Laparoscopic fundus-first cholecystectomy in children with prior abdominal surgeries: A case series

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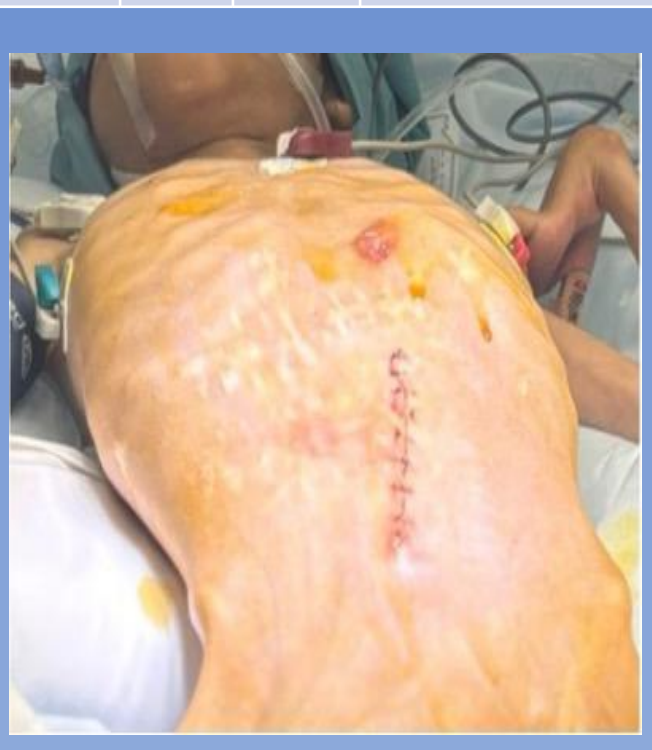
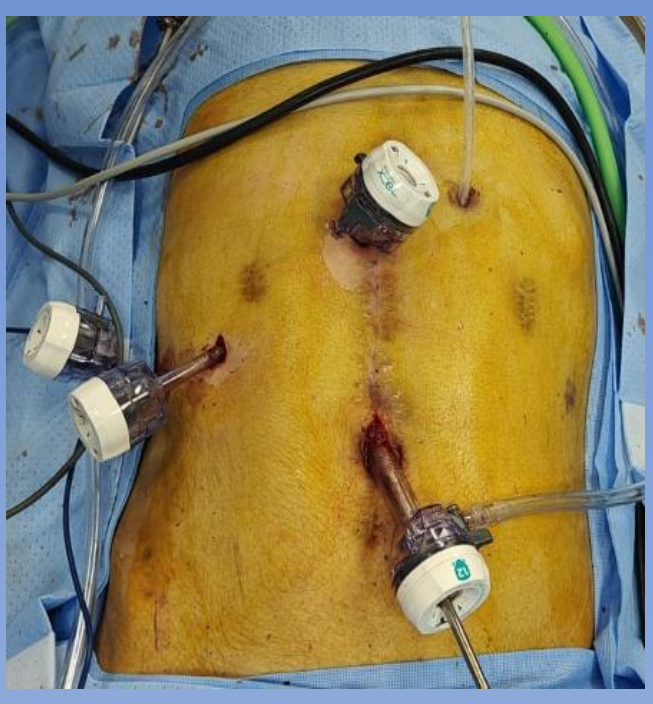
Introduction:
Gallbladder disease is increasingly diagnosed in children. In some cases, adhesions from prior abdominal surgeries may make the standard infundibulum-first dissection very difficult. The fundus-first (top-down) cholecystectomy technique offers an alternative in those cases.

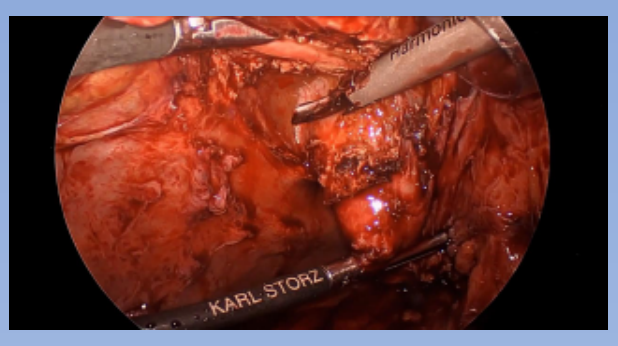
Case series:
We present five pediatric cases of calculous cholecystitis in patients with complex surgical histories.

