WebLog Journal of Cancer and Clinical Research

Case Report
Published: 13 Feb, 2026

Congenital Neonatal Infected and Bleeding Hepatic Hamartoma Presenting as a Falciform Ligament Abscess, Successfully Treated by Emergency Left Hepatic Lobectomy, with Subsequent Development of Infantile Hemihypertrophy

*Govani DR[1], Mehta AR[2], Midha PK[3], Govani ND[1], Panchasara NG[1], Patel R[1] and Patel RV[1]**

[1]Department of Pediatrics and Pediatric Surgery, Postgraduate Institute of Child Health & Research and KT Children Govt. University Teaching Hospital, Rajkot 360001, Gujarat, India

[2]Formerly Head, Department of Surgery at Tata Memorial Hospital, Mumbai, India

[3]J. Watumull Global Hospital & Research Centre, Delwara Road, Mount Abu, Rajasthan 307501, India

OPEN ACCESS

Correspondence:
Dr. Ramnik Patel, MD., Department of Pediatrics and Pediatric Surgery, Postgraduate Institute of Child Health & Research and KT Children Govt University Teaching Hospital, Rajkot 360001, Gujarat, India, Tel: +447956896641; E-mail: ramnik@doctors.org.uk; ORCID: http://orcid.org/0000-0003-1874-1715

Received Date: *10 Jan 2026*
Accepted Date: *11 Feb 2026*
Published Date: *13 Feb 2026*

Citation:
Govani DR, Mehta AR, Midha PK, Govani ND, Panchasara NG, Patel R, et al. Congenital Neonatal Infected and Bleeding Hepatic Hamartoma Presenting as a Falciform Ligament Abscess, Successfully Treated by Emergency Left Hepatic Lobectomy, with Subsequent Development of Infantile Hemihypertrophy. WebLog J Cancer Clin Res. wjcacr.2026.b1302. https://doi.org/10.5281/zenodo.18795347

Abstract

Mesenchymal Hamartoma of the Liver (MHL) is a rare benign hepatic pediatric tumor of infancy with approximately 20% of cases diagnosed during the neonatal period, typically presenting as an enlarging abdominal mass. Rare acute complications such as intralesional bleeding and infection can lead to rapid clinical deterioration. Neonatal presentation with infection, haemorrhage, and extension along the falciform ligament is exceptionally uncommon. We report a neonate who presented with sepsis and intralesional and falciform ligament bleeding due to an infected congenital hepatic hamartoma that tracked along the falciform ligament and mimicked a falciform ligament abscess. Emergency left hepatic lobectomy was lifesaving. During infancy, the child developed right-sided hemihypertrophy, prompting tumor-surveillance follow-up. This case highlights the diagnostic complexity of neonatal hepatic masses, the importance of early surgical intervention, and the need for long-term monitoring for overgrowth syndromes.

Keywords: Neonatal Hepatic Hamartoma; Mesenchymal Hamartoma of the Liver; Falciform Ligament Abscess; Neonatal Sepsis; Intraperitoneal Haemorrhage; Emergency Hepatic Lobectomy; Left Hepatic Lobectomy; Hepatic Resection; Congenital Liver Tumor; Hemihypertrophy; Hemihyperplasia; Overgrowth Syndromes; Pediatric Hepatobiliary Surgery; Neonatal Abdominal Mass

Introduction

Mesenchymal hamartoma is the second most common benign liver tumor of childhood but is rarely symptomatic in the neonatal period [1-10]. Infection and intralesional hemorrhage are unusual complications [3]. Extension along the falciform ligament is extremely rare and may mimic a primary falciform ligament abscess [4, 5].

Hemihypertrophy (also termed hemihyperplasia) is a recognised but infrequent association of mesenchymal hamartoma, likely reflecting shared pathways with congenital overgrowth disorders [7, 8]. Its presence necessitates ongoing tumour surveillance due to increased risk of embryonal tumours [7, 8].

This case is notable for congenital hepatic hamartoma presenting in the neonatal period [6, 9], secondary infection and haemorrhage [3], falciform ligament involvement mimicking an abscess [4, 5], emergency left hepatic lobectomy, and later development of hemihypertrophy requiring long-term follow-up [7, 8]. This manuscript describes an exceptionally rare neonatal presentation of congenital hepatic hamartoma complicated by infection, intraperitoneal haemorrhage, and inflammatory extension along the falciform ligament - an unusual combination that initially mimicked a primary falciform ligament abscess [4, 5]. Emergency left hepatic lobectomy was lifesaving and curative. During infancy, the child developed hemihypertrophy, a recognised but

WebLog Open Access Publications
Article ID : wjcacr.2026.b1302
Author : Dr. Ramnik Patel, MD.

uncommon association of mesenchymal hamartoma, prompting long-term tumour-surveillance follow-up [7, 8].

