

## Short Clinical Report

© 2022 Samia et al.

Submitted: 10-08-2022

Accepted: 01-11-2022

License: This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

DOI: <https://doi.org/10.47338/jns.v11.1124>

## Hernia of umbilical cord containing gallbladder

Krioudj Samia, Samari Bilel Zakaria,\* Zineddine Soualili

Pediatric Surgery Department, University Hospital Center of SETIF, Algeria

**Correspondence\***: Samari Bilel Zakaria, Pediatric Surgery Department, University Hospital Center of SETIF, Algeria. **E-mail**: samaribilel@gmail.com

## CASE PRESENTATION

An 11-day-old male neonate delivered by C-section presented to the emergency department with the misdiagnosis of umbilical hernia. The physical examination found a hernia of the umbilical cord with a defect of 3cm, and a small non-reducible umbilical mass covered with a thick and opaque membrane. The newborn has no other physical anomalies. Laboratory tests were also within normal ranges. The abdominal US was poorly contributive, and the radiologist concluded that there is an intraperitoneal structure within the sac without anomalies of the hepato-biliary and urinary tracts.



Figure 1: Hernia of the umbilical cord. The inset shows a freely floating gallbladder arising from under the surface of the liver (Arrowhead).

On exploration, a collapsed tubular structure adherent to the internal layer of the sac and attached to the inferior face of the liver by an elongated pedicle was found. We identified the structure as a floating gallbladder and performed a cholecystectomy to prevent further complications such as torsion, inflammation, and perforation (Fig.1). The defect was

closed with umbilicoplasty. The post-operative period was uneventful, and the boy was discharged after breast feeding without complications. A histopathology study confirmed it as the gallbladder with inflammatory changes.

## DISCUSSION

The intra-abdominal organs contained in the HUC are mostly the intestine. This is the second case of a HUC with a floating gallbladder reported in the literature. [1] Otherwise, two cases of omphalocele containing the gallbladder embedded in an accessory liver lobe were reported. [2, 3] One of them has been treated conservatively and developed a twisted gallbladder on the 5th day postoperatively. [4]

The overall prognosis of HUC is very good owing to a small defect and lack of complex anomalies. The floating gallbladder may be related to perturbation of the embryological migration of the organ, which leaves it mobile and attached to the liver by a stalk consisting of the cystic duct and artery. [5]

Generally, the contents are reduced, and the defect is closed. In the index case, we found a floating gallbladder, and cholecystectomy was done to prevent gallbladder torsion in the future.

**Acknowledgements:** Nil

**Conflict of Interest:** None declared

**Source of Support:** Nil

**Consent to Publication:** Author(s) declared taking informed written consent for the publication of clinical photographs/material (if any used), from the legal guardian of the patient with an understanding that every effort will be made to conceal the identity of the patient, however it cannot be guaranteed.

**Author Contributions:** Author(s) declared to fulfil authorship criteria as devised by ICMJE and approved the final version.

## REFERENCES

1. Patricio GS, Jorge SH, Caicedo HR, Cardona AF, Cardona CD. Floating gallbladder in exomphalos minor an exceptional condition that should be considered, a case report. *Int J Surg Case Rep.* 2022; 92:106809. Available from: <https://doi.org/10.1016/j.ijscr.2022.106809>
  2. Rougemont AL, Sartelet H, Oligny LL, Bensoussan A, Yazbeck S, Fournet JC. Accessory liver lobe with mesothelial inclusion cysts in an omphalocele: a new malformative association. *Pediatr Dev Pathol.* 2007; 10:224-8.
  3. Azmy A, Boddy SA, Eckstein HB. Torsion of the gallbladder, embedded in an accessory lobe of the liver in a neonate with Beckwith syndrome. *Z Kinderchir Grenzgeb.* 1980; 30:277-9. Available from: <https://doi.org/10.1055/s-2008-1066372>.
  4. M. Grob. Conservative treatment of exomphalos, *Arch Dis Child.* 1963; 38: 148; Available from: <https://doi.org/10.1136/adc.38.198.148>.
  5. Abou Sleiman C, Terro JJ, Semaan DB, Nicolas G, El Shami J, El Helou E, et al. Gallbladder volvulus: an unusual presentation. *Am J Case Rep.* 2019; 20:1879.
-