst measured 7.2 cm, was Gharbi Type II/WHO-IWGE CE3a, and no intraoperative spillage was documented. Both patients underwent subsequent hydatid cystectomy.

Table 6. Patients with recurrence. Procedure-specific denominator: 2/9 (22.2%) after cystectomy/enucleation with omentopexy.

Patient	Primary procedure	Time to recurrence	Site	Treatment
3	Laparoscopic enucleation + omentopexy; 5.9 cm; Gharbi III / CE2; preop albendazole: no; spillage: yes	24 months	Peritoneum	Hydatid cystectomy
13	Laparoscopic enucleation + omentopexy; 7.2 cm; Gharbi II / CE3a; preop albendazole: 14 days; spillage: no	18 months	Omentum	Hydatid cystectomy

Focused literature review

Published evidence remains dominated by retrospective case series. Durgun et al. reported 14 patients with isolated splenic hydatidosis, all treated with splenectomy[4]. Nine patients had 2–14 years of follow-up without recurrence; three were lost to long-term follow-up, while two died later of unrelated causes[4]. Dar et al. reported 26 surgically treated patients; the abstract reports 21 with isolated splenic disease, whereas the Results section reports 19[5]. All patients underwent splenectomy except one who initially underwent partial splenectomy but subsequently required splenectomy for postoperative hemorrhage[5]. One recurrence was reported. Akbulut et al. reported nine institutional cases, five of which were primary; six underwent splenectomy and three underwent splenectomy with partial cystectomy and omentopexy, with no recurrence during 1–60 months of follow-up[3]. In the same publication, their literature review comprised 333 surgically treated SHC cases from 27 case series[3].

The Dar et al. report contains an internal discrepancy regarding isolated splenic disease: the abstract reports 21 patients, whereas the Results section reports 19. One recurrence was reported in the original series; because the original report does not provide a uniform recurrence denominator in the abstract, Table 7 does not infer one and instead reports the published cohort size and the follow-up information available from the literature review[5].

Table 7. Source-verified representative published series of splenic hydatidosis and the present institutional cohort. Published denominators are retained as reported; where follow-up was incomplete or the recurrence denominator was not explicitly stated in the original report, this is indicated rather than inferred. *Dar et al.: the abstract reports 21 isolated splenic cases; the Results section reports 19

Study	n	Primary / isolated	Surgical approach	Recurrence / outcome
Akbulut et al. [3] — institutional cohort	9	5/9	Splenectomy, 6; splenectomy + partial cystectomy/omentopexy, 3	No recurrence; follow-up 1–60 months
Durgun et al. [4]	14	14/14	Splenectomy, 14	No recurrence among 9 followed patients; 3 lost to long -term follow-up; 2 later deaths from unrelated causes
Dar et al. [5]	26	21/26*	Splenectomy, 25; partial splenectomy, 1 (converted to splenectomy)	1 recurrence reported; follow -up 84 (13 –192) months in Akbulut's literature table; original report had incomplete follow-up
Atmatzidis et al. [6]	19	16/19	Splenectomy, 11; spleen-preserving, 8	2/15 followed (13%) recurrence; median follow-up 52 (6–300) months
Aljaiuossi et al. [7]	18	18/18	Minimally invasive spleen -preserving surgery	2/18 (11.1%) recurrence; follow -up assessments at 3 months, 1 year and 2 years
Tivadar et al. [8]	10	Not specified in abstract	Partial splenectomy	0/10 recurrence or complications at 2 years; literature review included 42 partial-splenectomy cases
Arikanoglu et al. [9]	11	5/11	Splenectomy, 8; enucleation, 1; partial cystectomy + omentoplasty, 1; laparoscopic drainage + partial cystectomy, 1	Recurrence not reported; postoperative complications 4/11 (36%); follow-up 26.4 (12–44) months
Ozogul et al. [10]	17	7/17	Splenectomy, 10; distal splenectomy, 1; partial c ystectomy/cystotomy + omentoplasty, 6	No recurrence reported; mean follow-up 9.2 (1–17) months
Present series	15	15/15	Total splenectomy, 4; partial splenectomy, 2; cystectomy/enucleation + omentopexy, 9	2/15 overall (13.3%); 2/9 after cystectomy/enucleation + omentopexy (22.2%)

Atmatzidis et al. described 19 patients, including 16 with isolated splenic disease; 11 underwent splenectomy and 8 spleen-preserving surgery. The median follow-up was 52 months among 15 patients with follow-up, and 2 patients (2/15, 13%) developed recurrence. Thus, the recurrence denominator is the followed cohort rather than all 19 patients[6]. More contemporary evidence has increasingly focused on spleen preservation. Aljaiuossi et al. reported 18 patients with primary splenic hydatidosis treated using minimally invasive approaches and observed recurrence in 2/18 patients (11.1%)[7]. Tivadar et al. reported 10 partial splenectomies and reviewed 42 published partial-splenectomy cases; there were no complications or recurrences in their own 10-patient series at 2 years[8].

For the literature review, we selected studies that are most relevant to the present question: classic primary-disease series, studies specifically addressing splenectomy versus spleen-preserving surgery, the Akbulut institutional cohort, and recent contemporary spleen-preserving series. Akbulut et al.'s 333-patient literature review is discussed in the text but is not reproduced as 27 individual studies in this table.

