

VII GIORNATE GASTROENTEROLOGICHE DEL SANGRO

CASTEL DI SANGRO 24 - 26 Marzo 2011





Azienda Ospedaliera Universitaria Policlinico
Seconda Università degli Studi di Napoli
Dipartimento di Chirurgia generale e specialistica

U.O.C. di Chirurgia Endoscopica

Direttore: Prof. Angelo Pezzullo

Prof. Vincenzo Napolitano
Dott. Pietro Schettino

Prof. Giuseppe Amato
Dott.ssa Rosamaria Bozzi





SUN

SECONDA UNIVERSITÀ DEGLI STUDI DI NAPOLI



VII GIORNATE GASTROENTEROLOGICHE DEL SANGRO– CASTEL DI SANGRO 24 – 26 Marzo 2011

Wireless Capsule Endoscopy Years after Michelassi Strictureplasty for Crohn's Disease

Pietro Schettino



VCE nella Malattia di Crohn

Diagnosi

Disease assessment:

- a. Sede
- b. Estensione (lesioni digiunali)
- c. Tipo
- d. Recidiva post-chirurgica
- e. Risposta alla terapia



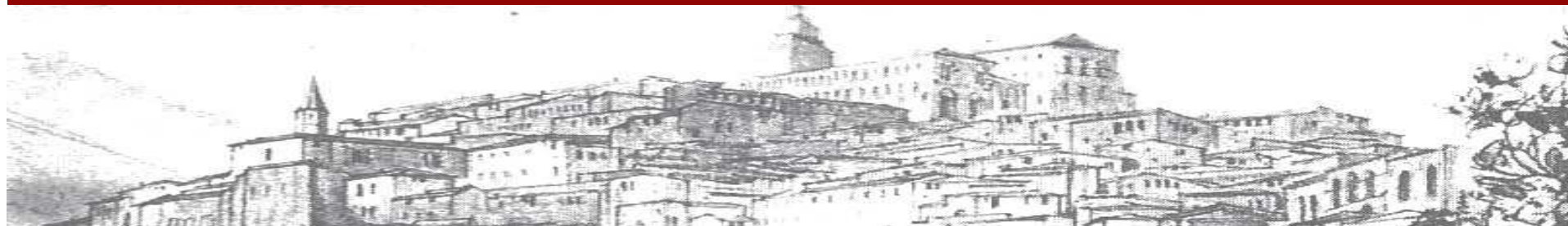


INCREMENTAL YIELD VCE OVER OTHER MODALITIES IN PATIENTS WITH ESTABLISHED CROHN'S DISEASE

Table 5 Incremental yield of capsule endoscopy over the other modalities in patients with established Crohn's disease (from Triester SL *et al*^[63])

	Yield of capsule endoscopy (%)	Yield of other modalities (%)	% Incremental yield for capsule endoscopy (95% CI)	NNT	P
vs Small bowel radiography	78	32	51 (0.31-0.70)	2	< 0.001
vs Ileoscopy	86	60	26 (0.08-0.43)	4	0.002
vs CT enterography	68	38	30 (0.12-0.48)	-	< 0.01

Triester et al . Am. Journ. Gastroent. '06



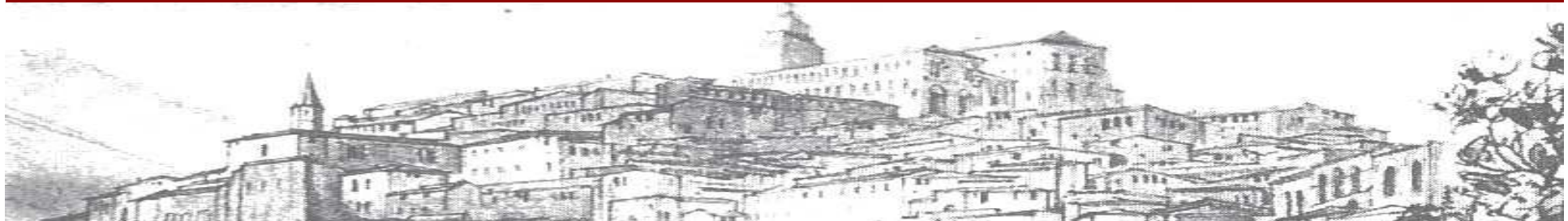


ECCO - European Crohn's and Colitis Organisation *Statement 2M*

Wireless capsule endoscopy (WCE) represents an advance for small bowel imaging, but large prospective studies are needed to confirm the diagnostic relevance in CD. WCE may be considered in symptomatic patients with suspected small bowel CD in whom a stricture/stenosis has been excluded, endoscopy of terminal ileum is normal or not possible, *in whom fluoroscopic or cross sectional imaging have not showed lesions*

