

Colon capsule will replace diagnostic colonoscopy - CON

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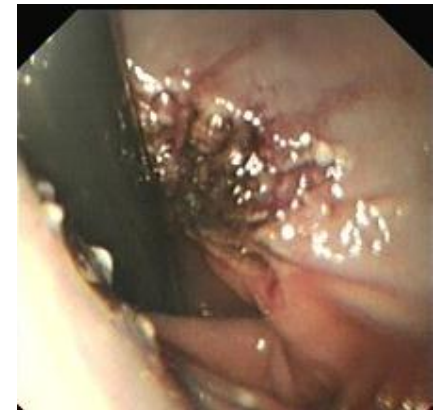
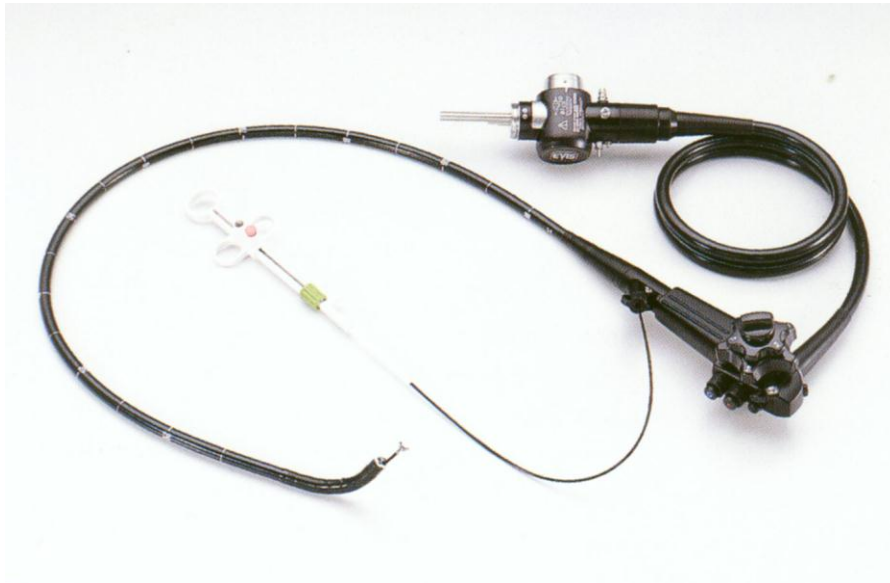


