The ileostomy & internal pouch Support Group

Pouch outcomes and complications

IA Pouch Information Day
November 5th 2016

Miss Laura Hancock BSc MD FRCS (Eng)
Consultant Colorectal Surgeon

Central Manchester University Hospitals NHS
NHS Foundation Trust

UHSM
Your Hospital

ia

The Ileostomy and Internal Pouch Support Group

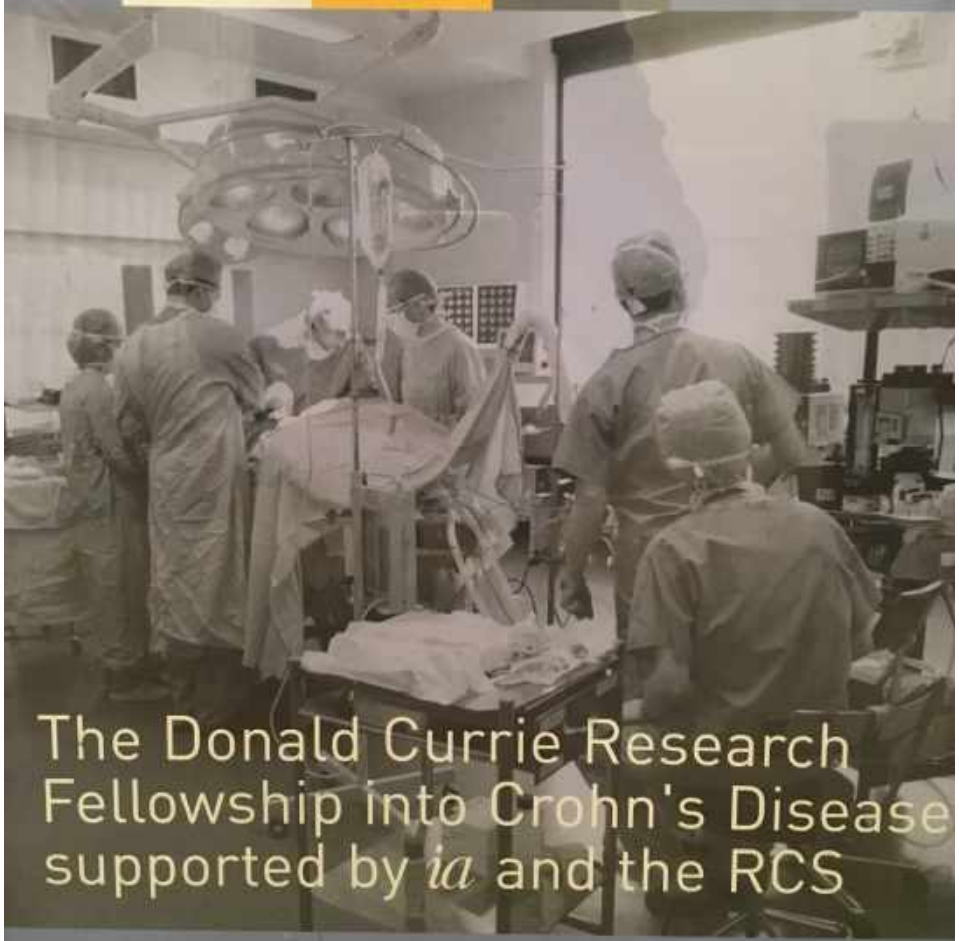
RESEARCH FELLOWSHIP SCHEME

10th ANNIVERSARY

COMMITTED TO PROMOTING & ADVANCING THE HIGHEST STANDARDS OF SURGICAL CARE FOR PATIENTS

Closing date

Tuesday 30th March 200



The Donald Currie Research Fellowship into Crohn's Disease supported by *ia* and the RCS

For further details and an application form, please contact

Through the generosity of the members and friends of ia (The Ileostomy and Internal Pouch Support Group), The Royal College of Surgeons is delighted to invite applications to undertake a one year research fellowship into any aspect of Crohn's Disease.

post as an SHO who has passed the MCQ papers and will sit the final parts of the MRCS(Eng) examination, you are eligible to apply.