Case Presentation

A term neonate (day 9 of life) presented with fever, irritability, and poor feeding, progressive abdominal distension, respiratory distress with tachycardia and pallor (Figure 1A).

Examination revealed an infected umbilical cord area with methylene blue application by general practitioner and pediatrician, tender distended right and central upper abdomen, a large firm tender epigastric mass, no jaundice and purulent umbilical discharge (Figure 1B). The patient exhibited signs of acute sepsis with fever, elevated inflammatory markers and severe anemia with pallor, falling hemoglobin levels, suggesting secondary infection and internal bleeding within the lesion.

Laboratory findings included leukocytosis and markedly elevated CRP, falling hemoglobin, mildly raised transaminases, and normal coagulation profile.

The clinical picture suggested intra-abdominal sepsis with possible hemorrhage. Broad spectrum antibiotics were started.

Abdominal radiograph showed a soft tissue mass in the falciform ligament area and the left lobe of liver (Figure 2). Abdominal imaging ultrasound showed a large, heterogeneous, predominantly cystic lesion arising from the left hepatic lobe in segments II-III, internal debris and septations, fluid-fluid levels indicating haemorrhage, inflammatory extension along the falciform ligament and free intraperitoneal fluid consistent with hemoperitoneum. Contrast CT was not available in our institution in 1989.

The working diagnosis was an infected falciform ligament abscess with associated hemorrhage, though a hepatic origin remained possible.

Management

The infant deteriorated rapidly with worsening anaemia and rising lactate. Emergency incision and drainage was booked in the late evening. Examination under anesthesia and aspiration of the soft fluctuant lesion in the falciform ligament with pus and fresh blood allowed too clearly. palpate underlying solid tumor in the left lobe of liver. Emergency laparotomy and proceed was considered after discussion was undertaken with the parents, sending blood samples with medical student to get 4 units of pack red cells, requesting extra surgical and nursing staff to join the team.

Operative findings showed a large cystic mass arising from the left hepatic lobe with intralesional bleeding with rupture into the peritoneal cavity, purulent material tracking along the falciform ligament and the umbilical source of infection was evident. To achieve definitive control of the bleeding and source of infection, an emergency left lobectomy was conducted. Meticulous ligation of the left hepatic artery, portal vein, and left hepatic duct was performed to minimize blood loss. A left hepatic lobectomy (with the lesion in segments II-III) was performed. The falciform ligament was excised due to extensive inflammatory involvement.

Histopathology

Macroscopic examination showed a multicyclic mass containing hemorrhagic fluid and areas of necrosis (Figure 3). Histopathology confirmed the diagnosis of Mesenchymal Hamartoma of the Liver (MHL), characterized by a proliferation of mesenchymal stroma, bile ducts, and hepatocytes without evidence of malignancy. Features consistent with mesenchymal hamartoma of the liver with myxoid stroma with cystic spaces, areas of acute haemorrhage, neutrophilic infiltration confirming secondary infection.

Outcome

Postoperative recovery was uneventful. Sepsis resolved with intravenous antibiotics. Liver function normalised, and the infant was discharged home in good condition.

Development of Hemihypertrophy

At 6 months of age, parents noted asymmetry of limb and trunk size. Examination confirmed right-sided hemihypertrophy.

Investigations in the form of abdominal ultrasound: no recurrent hepatic lesion, normal renal ultrasound and no features of Beckwith-Wiedemann syndrome.

The child was enrolled in a tumour-surveillance programme with:

- 3-monthly abdominal ultrasound

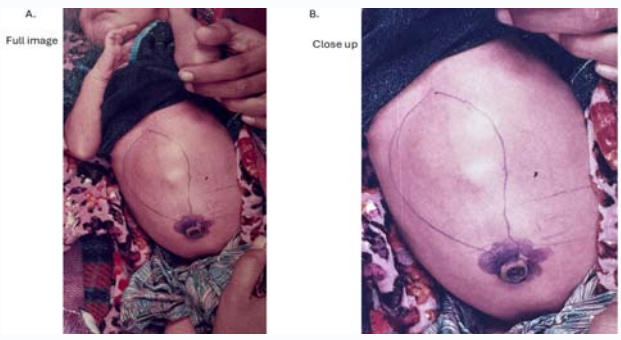

Figure 1: Clinical photographs A. Full B. Close up.