DISCUSSION

The present series illustrates the rarity of primary splenic hydatidosis and the changing surgical philosophy surrounding its management. Earlier reports were dominated by splenectomy. Durgun et al. reported 14 patients with isolated splenic hydatidosis, all treated with splenectomy[4]. Dar et al. reported 26 surgically treated patients from SKIMS Srinagar, with splenectomy ultimately performed in all but one patient[5]. Akbulut et al.'s institutional cohort included five primary cases among nine total splenic hydatid cases, while their separate literature review included 333 surgically treated patients[3].

With increasing recognition of the immunological role of the spleen and the long-term consequences of asplenia, spleen-preserving procedures have become increasingly attractive in appropriately selected patients. Akbulut et al.'s literature review documented spleen-preserving procedures in 81 of 333 patients (24.3%), although the authors emphasized the heterogeneous and retrospective nature of the evidence[3]. More recent series have further emphasized minimally invasive and spleen-preserving approaches[7,8].

In our series, 11 of 15 patients (73.3%) underwent spleen-preserving surgery. The distribution of procedures should be interpreted in the context of selection: patients undergoing total splenectomy had a larger median cyst diameter (11.9 cm) than those undergoing cystectomy/enucleation with omentopexy (7.2 cm), and no prespecified operative thresholds were used. The high proportion of spleen-preserving procedures therefore reflects contemporary institutional practice and surgeon judgment rather than evidence that one technique is superior.

Postoperative morbidity in our cohort was 40.0%. Postoperative collections occurred in 2/9 patients (22.2%) after cystectomy/enucleation with omentopexy and in none of the four total splenectomies or two partial splenectomies. These observations are descriptive only. The groups differed in cyst size, anatomy and operative selection, and the sample is too small to estimate procedure-specific risk or adjust for confounding. The occurrence of collections after cystectomy/enucleation should therefore be considered a clinically relevant observation rather than evidence of increased morbidity from spleen preservation.

The overall recurrence rate in the present cohort was 2/15 (13.3%). Both recurrences occurred after cystectomy/enucleation with omentopexy, giving a procedure-specific observation of 2/9 (22.2%). This should not be interpreted as a comparative recurrence rate because treatment was selected non-randomly and follow-up duration differed between groups. One recurrence followed documented intraoperative spillage and one occurred without documented spillage; the sample is too small to infer a relationship between spillage and recurrence.

Partial splenectomy represents another spleen-preserving option, particularly for localized lesions where an adequate remnant can be maintained. The 2024 review by Tivadar et al. identified 42 published cases of partial splenectomy and reported favorable outcomes in their own 10-patient series[8]. Laparoscopic enucleation with omentopexy has also been described from our institution in a 55-year-old man with a primary splenic hydatid cyst, supporting the technical feasibility of spleen-preserving surgery in selected patients[11]. Total splenectomy remains appropriate when preservation is technically unsafe because of extensive involvement, central or hilar anatomy, or inability to leave adequate viable splenic tissue.

Medical therapy remains an adjunct to surgery in most operable splenic hydatid cysts. In the present cohort, 14/15 patients (93.3%) received preoperative albendazole, with a median recorded preoperative duration of 47.5 days (range 7–80 days), and all 15 received postoperative albendazole

for 90–120 days. Exact albendazole dosage records were not available in the retrospective dataset. Two patients had documented intraoperative spillage; both had 10% povidone-iodine cavity treatment documented. The exact contact duration was not consistently recorded and therefore cannot be reliably reported. The available splenic hydatid literature likewise describes variable perioperative albendazole regimens[3,7].

The prolonged study period also introduces temporal heterogeneity. Changes in laparoscopic availability, imaging quality, perioperative medical therapy, surgeon experience and institutional preference may have influenced the operative distribution over time. Consequently, the operative distribution in this series should not be interpreted as a time-independent estimate of current practice.

The principal strengths of the present study are the inclusion of only primary splenic hydatidosis, a prolonged institutional experience and documented follow-up in all 15 patients, including 50 months in Patient 3. The limitations include the retrospective design, small sample size, heterogeneous operative techniques, absence of a standardized operative algorithm, incomplete documentation of the exact scolicidal contact duration, incomplete capture of cyst sublocation and imaging surveillance schedules, changes in surgical expertise and practice over the 2010–2026 period, and potential selection bias in the choice of procedure. The apparent clustering of collections and recurrence after cystectomy should therefore be considered hypothesis-generating rather than evidence of procedure-related excess risk.

CONCLUSION

Primary splenic hydatidosis remains a rare surgical entity for which evidence is derived mainly from small retrospective series. In our institutional experience, spleen-preserving surgery was feasible in 11 of 15 patients (73.3%). Postoperative complications occurred in 6 of 15 patients (40.0%), and recurrence occurred in 2 of 15 patients (13.3%); both recurrences followed cystectomy/enucleation with omentopexy (2/9, 22.2%). These procedure-specific observations are descriptive and cannot establish comparative safety or efficacy. Operative strategy should therefore remain individualized according to cyst characteristics, disease stage and the feasibility of preserving adequate viable splenic tissue.

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