The Fellowship will cover salary on point

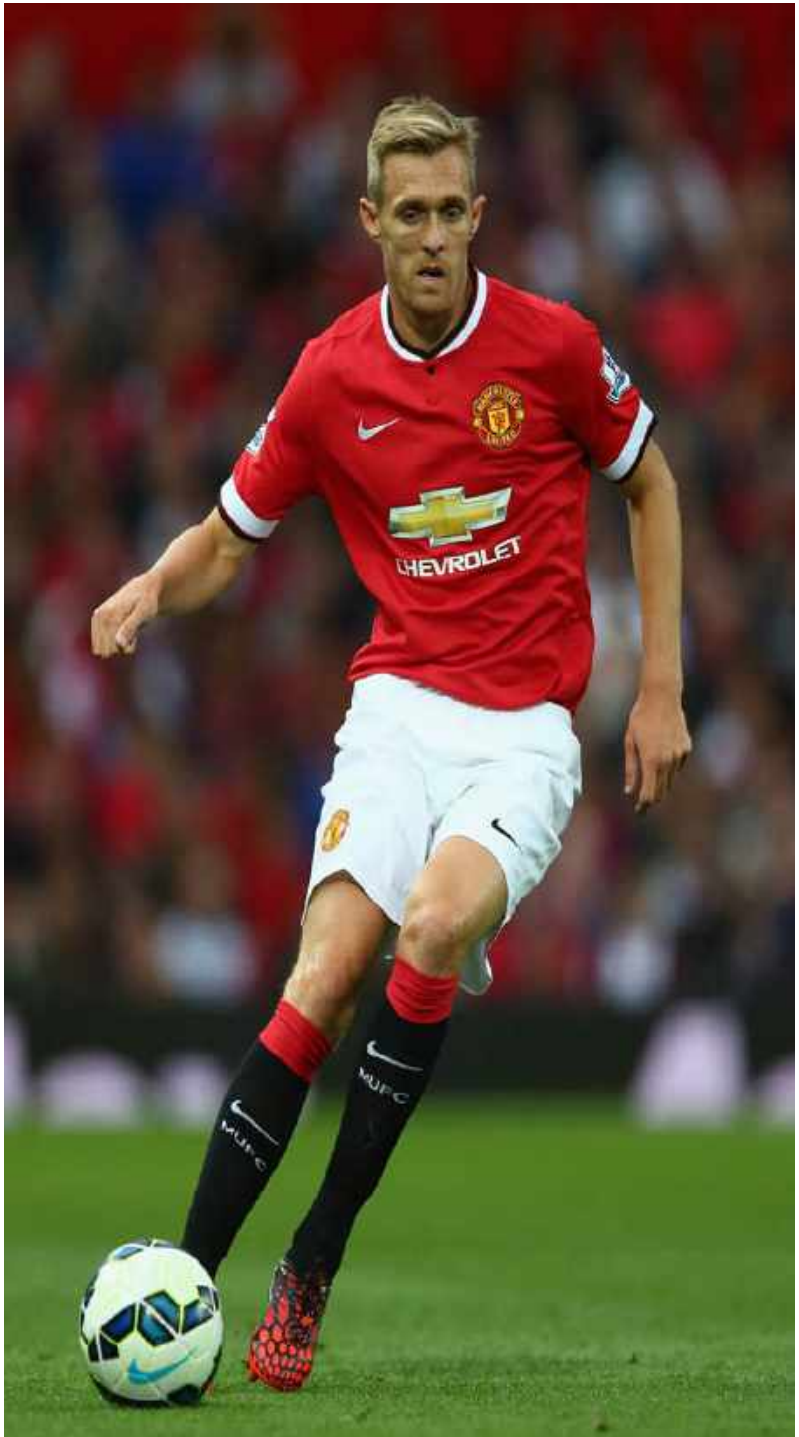
Genetics of IBD

UNIVERSITY OF OXFORD

Ellen Currie and Dr Laura Hancock

Outcomes and complications


Bates
Robert Winter
Christopher Wright
John Wright
Thomas Percy
Guido Fawkes
Robert Catesby
Thomas Winter



