

Archamps, March 13th, 2017

SURGICAL TREATMENT OF LIVER ADENOMA

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**A. Rode
AF. Manichon**

RADIOLOGIE

**CHIRURGIE
&
TRANSPL
HEPATIQUE**

**C. Ducerf
JY. Mabrut
M. Lesurtel**

JC. Souquet

**GASTRO
ONCOLOGIE**

**FOIE
EN
CRISE**

**REA
CHIR**

**S. Duperret
L. Heyer**

**F. Zoulim
Ph. Merle**

HEPATOLOGIE

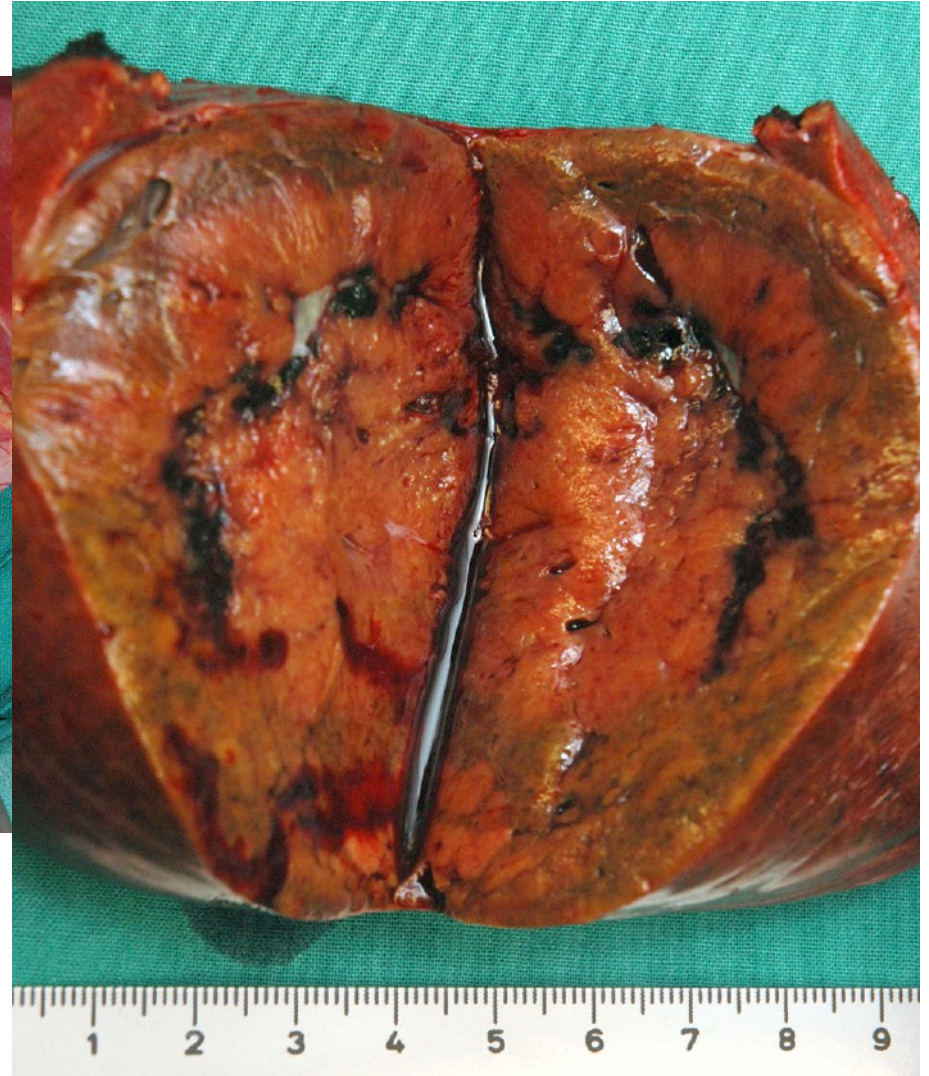
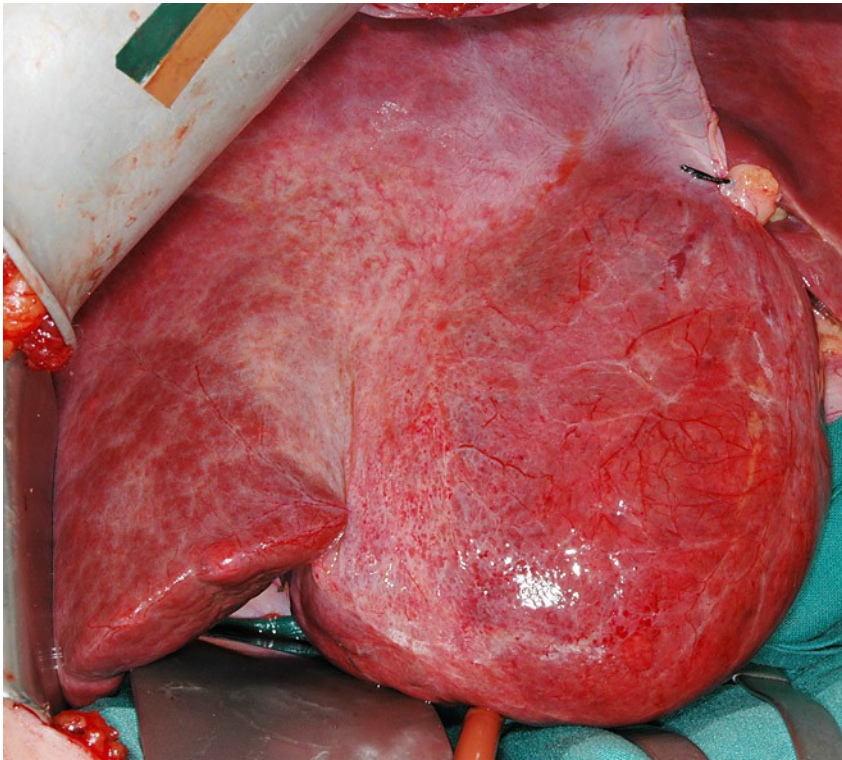
**ANATOMIE
PATHOLOGIE**

