ESMO GOOD SCIENCE BETTER MEDICINE BEST PRACTICE

ESMO ADVANCED COURSE ON INDIVIDUALISING THE THERAPEUTIC APPROACH IN PATIENTS WITH NENS

Liver metastasectomy

Els Nieveen van Dijkum, surgeon, Amsterdam UMC

14-06-2019

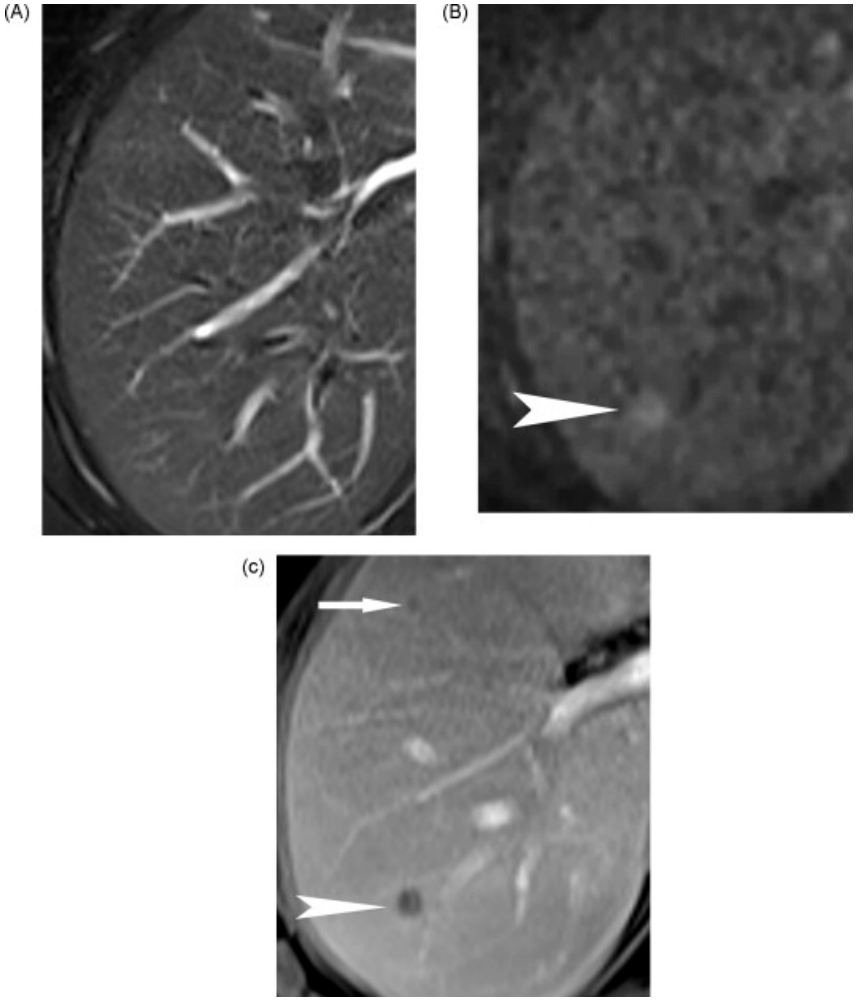
DISCLOSURES

Ipsen research Grant

IMAGING OF NELM

	Sensitivity fol NELM
US	40%
CEUS	60-70%
CT	70-80%
MRI	85-90%
GA-Dotatate PET CT	85-90%

IMAGING OF LIVERMETASTASES



Soyer Eur J Radiology 2011

27 patients operated with 64 livermetastases

Livermetastases 3-48 mm (mean 19 mm)

DW-MRI	54/64 metastases (sens 84%)
T2W-FSE	44/64 metastases (sens 68%)
Gadol MRI	51/64 metastases (sens 79%)

16-32% undetected pre-operatively!

RECURRENCE AFTER RESECTION OF LIVERMETASTASES

Xiang J Surg Oncol 2018

548 patients with GEP-Net underwent resection of livermetastases
162 patients with Grade 1 disease

After a median follow-up of 69 months,

- 59 (36.4%) patients had tumor recurrence;
- 23 (39.0%) patients recurred within 1 year after surgery
- 36 (61.0%) recurred after 1 year .

Early recurrence was associated with worse outcome vs late recurrence (5-year OS, 72.4% vs 92.0%; P = 0.02)