ECCO Statement 4B (2014)

Completion proctectomy with a pouch is standard in patients with ulcerative colitis

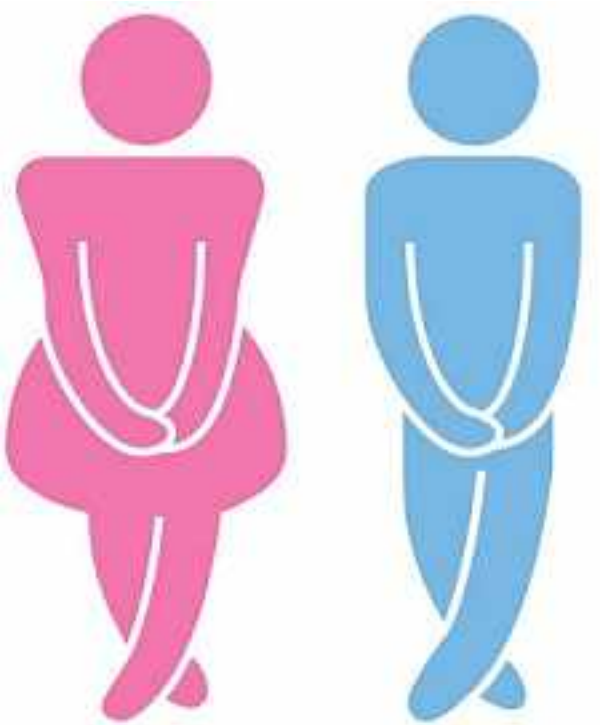
Pouch Outcomes

Function
Failure
Fecundity

Normal pouch function

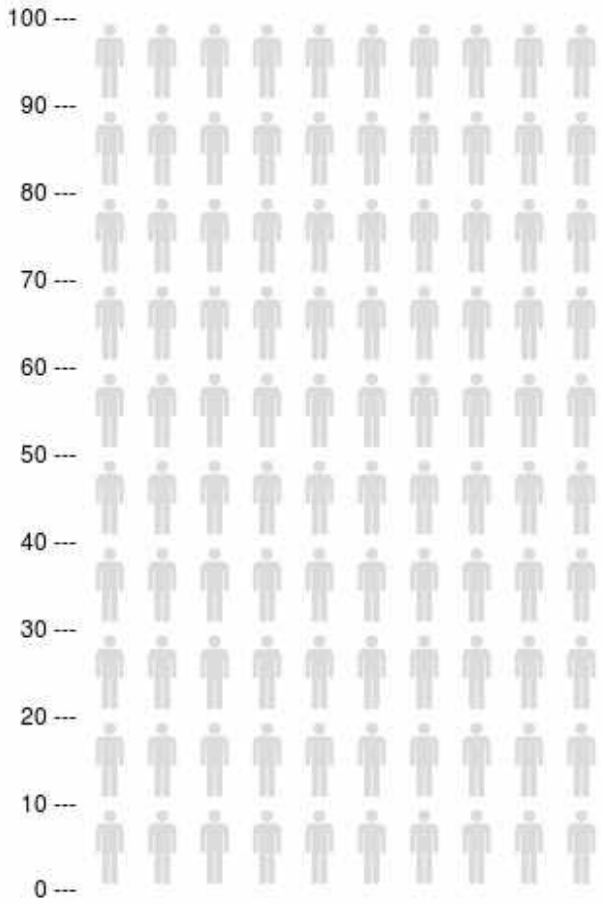
- Highly variable
- 5 - 8 times in 24 hours
- 5 x during day
- 1 x at night
- Ability to defer
- Loose stool (porridge consistency)