**B. Bancel
V. Hervieu**

Adenoma

- Rare benign neoplasm associated with:
 - Female predominance (>90%): 3-4 per 100,000 women
 - Contraceptives (>2 years)
 - Anabolics or androgens
 - Glycogen storage disease
- Multiple adenomas in ~20%
- Hepatic Adenomatosis: multiple (>10) adenomas

Adenoma



Clinic

- Symptom free (53%)
- Symptoms present
 - Abdominal discomfort/pain
 - Signs of bleeding
- Liver tests abnormal in 60%
 - Transaminases 20%
 - Alk phosphatase 50%
 - Gamma-glutamyl-transferase 60%

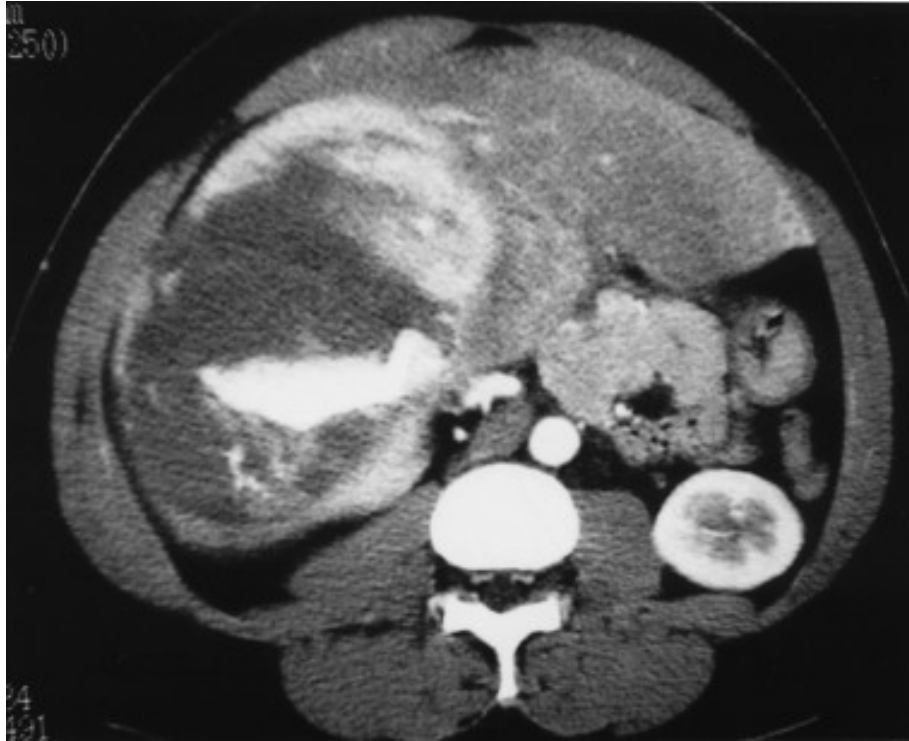
Adenoma - Risks

Risks

- Bleeding (15-20%)
- Rupture
- Malignancy (8%)