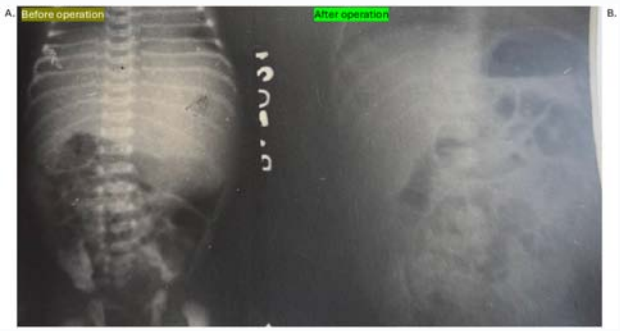

Figure 2: Abdominal radiographs A. Before operation, B. After operation.

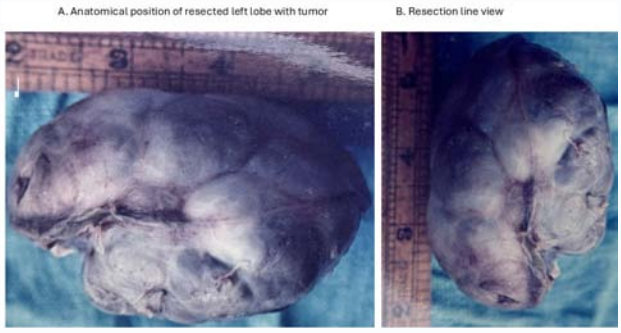

Figure 3: Resected specimen A. Hepatic left lobe with tumor in anatomical position, B. resection line view.

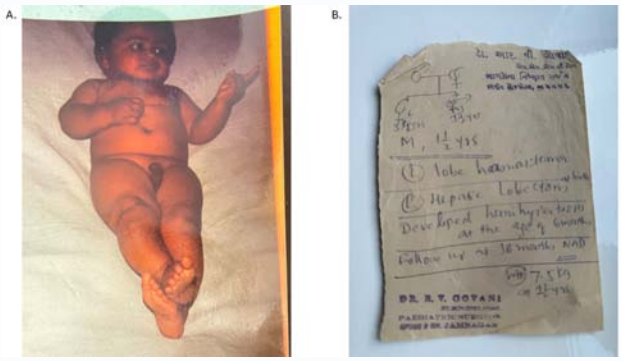

Figure 4: Clinic follow up at 18 months. A. Clinical photograph-Note right sided hemihypertrophy B. Clinical note at follow-up.

- 3-monthly serum Alpha-Fetoprotein (AFP)

No tumours have been detected to date, and the child continues to grow and develop normally. The patient had consanguineous parents with a 13 year old boy and 3.6 year old girl both fit and well and no significant family history (Figure 4).

Discussion

Hepatic mesenchymal hamartoma is the second most common benign liver tumor in children [1, 2]. Most cases occur in the right lobe, with left-lobe involvement seen in only approximately 11% of patients [1]. Although histologically benign, its rapid postnatal growth - often due to fluid accumulation - can cause diaphragmatic compression, respiratory distress, and hemodynamic instability [3, 9].

Emergency hepatectomy in neonates is rare and carries a high risk of surgical complications, including severe hypovolemia [9, 10]. However, in cases of life-threatening complications like infected cysts or intralesional bleeding, radical surgical excision is the gold standard for both diagnosis and curative treatment [1, 3]. Complete resection avoids the risks of local recurrence and potential (though rare) malignant transformation into undifferentiated embryonal sarcoma [1, 2].

This case demonstrates several rare features of neonatal hepatic hamartoma:

1. Neonatal presentation with infection and haemorrhage

Most mesenchymal hamartomas are asymptomatic. Infection and bleeding are unusual and can obscure the diagnosis [3, 6].

2. Falciform ligament involvement

The falciform ligament, a remnant of the ventral mesentery, can act as a conduit for inflammatory spread. This led to diagnostic

confusion with a primary falciform ligament abscess [4, 5].

3. Emergency surgical intervention

Given the combination of sepsis, haemorrhage, and diagnostic uncertainty, early surgical exploration was essential. Neonatal left hepatic lobectomy is safe in experienced hands [9, 10].

4. Development of hemihypertrophy

Hemihypertrophy is a recognised but rare association of mesenchymal hamartoma. Its presence mandates tumour surveillance due to increased risk of hepatoblastoma, Wilms tumour, and adrenal tumours [7, 8].