Function - Continence



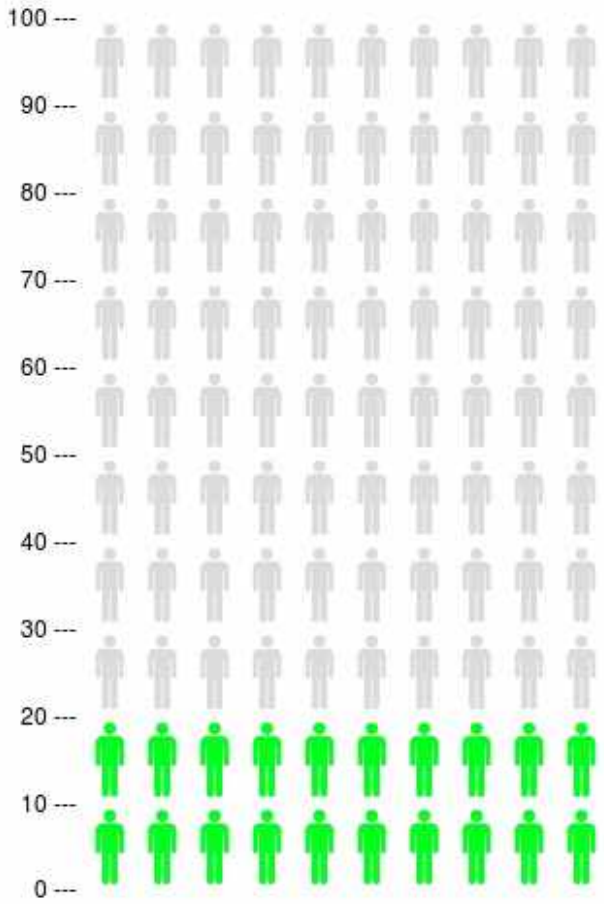
- Seepage
  - 10% during day
- Nocturnal seepage
  - 20% at 20 years
- Urgency
  - 10% 15 years