**NOT related to the NUMBER of adenomas
BUT more to the SIZE >5cm**

Bleeding Adenoma



Intratumoral hemorrhage

Bleeding Adenoma



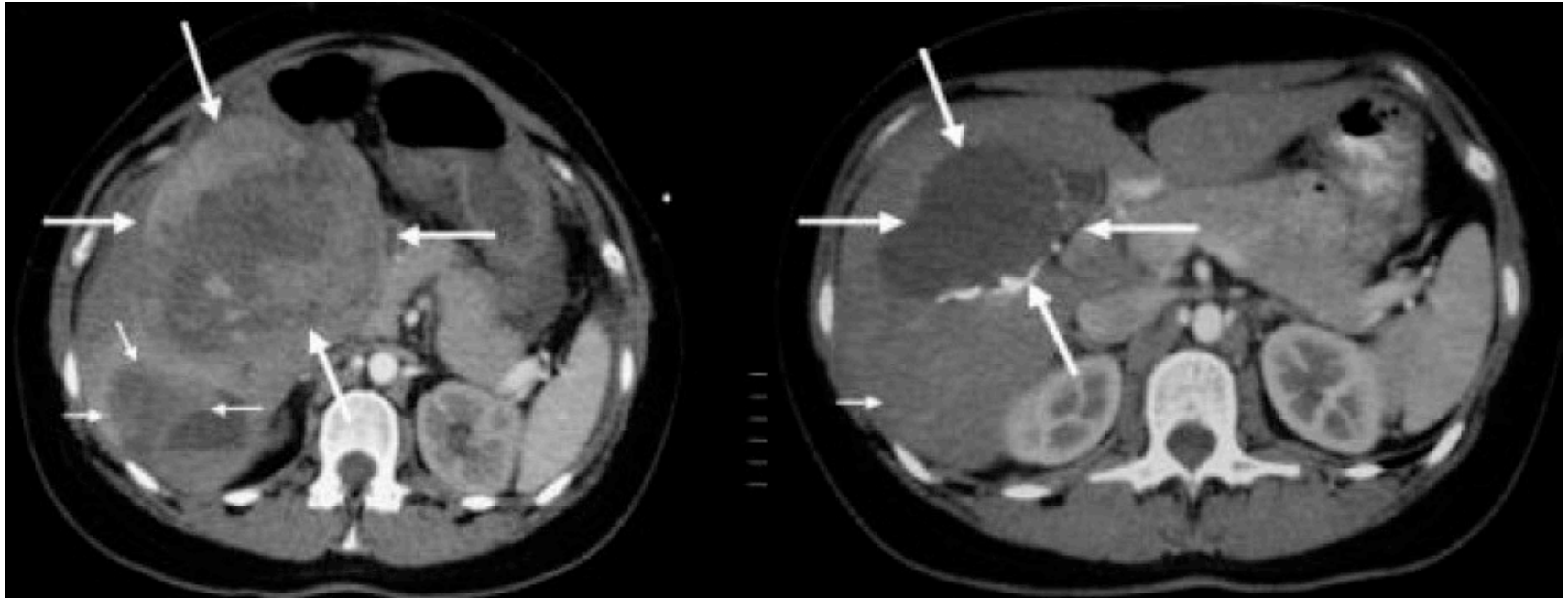
Intraperitoneal tumor rupture

Bleeding Adenoma

Management of bleeding adenoma

- Transarterial embolization
- Stop oral contraceptives
- Elective oncological surgical resection

Bleeding Adenoma

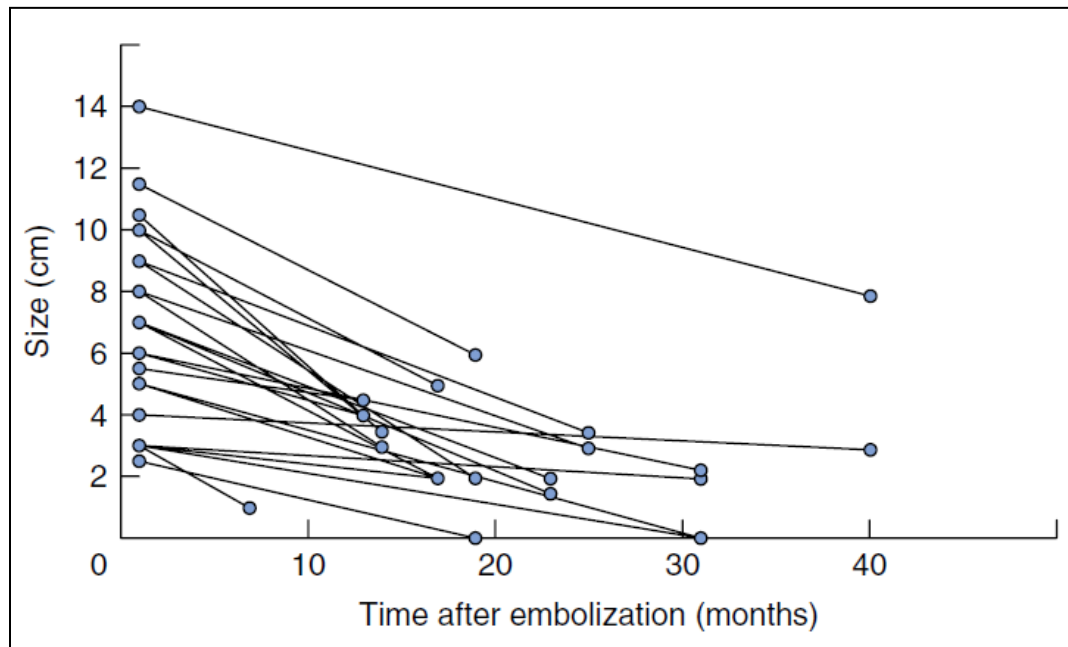


Before arterial embolization

10 mo after embolization

Bleeding Adenoma

- Successful first embolization: 91%
- 1 patient required 3 embolizations
- No procedure-related major complications



Management uncomplicated adenoma

- Stop oral contraceptives, Loss of weight
- Surgical resection (lesion >5cm)
 - Tumors may regress slowly
- Transplantation as ultimate option
 - Rare cases of transplantation reported
 - Multiple big unresectable lesions
 - Centrally located lesions
 - Two case series available with 6 and 2 patients - no mortality reported

Lerut et al. J Hepatol 2007;47:466-75
Mortele et al. Clin Liver Dis 2002;6:119-45

High risk of Malignancy

- Men
- Hepatitis
- Underlying glycogen storage disease
- Sex steroid hormone abuse

more aggressive treatment is advised
even for lesions < 5 cm.