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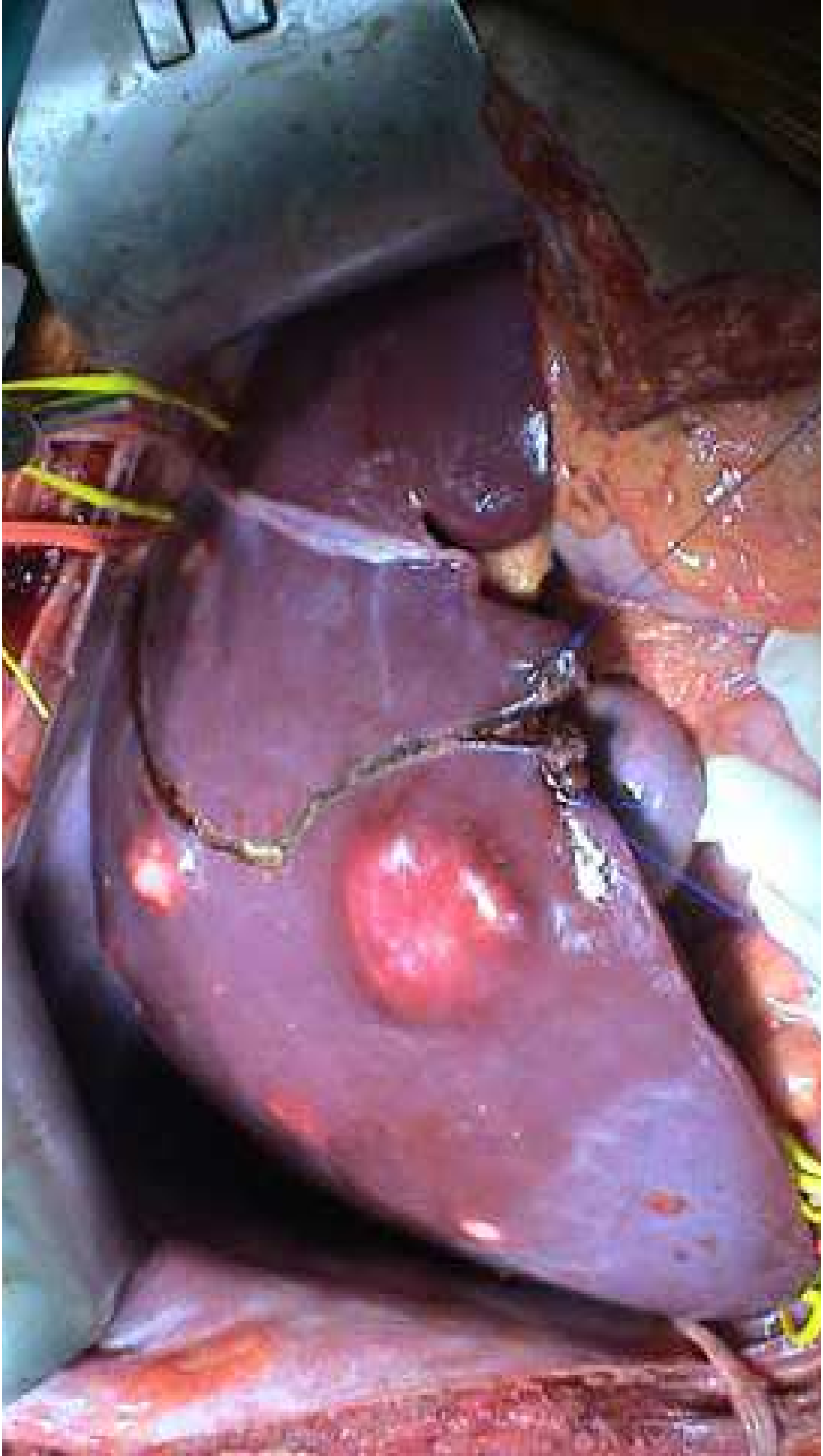
Recurrence or Undetected NELM?

OPERATIVE TECHNIQUES NELM

- Segment resection
- Hemihepatectomy
- Metastasectomy
- Laparoscopic / open or robot-assisted



COMPLICATIONS CLAVIEN DINDO

	Definitions
I	Any deviation from the normal postoperative course without the need for pharmacological treatment other than the "**allowed therapeutic regimens**", or surgical, endoscopic and radiological interventions
II	Requiring **pharmacological** treatment with drugs beyond those allowed for grade I complications. Blood transfusions and total parenteral nutrition are also included.
III	Requiring **surgical, endoscopic or radiological intervention.**
IV	**Life-threatening complication** requiring critical care management; CNS complications including brain haemorrhage and ischemic stroke (excluding TIA), sub-arrachnoidal bleeding.
V	**Death** of a patient

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COMPLICATIONS OF LIVERRESECTION

- Bile leakage / biliary fistula	5-10%
- Bleeding	5-10%
- General complications	20-35%
- Liver failure	< 1%
- Mortality of hemihepatectomy	5-15%

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NELM IN FUNCTIONING TUMORS

- Resection or debulking liver if all other treatment failes
- Not a first option

- Resection of NELM in functioning tumors should be combined with resection of the primary tumor

- Most succesful if < 25% of liver is involved

- Be prepared for dedifferentiating livermetastases!

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CONCLUSIONS AND TAKE HOME MESSAGE

- Discuss in multidisciplinary meeting with liver experts in imaging and resection
- Be prepared to have a low curative rate (45%) possibly due to low sensitivity of imaging studies
- Debulking, especially in functional tumors is still possible, if all other treatments fail
- Liversurgery, especially hemihepatectomy, is associated with
  - morbidity (up to 35%)
  - mortality (up to 15%)

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