Pouch Outcomes



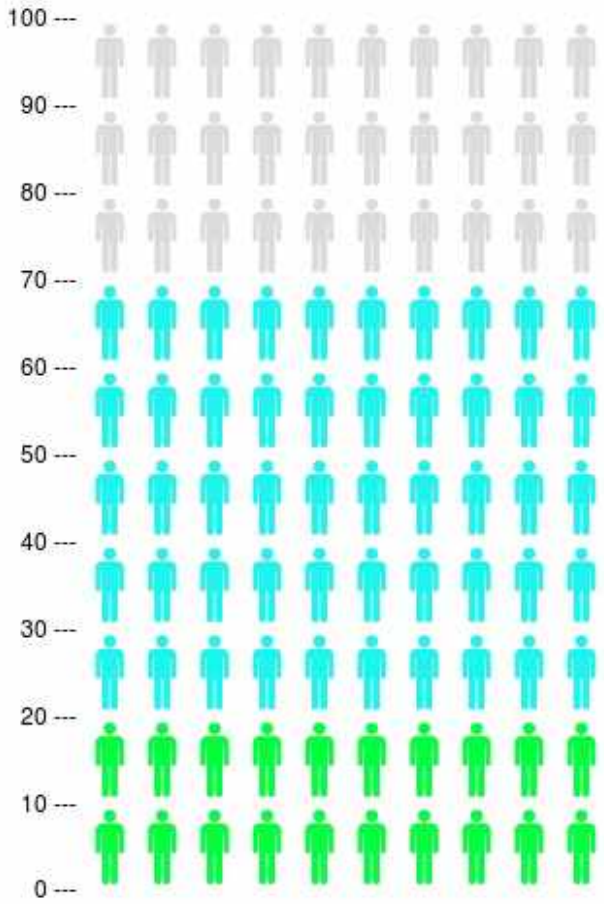
100 pouches

Pouch Outcomes



20% no problems

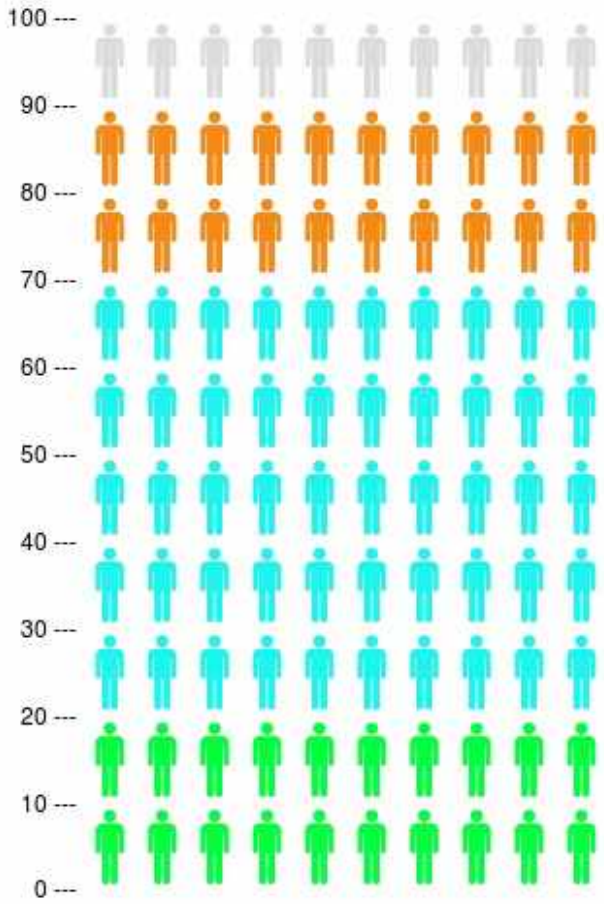
Pouch Outcomes



50% minor problems

20% no problems

Pouch Outcomes

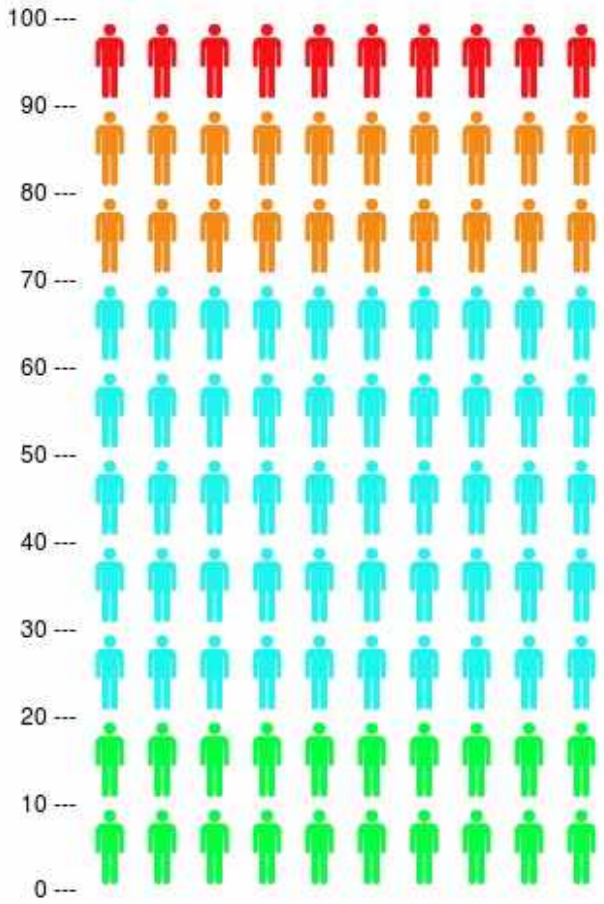


20% failing pouch

50% minor problems

20% no problems

Pouch Outcomes