Adenomatosis

- >10 Adenomas
- Strong association with glycogen storage disease
- Often the same subtypes (H-HCA and IHCA)
- No clear data that should be treated differently from solitary HCAs

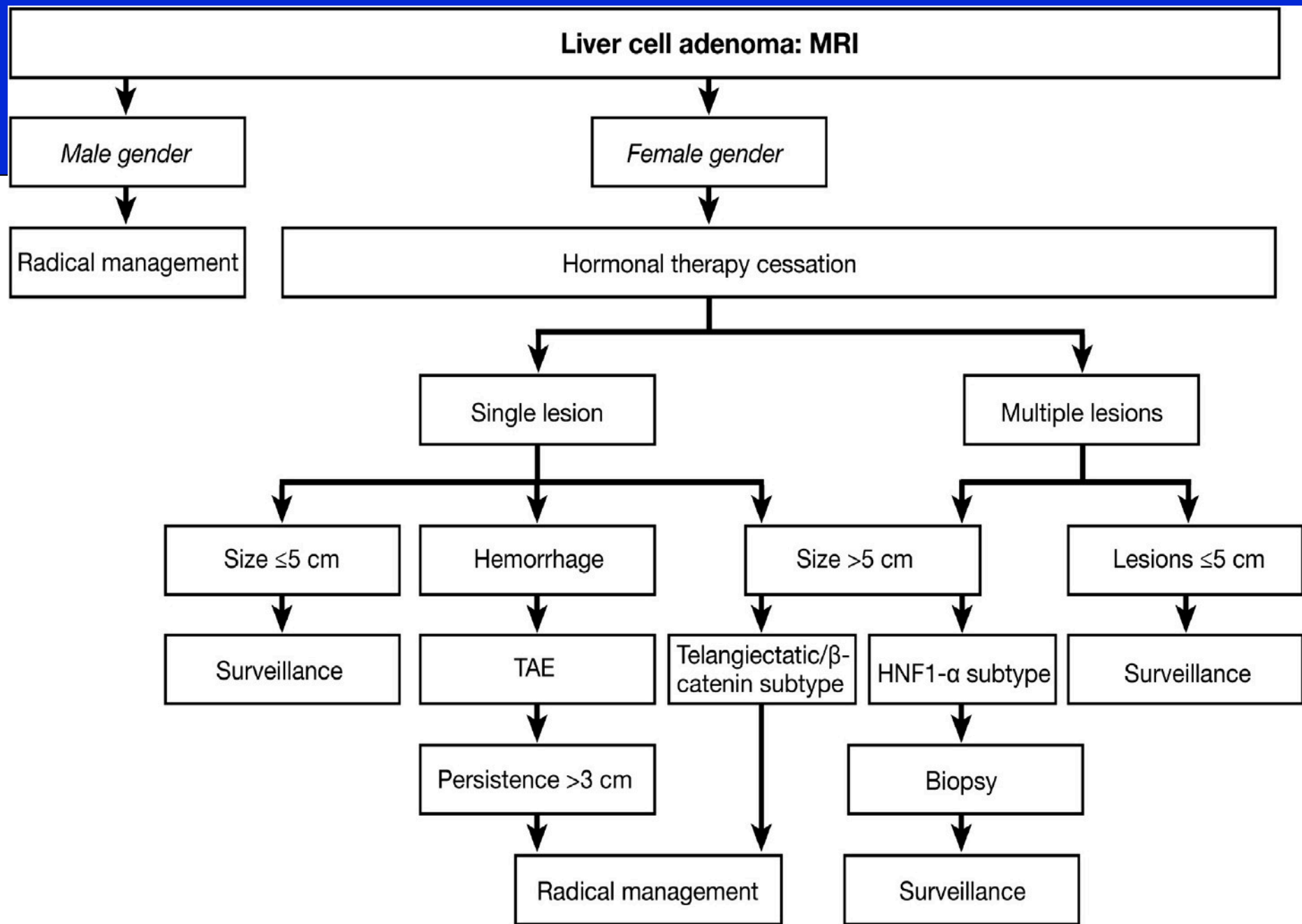
The Bordeaux Classification

Type	Steatotic	β -catenin	Inflammatoire (Telangiectasic)	Unclassified
Histological features	Steatosis >60%	Cholestasis Cell dysplasia	Portal track remnants Vascular changes Inflammation	No specific
Hemorrhage	Rare	\pm	+++	
Malignancy	No	+++		+
Mutation	hepatocyt nuclear factor 1	activated	GP 130	Rare

Subtyping= refinement in management

Biopsy

- In very selected cases
- HCA cannot be differentiated from FNH or well-differentiated HCC with any imaging modality.
- Risk of bleeding < 1%



Outcome after hepatectomy

- Mortality ~ 0%
- Morbidity 15%
- Resectability of single tumors: 100%
- Resectability of multiple tumors: 25%
 - Need for surveillance

Laparoscopic Liver Resection



Invited Faculty

(as of 11th October 2016)