[EL2, RG B]

Bourreille et al Endoscopy 2009





Complications

Retention of capsule: 1-5%

Bowel obstruction: .5 %

Tracheal aspiration: Rare



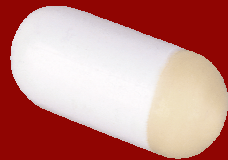
Variabilità della % di ritenzione della VCE a seconda del quadro clinico.

Situation	Retention	Retention rate	
Healthy volunteers	0 / 773	0%	Gestwein et al Clin Gastroint.Hep '05
OGBI	10 / 667	1.5 %	Li et al GIE 2006
CD	1 / 64	1.6 %	Chewitz AJG 2006
Suspected CD	5 / 38	13 %	Chewitz AJG 2006
Suspected stenosis	4 / 19	21 %	Chewitz AJG 2006



Patency System

Patency Capsule



26mm long X 11mm diameter
(same dimensions as
CapsuleSB)

Patency Scanner



A dissolvable capsule containing a detectable Radio Frequency Identification (RFID) tag and is propelled through the GI tract by natural peristalsis.

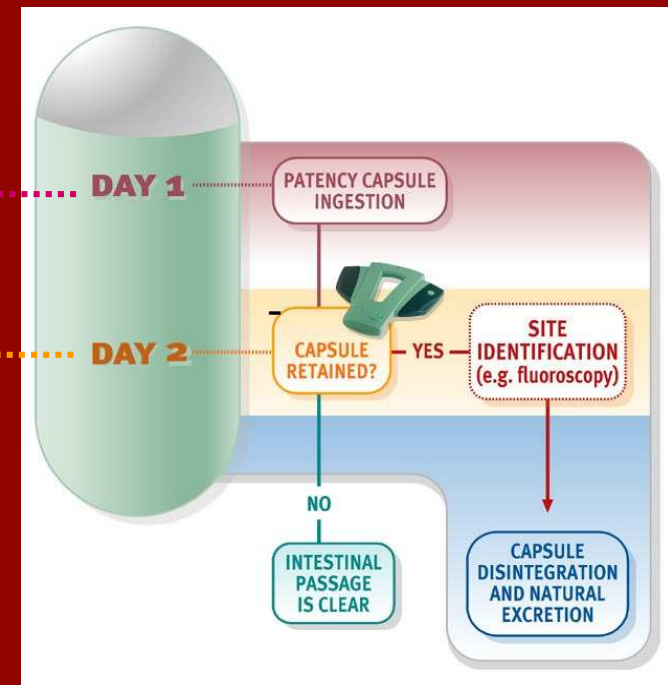
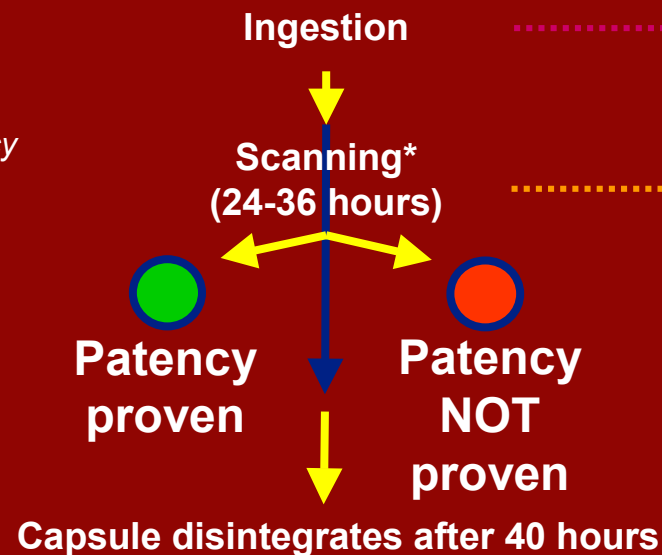
Spada C., et.al. A novel diagnostic tool for detecting functional patency of the small bowel: the Given patency capsule. *Endoscopy* 2005;37;9:793-800