CASE	SEX	AGE YR	DX PREVIUS	SURGERY	FOLLOW	FUNDUS FIRST MIN	VO (HRS)	DISCHARGE DAYS
1	F	12	INTUSSUSCEPTION	MULTIPLE	2 YEARS	75	18	4
2	F	6	NEC RESECTION BOWEL	MULTIPLE	6 MONTH	65	12	3
3	F	16	NEC	MULTIPLE	4 YEARS	45	8	3
4	F	13	HIRSCHSPRUNG	MULTIPLE	3 YEARS	65	8	4
5	M	9	PYLORIC HYPERTROPHY	MULTIPLE	1 YEAR	75	8	3

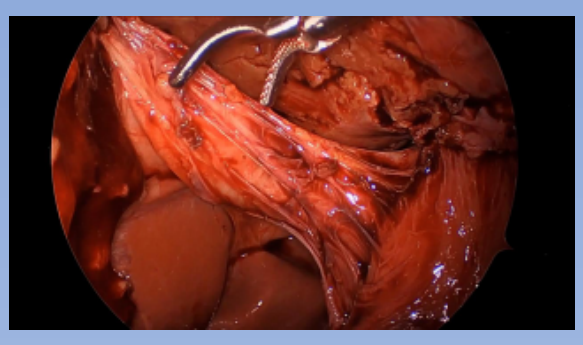


When exploring the abdomen we evaluate where to install the trocars

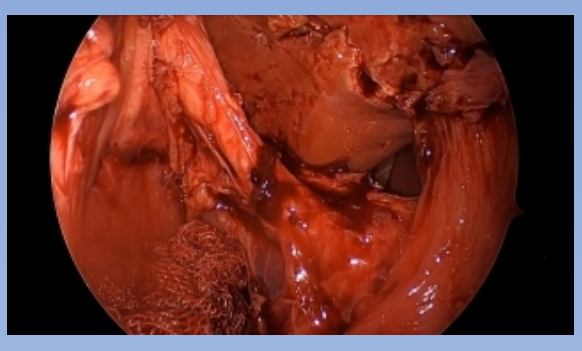




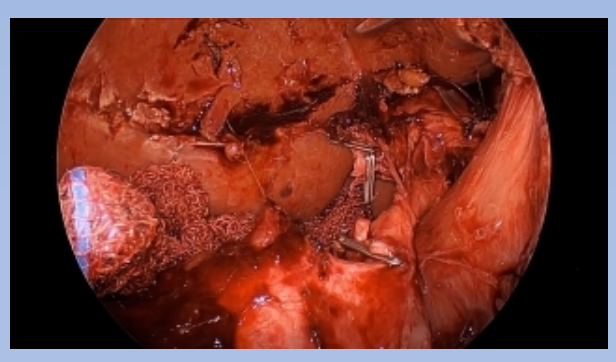
Release of adhesions, we use Harmonic scalpel.



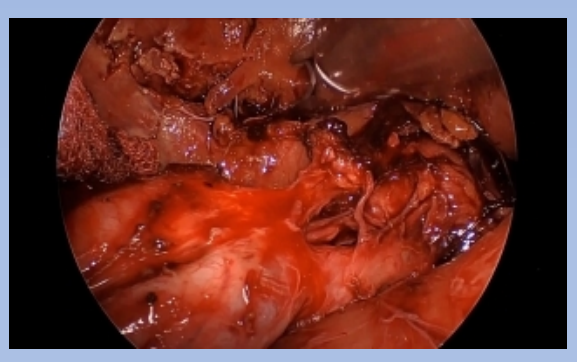
We identify the fundus of the Gallbladder.



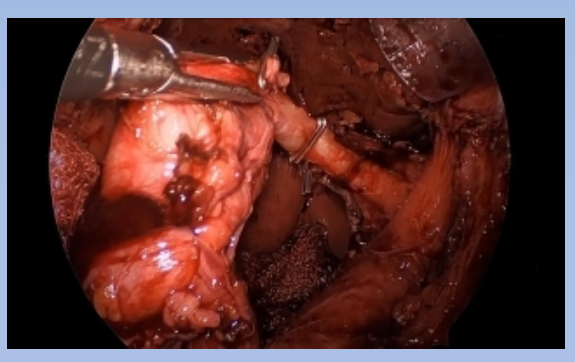
A subserosal dissection and dettach the gallbladder from the hepatic bed.



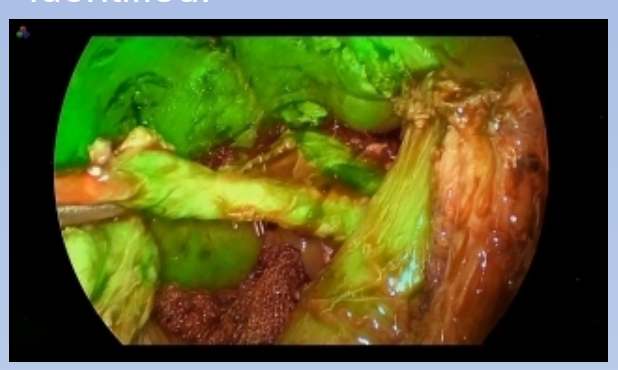
Once the infundibulum is reached the cystic duct is identified.



It is common through this approach to identify the cystic duct before identifying the cystic artery.



We then place clips on the cystic duct and divide it.



We then place clips on the cystic duct and divide it.
The cystic artery typically becomes visible at this point.
We then clipp it and divide it.

Indocyanine green is very useful to us.

Conclusion:
Fundus-first laparoscopic cholecystectomy is a safe and effective alternative to a standard cholecystectomy in pediatric patients with complex surgical histories and limited infundibular access.