Validation Committee

Horacio Asbun, USA

Joseph Buell, USA

Pierre-Alain Clavien,
Switzerland

Christos Dervenis,
Greece

Giuseppe Fusai, UK

David Geller, USA

Hauke Lang, Germany

John Primrose, UK

Mark Taylor, Ireland

Thomas van Gulik, Netherlands

Go Wakabayashi, Japan

Expert Panel

Luca Aldrighetti*, Italy

Ruslan Alikhanov, Russia

Somaiah Aroori, UK

Giulio Belli, Italy

Marc Besselink, Netherlands

Javier Briceño, Spain

Daniel Cherqui*, France

Ibrahim Dagher*, France



The First European Guidelines Meeting on Laparoscopic Liver Surgery

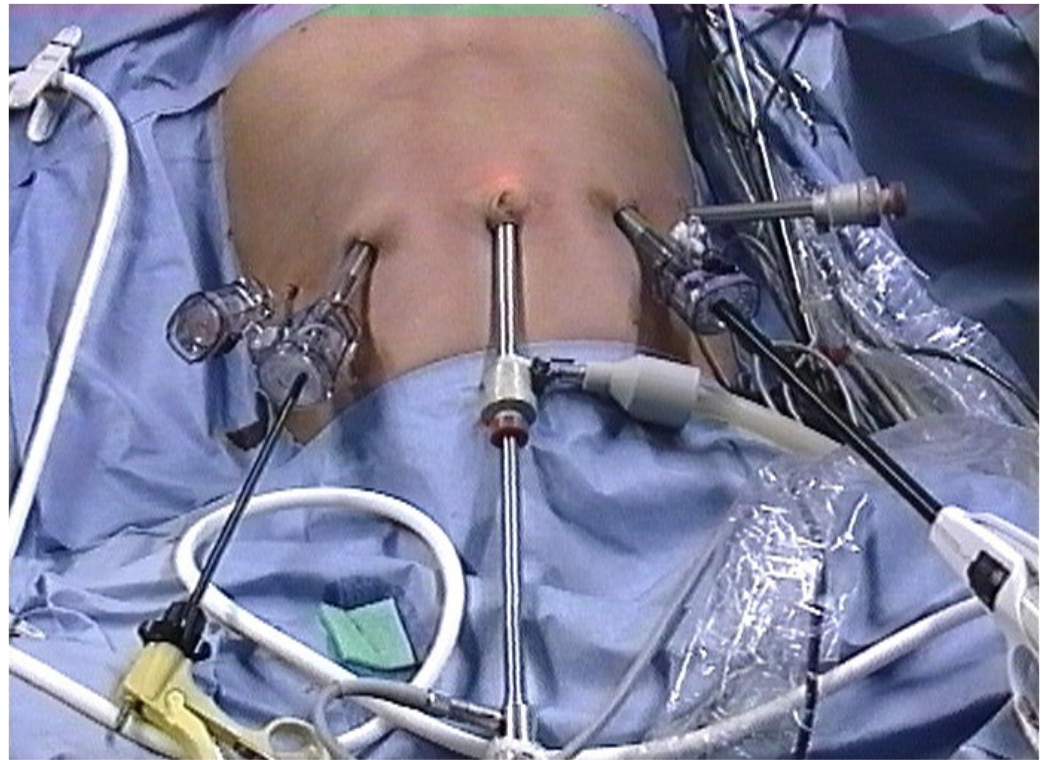
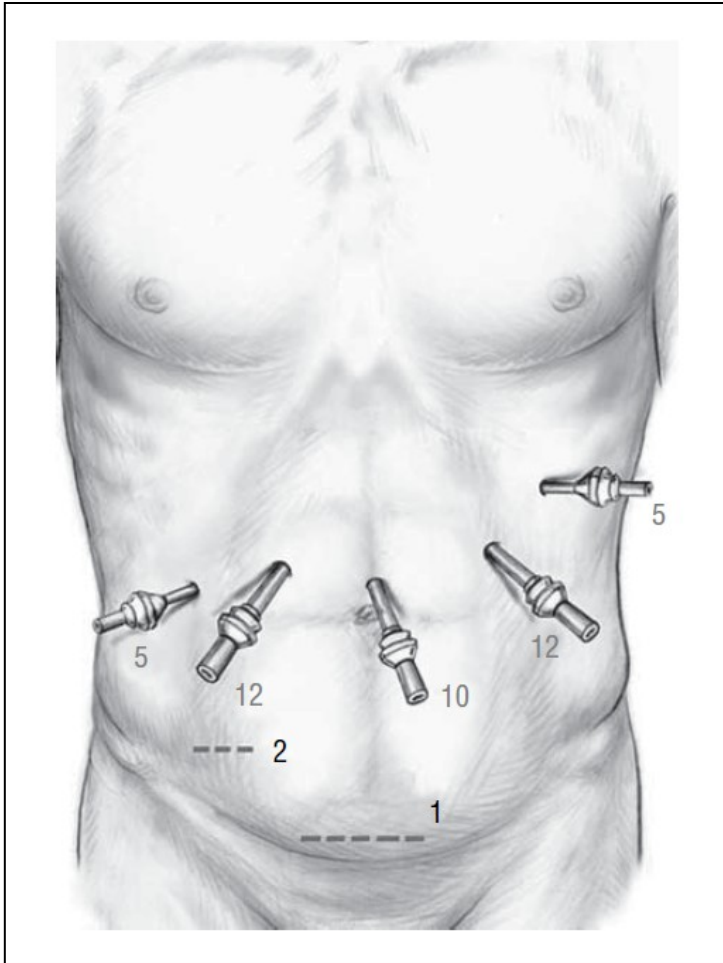
10th-11th February 2017