Patency Procedure

- Capsule disintegrates after 40 hours
- Capsule excreted intact in >80% of patients in less than 40 hours

**If Given® Patency Scanner is contraindicated, use fluoroscopy*



Spada C. et.al. A novel diagnostic tool for detecting functional patency of the small bowel: the Given patency capsule. Endoscopy 2005;37;9:793-800



Patency Procedure



Before



After





Case Report

- **In 2005 a 27-year-old woman, affected with CD underwent surgery for a long ileal stenosis (74 cm), which was treated by performing a side-to-side isoperistaltic stricturoplasty, with a jejunostomy closed 7 months later.**
- **After 5 years the patient was asthenic and presented mild malleolar oedema. Serum albumin (2.9 g/dl), total protein test (6.0 g/dl) and haemoglobin (6.7 g/dl) were low and a blood transfusion was necessary.**



Case Report

- The patient did not complain of obstructive symptoms.
- Crohn's Disease Activity Index (CDAI) was 170.
- Erythrocyte sedimentation rate (30 mm/h) and C-reactive protein (20 mg/l) were slightly increased.
- Intestinal ultrasonography, pancolonoscopy and esophagogastrosocopy were negative for recurrence.

The patient refused to undergo MRE, and a small bowel barium enema was administered, revealing no stenotic tracts.



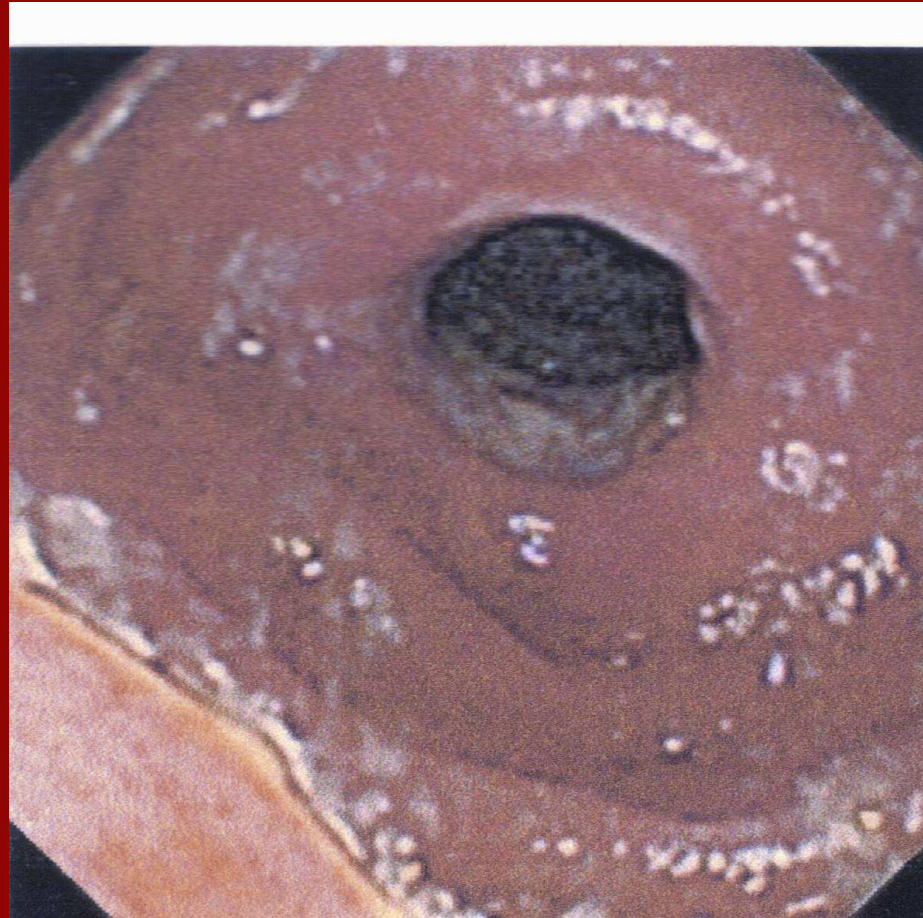
what is the best choice?