This case underscores the importance of long-term follow-up even after complete surgical cure. We hope this case will contribute meaningfully to the literature on neonatal hepatic tumours, paediatric hepatobiliary surgery, and congenital overgrowth syndromes.

Patient's Perspective

When our baby first became unwell, everything happened so quickly that we barely had time to understand what was going on. One moment we were settling into life with new born baby, and the next we were surrounded by monitors, alarms, and a team of doctors explaining that our newborn had a serious infection and internal bleeding. Hearing the words "emergency surgery" was terrifying. We handed our baby over to the surgical team hoping they could save him, but feeling completely powerless.

The relief we felt when the operation was successful is something we will never forget. We are deeply grateful for the skill, calmness, and compassion of everyone who cared for our child during those critical hours. As we recovered from the shock, we learned more about the rare liver condition that caused all of this. Even after the surgery, we found ourselves worrying about what the future might hold.

When hemihypertrophy became noticeable during infancy, it brought a new wave of anxiety. We had never heard of this condition before, and the idea of needing long-term tumour surveillance was overwhelming. Over time, with clear explanations and supportive follow-up, we have learned how to manage these worries and focus on our child's growth and development. Today, he is thriving, active, and full of personality.

Looking back, this experience taught us how quickly life can change and how important it is to have a medical team that listens, explains, and acts decisively. We hope that sharing our story helps other families facing rare and frightening diagnoses feel less alone.

Learning Points

- Mesenchymal hamartoma can present in the neonatal period with infection and hemorrhage.
- Extension along the falciform ligament may mimic a primary falciform ligament abscess.
- Emergency hepatic lobectomy can be lifesaving when sepsis and bleeding coexist.
- Hemihypertrophy may develop in infancy and requires structured tumour surveillance.
- Long-term follow-up is essential even after complete excision of benign hepatic lesions.

Conclusion

This case illustrates an exceptionally rare neonatal presentation of congenital hepatic hamartoma complicated by infection, haemorrhage, and inflammatory extension along the falciform ligament, initially mimicking a primary falciform ligament abscess. Rapid clinical deterioration required urgent surgical intervention, and emergency left hepatic lobectomy proved both lifesaving and curative. The subsequent development of hemihypertrophy in infancy underscores the recognised association between mesenchymal hamartoma and congenital overgrowth disorders, highlighting the importance of long-term tumour-surveillance protocols even after complete excision of a benign lesion. Early recognition, decisive surgical management, and structured follow-up are essential to optimise outcomes in these rare but complex presentations.

References

1. Stringer MD, Alizai NK. Mesenchymal hamartoma of the liver: a systematic review. J Pediatr Surg. 2005; 40(11): 1681-1690. doi: 10.1016/j.jpedsurg.2005.07.052.
2. Stocker JT, Ishak KG. Mesenchymal hamartoma of the liver: report of 30 cases and review of the literature. Pediatr Pathol. 1983; 1(3): 245-267. doi: 10.3109/15513818309040663.
3. Chung EM, Cube R, Lewis RB, Conran RM. Pediatric liver masses—radiologic-pathologic correlation. Radiographics. 2010; 30(3): 801-826. doi.org/10.1148/rg.303095173.
4. Stringer MD. The falciform ligament: anatomy and pathology. Pediatr Radiol. 2012; 42(10): 1284-1298.
5. Bair MJ, Lin JT, Hsu HS, Chen JS. Falciform ligament abscess: a rare cause of epigastric pain. J Gastroenterol Hepatol. 2004; 19(4): 482-483.
6. D'Agostino S, Rinaldi VE, Rinaldi L. Neonatal hepatic tumors: clinical, imaging, and pathological findings. Cancers (Basel). 2021; 13(9): 2143.
7. Clericuzio CL, Martin RA. Diagnostic criteria and tumor screening for individuals with isolated hemihyperplasia. Genet Med. 2009; 11(3): 220-222. doi: 10.1097/GIM.0b013e31819436cf.
8. Lapunzina P. Risk of tumorigenesis in overgrowth syndromes: a comprehensive review. Am J Med Genet C Semin Med Genet. 2005; 137C(1): 53-71. doi: 10.1002/ajmg.c.30064.
9. Isaacs H Jr. Fetal and neonatal hepatic tumors. J Pediatr Surg. 2007; 42(11): 1797-1803. doi: 10.1016/j.jpedsurg.2007.07.047.
10. Roebuck DJ, Perilongo G. Hepatic tumours in children: diagnosis and management. Eur J Radiol. 2002; 43(2): 133-45.