

FIRST WORLD CONGRESS OF THE INTERNATIONAL LAPAROSCOPIC LIVER SOCIETY

LAPAROSCOPIC LIVER RESECTION: FROM INNOVATION TO STANDARD PRACTICE JULY 6-8 2017 MAISON DE LA CHIMIE PARIS - FRANCE

What is the place of hand-assisted liver surgery?

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Hand-Assisted Laparoscopic Surgery (HALS)



- Utilizing the hand (via small adjunct incision) as:
 - Multi-purpose instrument
 - Liver retraction
 - Specimen extraction (cancer)
 - Safety in surgical education
 - Ad hoc use of "open techniques"
 - Rapid control (hemorrhage)



HALS vs. pure laparoscopic



- personal experience and preference
- Assistant's abilities
- Case specifics
 - Cancer
 - Lesion size/location
 - Patient factors
 - Patient expectations
- Style and comfort level





Hand Port Location



- Consider its *function*:
 - Extraction
 - Hand-assist (retraction vs. dissection)
 - Adjunctive procedure (ex. Autotransplant)
 - Maintain visualization
- Consider abdominal wall structures
 - Cosmesis?
 - musculature
- Consider *potential* for:
 - Conversion
 - Hybrid events





Hand-assist in surgical education

- surgical "maestro" concept
- Description on operative field
- Real-time control
- Tactile feedback (tissue fragility, stapler passage)



• Speed



Programmatic trends (hemihepatectomy)



Laparoscopic "hybrid"



- an extension of HALS
- Either intermittent open techniques or completion approach
- Thoughtful location of incision allows full spectrum of MIS approaches
- Allows progression of MIS experience (ex. Mobilization -> vascular dissection -> transection)
- Reduces incision size in open surgery by performing laparoscopic "remote" tasks (ex. Adhesiolysis, Roux limb construction)



Review of literature



- The "hybrid" method (*Surgery*, 2008): attempts to coax progress of LLS
- Recommendations for laparoscopic liver resection: a report from the second international consensus conference held in Morioka. *Ann Surg*, 2015
- Approaches to laparoscopic liver resection: a meta-analysis of the role of hand-assisted laparoscopic surgery and the hybrid technique. Hasegawa, Koffron, Buell, Wakabayashi. *J Hepatobiliary Pancreat Sci*, 2015
 - Literature 1991-2014
 - 75 studies, 18 series (9 HALS, 9 hybrid)
 - Most centers utilize the MIS spectrum in LLS
 - Non-superiority of methods
 - Question of progression to PLS with experience

SUMMARY



- HALS bridges the *crevasse* between pure laparoscopic and open liver surgery
- Use of HALS is case-specific
- Obvious situational advantages, but not superior approach
- Fosters surgical education in LLS
- Promotes consideration of MIS in the treatment of liver disease





Questions?