OUR OBSERVATION
2010



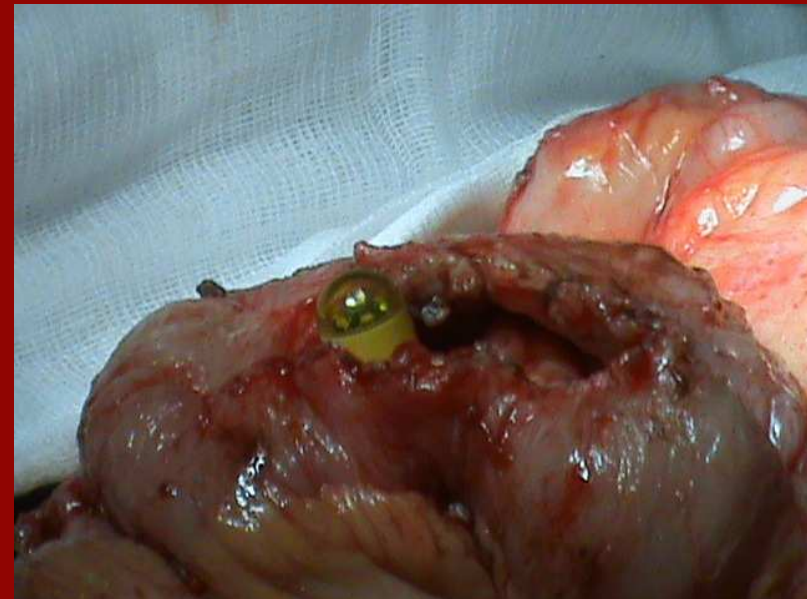
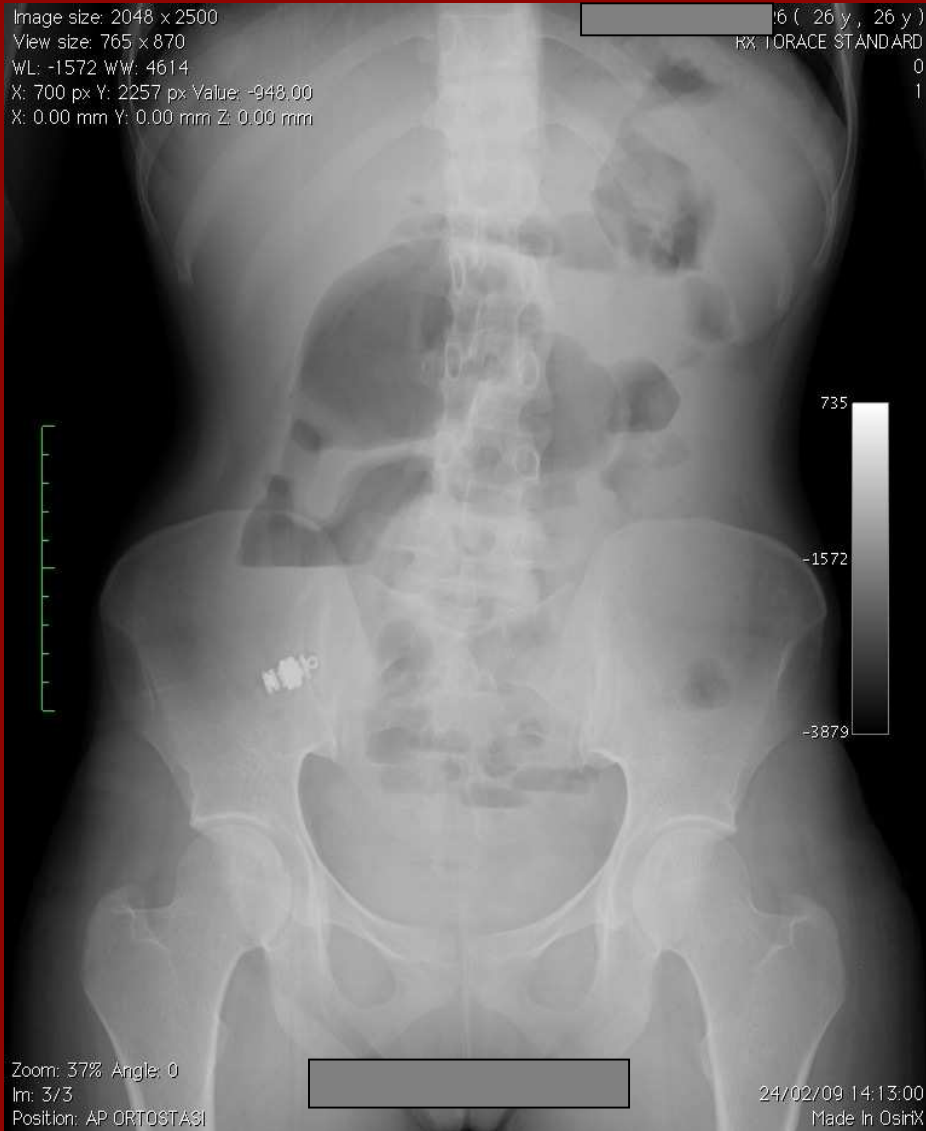
VCE