9th February Pre-Congress Technical Course

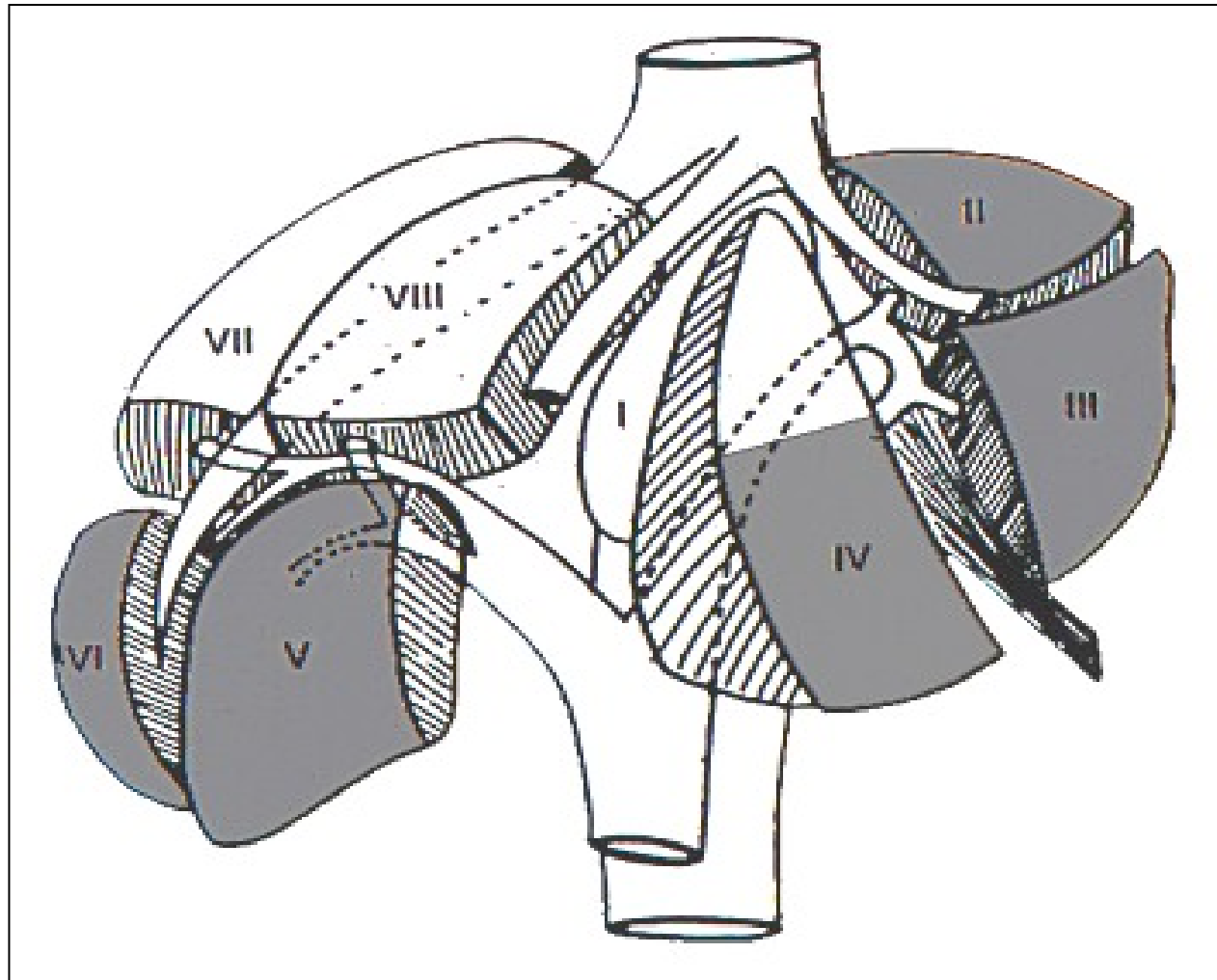
Southampton, UK

Hilton at the Ageas Bowl, Southampton

Laparoscopic Liver Resection



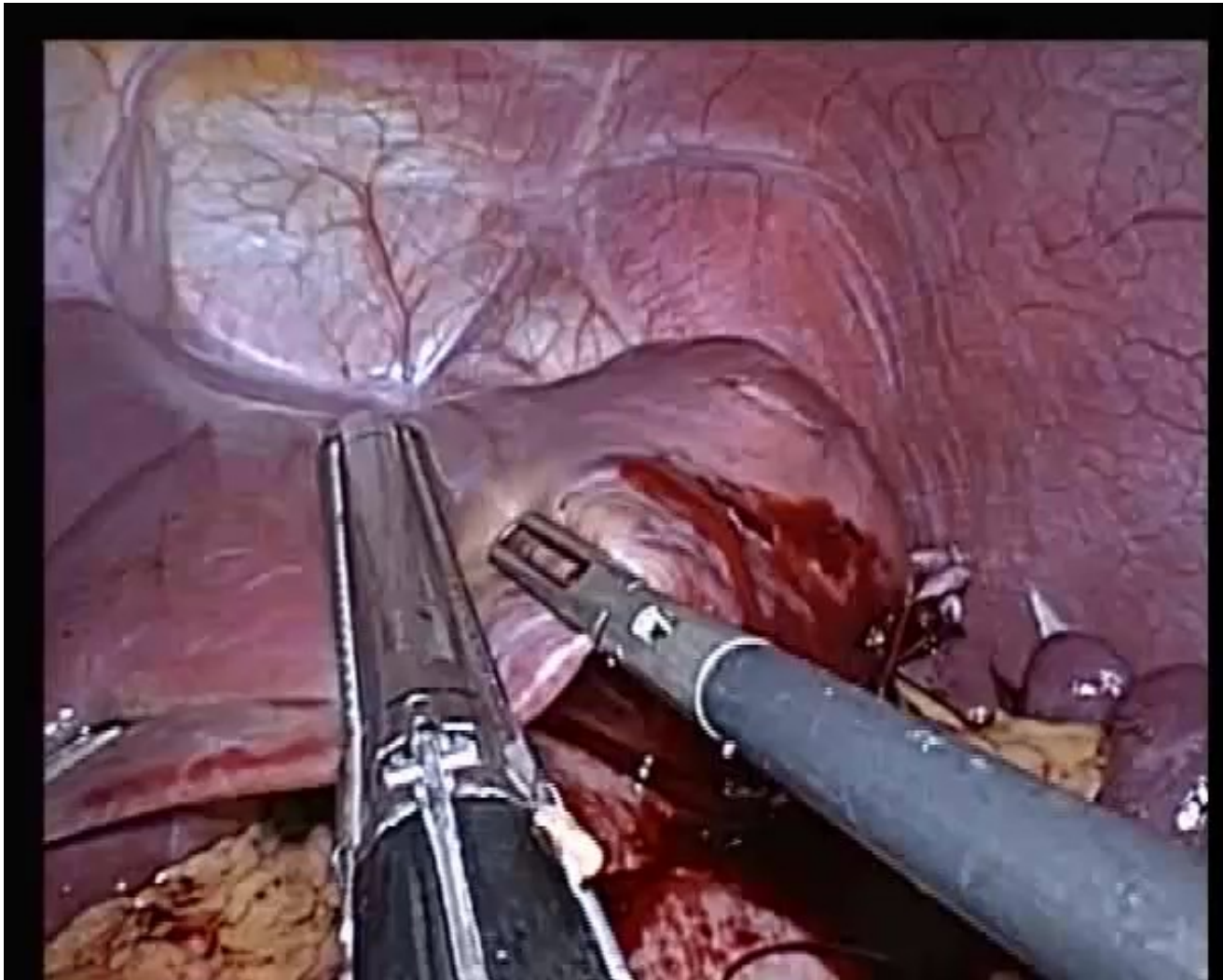
Laparoscopic Liver Resection



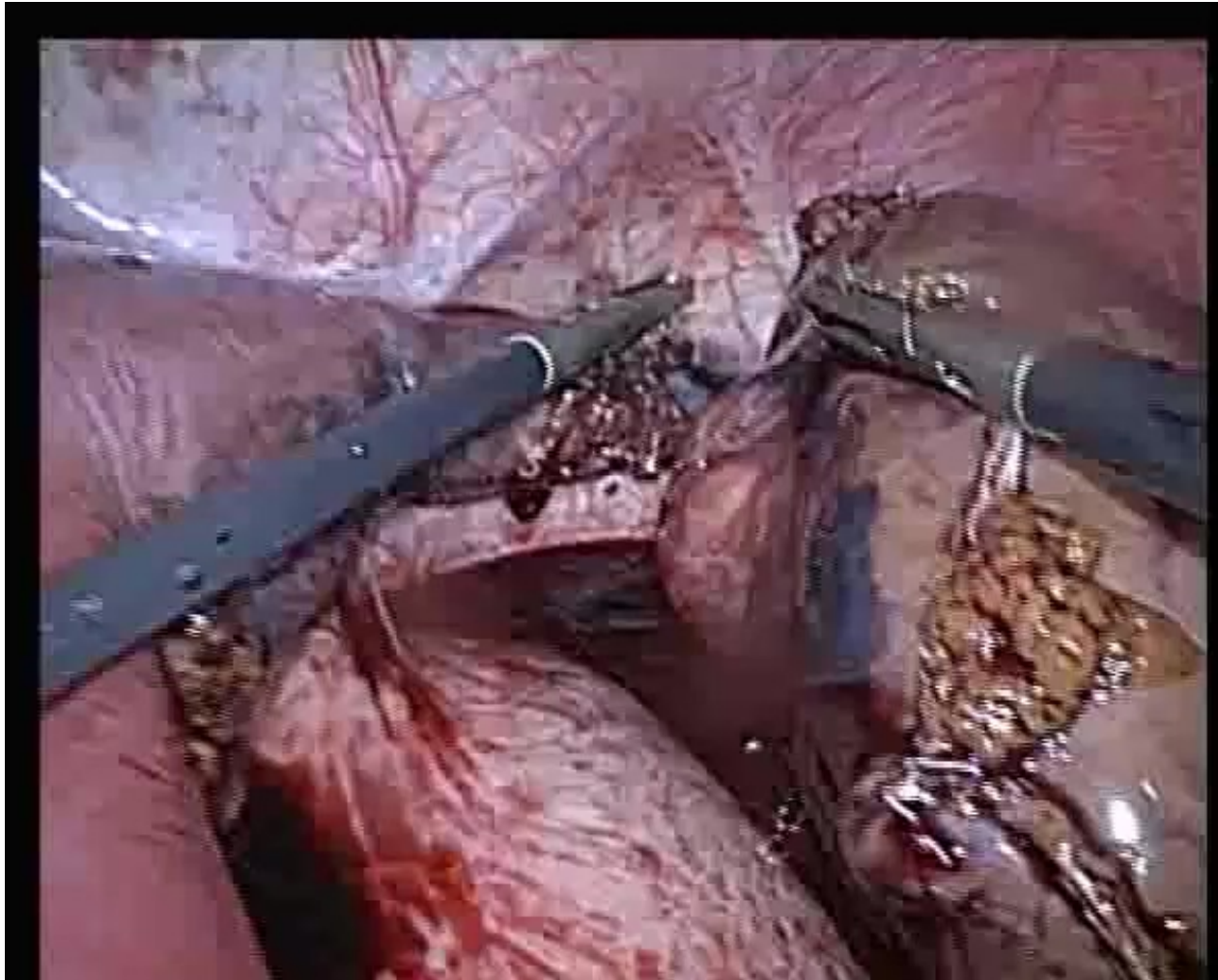
Laparoscopic Liver Resection



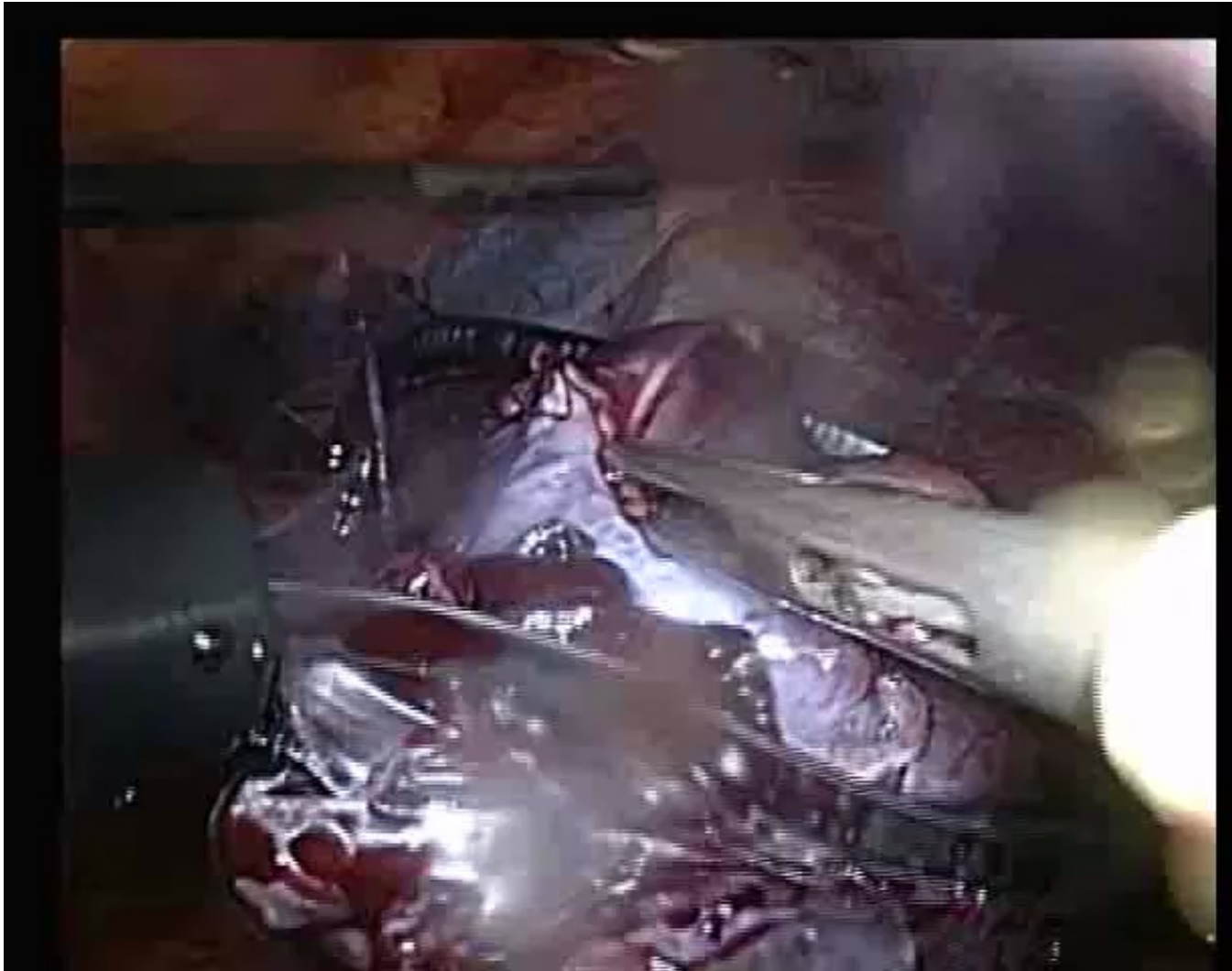
Laparoscopic Liver Resection



Laparoscopic Liver Resection



Laparoscopic Liver Resection



Laparoscopic Liver Resection



Laparoscopic Liver Resection

- Ideal: Left-sided or right peripheral lesions
- Expertise needed
- Same indications than open
- Benefits of laparoscopy
 - Shorter hospital stay
 - Less pain
 - Cosmetics: smaller scars

Take Home Message

- **MRI** is the preferred tool in the management of HCA (size, steatotic, diff diag)
- **Resection** if symptomatic or >5cm, stop oral contraceptives
- **Subtyping**= refinement in management (evolving role of biopsy)
- **Steatotic subtype**: low risk justifies more conservative approach
- **In Men**: adenoma must be resected
- **Laparoscopic approach** should be the first choice (same indications as open surgery)

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