



# **EURO-NOTES 2008**

*Working Group 6*

## **NOTES and Associated Techniques**

*Co-Chairpersons*

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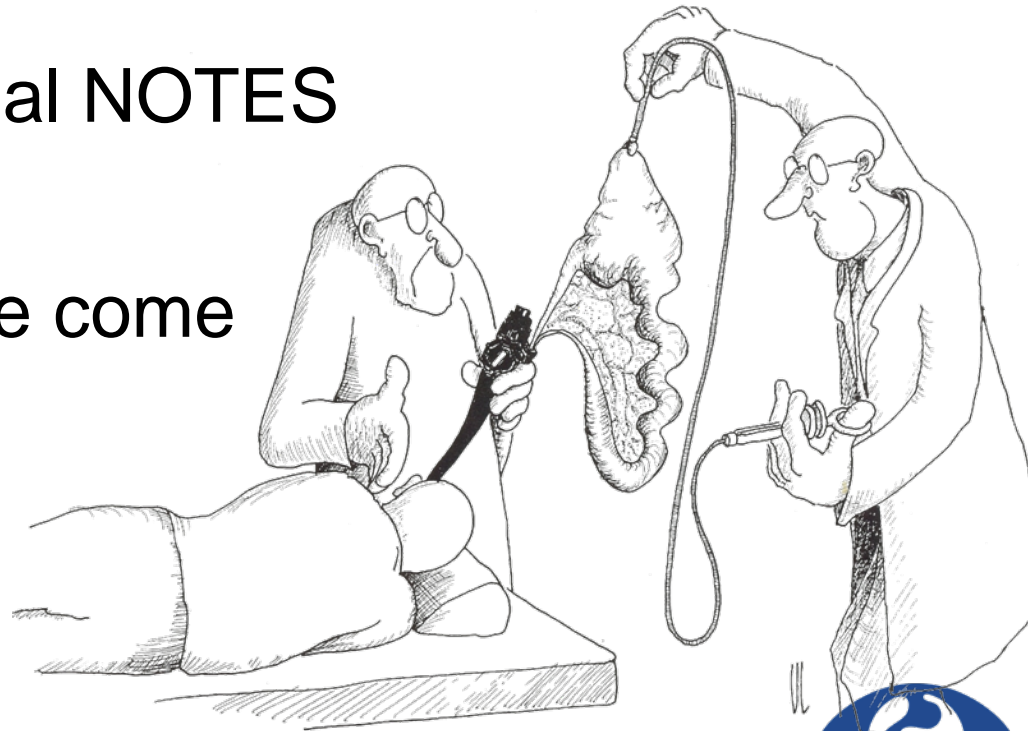


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# Participants

- 10 surgeons
- 4 gastroenterologists
- 4 industry
- 5 with personal NOTES experience
- The rest: “Have come to observe”



# Rigid endoscopes vs flexible

## Rigid tools

Transvaginal access based on well established TEM-technique

- TEM: Single port technology (applicable for NOTES and transabdominal access)
- Hybrid procedures

Transvaginal-hybrid approach:  
Combination of two accepted techniques



# Advantage of rigid instrumentation

- They are available
- Need just some modification
- Laparoscopists know how to handle
- Dissection, haemostasis and control of complications is easier
- Stable view



# Rigid/semiflexible optic mainly for transvaginal/transrectal approach

Two versions:

- Rigid optics with movable lens
- Rigid shaft with flexible tip
  - Minimum length 45 cm,
  - for applications high up 60 cm.



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# Tools needed for all NOTES/SILS applications

- Optimal hemostatic-disecting tools (ultrasonic or bipolar like in standard laparoscopy)
- Staplers with better flexibility between guiding rods and stapling part for linear and circular stapling.



# Future important developments

- Platforms, flexible positioning and high stability for the surgical steps.
- Fixed monitor view
- Better ergonomic solutions with implementation of electronic control (robots)



# Costs

- Instrument development has to be cost effective
- Reusable or disposable?
- For routine application discussion about costs will be important - reimbursement problems