QUALITY IN ENDOSCOPY

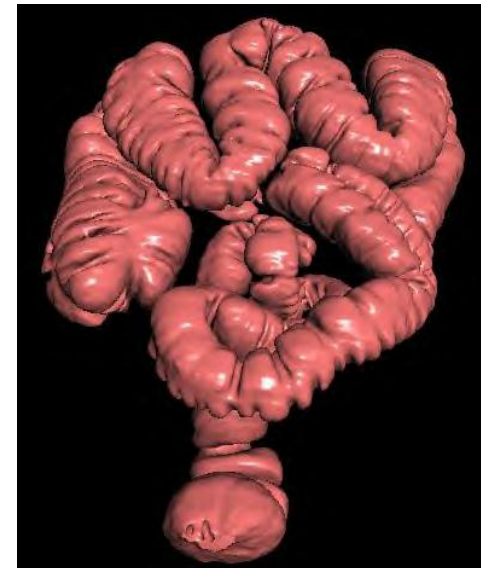
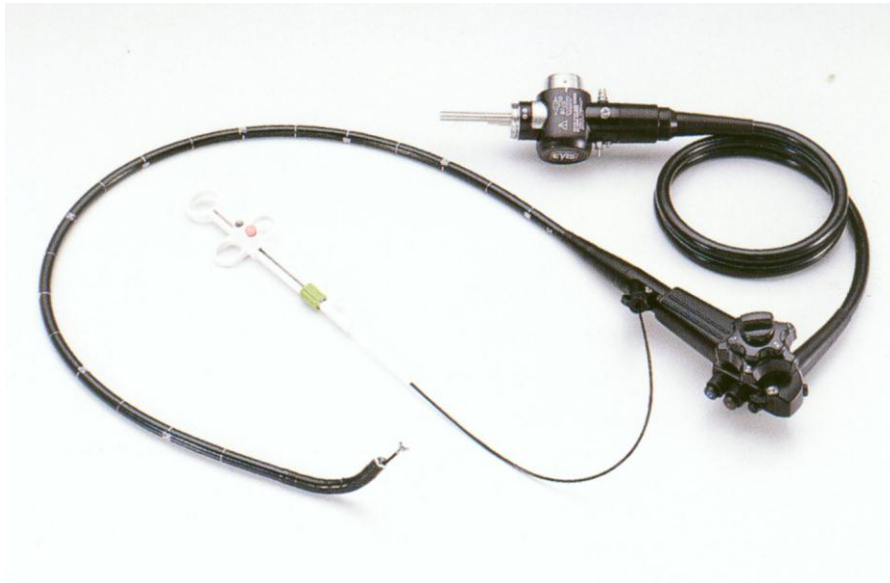
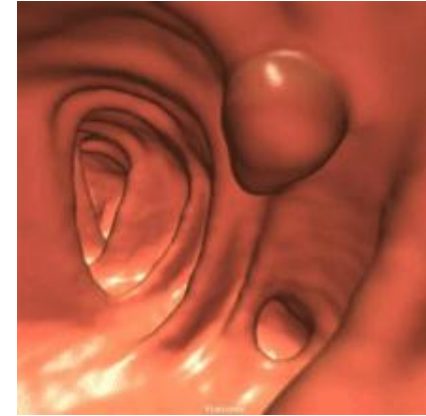
COLONOSCOPY &
COLONIC NEOPLASMS

Berlin, Germany May 4 - 5, 2012

Colon capsule vs Colonoscopy



Colon capsule vs Colonoscopy



CT Colonography

- Why has CTC not replaced diagnostic colonoscopy?
 - Can't provide therapy
 - Can't take samples for histology
 - Limited discrimination >5mm polyps
 - Cannot detect true flat lesions/angiodysplasias/etc
 - Large reader variability
- What is it good for?
 - Excluding large lesions/cancer
 - Elderly comorbid patients
 - Failed colonoscopy (strictures, poor tolerance)

Colon capsule



3rd battery
Sleep mode
Twin 154° cameras
Static frame rate



Twin 172° cameras
Variable frame rate controlled by
Data Recorder 3
Location recognition and prompt
for booster prep
Post-procedure processing
(FICE)

Colon capsule2 vs Colonoscopy



| Bowel prep | Completion rate | Sensitivity | Specificity | NPV |
|------------|-----------------|-------------|-------------|--------|
| 80% | 88% | 84-89% | 64-76% | 85-97% |
| >90% | >90% | ~90% | - | - |

Eliakim et al, Endoscopy 2009
Spada et al, GIE, 2011

Colon capsule

- What are the issues?

- Can't provide therapy
- Can't take samples for histology
- Bowel prep

} Not suitable for high risk symptomatic patients or IBD assessment/surveillance

- Withdrawal rate up to 30%
[Sieg et al, Am J Gastro 2009]
- Sodium phosphate associated electrolyte imbalance, acute nephropathy, kidney failure
[Wexner et al, GIE 2006]

} Contraindicated in very elderly, comorbid, unwell

- Long reader time
 - 8h video takes 30-60 mins to report

} ?Cost effective

- Cost
 - 6x conventional colonoscopy
 - Not currently reimbursed by most insurance companies

Colon capsule

- Who might it be useful for?
 - Patients who refuse colonoscopy
 - Incomplete colonoscopy
 - Triantafyllou et al, GIE 2009
 - Colonoscopy contraindicated
 - If unfit for colonoscopy ? Fit for bowel prep for colon capsule
 - CRC screening if uptake is significantly higher than for conventional colonoscopy
 - 40% uptake in Germany
 - 45% uptake in USA
 - 70% uptake in Norway

Colon capsule should be considered as an alternative to colonoscopy for diagnostic purposes in certain selected patient groups once it has had further validation studies

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