VCE

Image size: 2048 x 2500
View size: 765 x 870
WL: -1572 WW: 4614
X: 700 px Y: 2257 px Value: -948.00
X: 0.00 mm Y: 0.00 mm Z: 0.00 mm



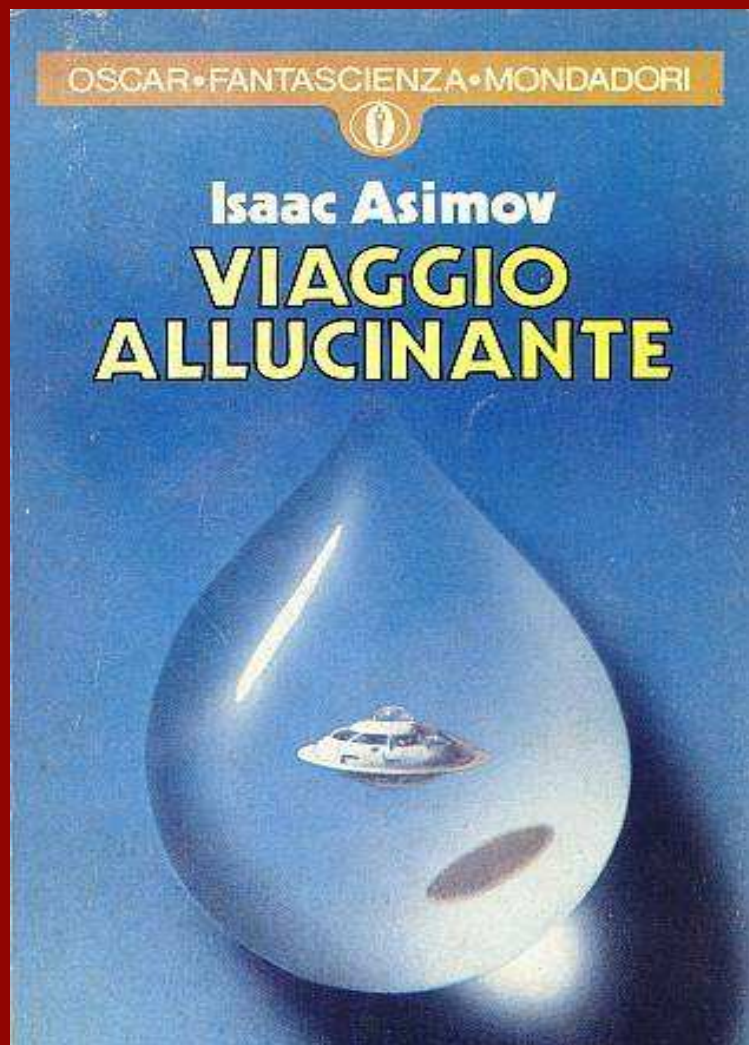


Conclusion

We believe that WCE can be performed maybe in selected CD patients who have undergone surgery.

However, further studies are needed to clarify the WCE role in patients with long-stricturoplasties and to establish which examination could be the most effective in selecting patients.

Grazie per l'attenzione



1965

« Non capisco tutto questo clamore per lo sbarco dell'uomo sulla luna, lo l'avevo previsto trent'anni fa e fui deriso. Già, ma Giulio Verne l'aveva previsto un secolo prima »

« Nella vita, a differenza degli scacchi, il gioco continua dopo lo scacco matto. »

Isaac Asimov