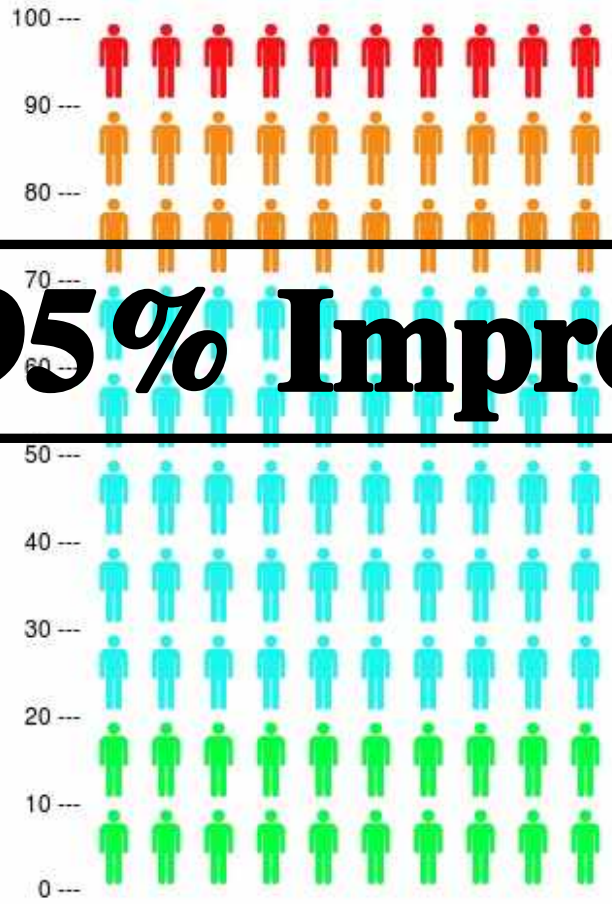
10% pouch failure

20% failing pouch

50% minor problems

20% no problems

Pouch Outcomes



10% pouch failure

20% failing pouch

95% Improvement in QOL

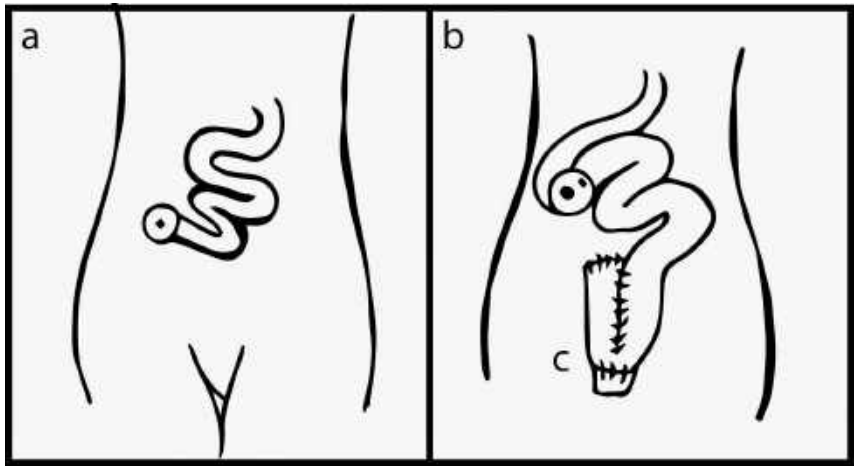
50% minor problems

20% no problems

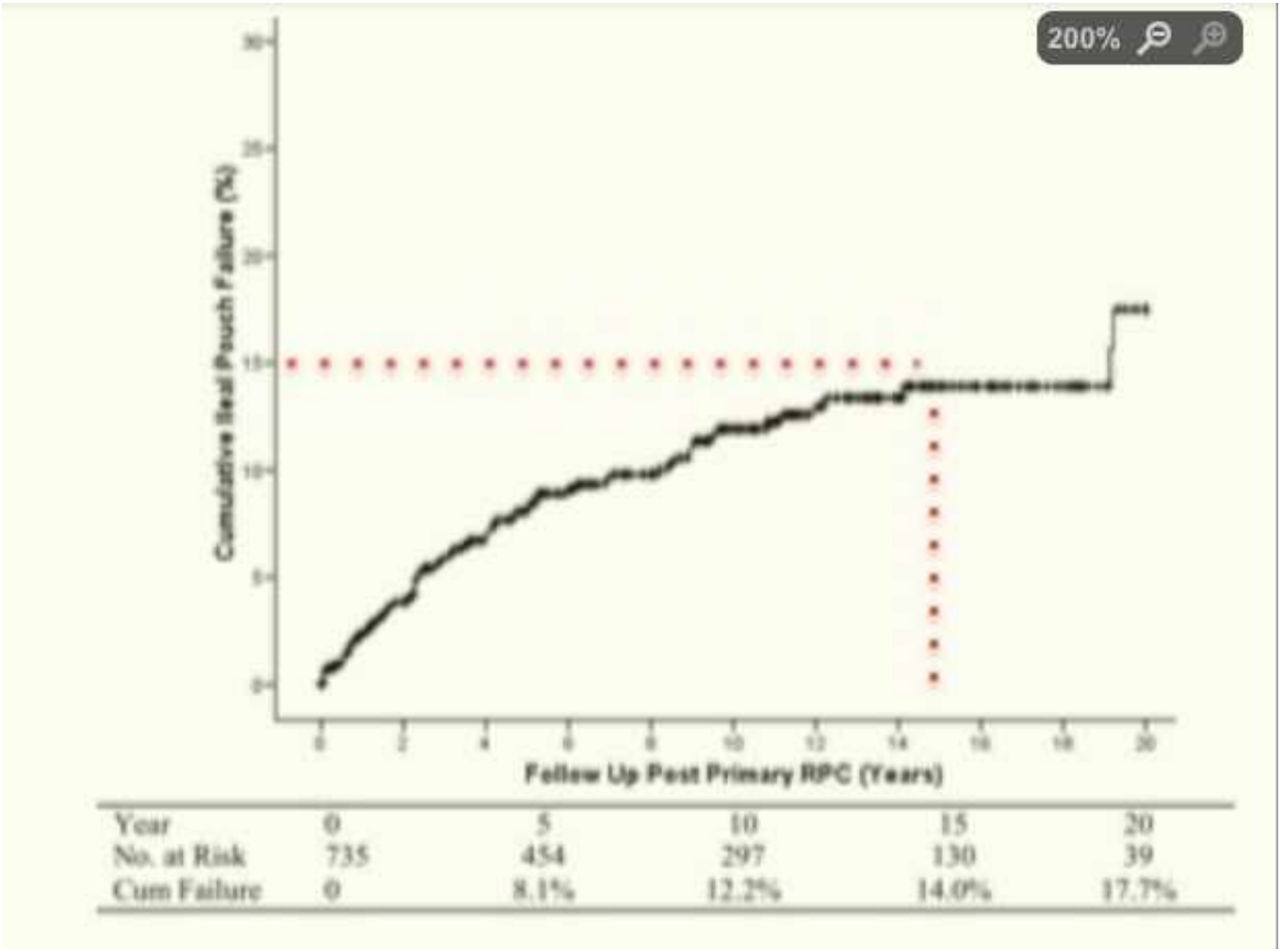
Pouches behaving badly

Pouch failure definition

Excision of the pouch or Indefinite defunctioning



Pouch failure



Year	0	5	10	15	20
No. at Risk	735	454	297	130	39
Cum Failure	0	8.1%	12.2%	14.0%	17.7%

Causes of pouch failure

1. Sepsis
2. Structural problems
3. Inflammation
4. Risk of cancer
5. Irritable pouch syndrome

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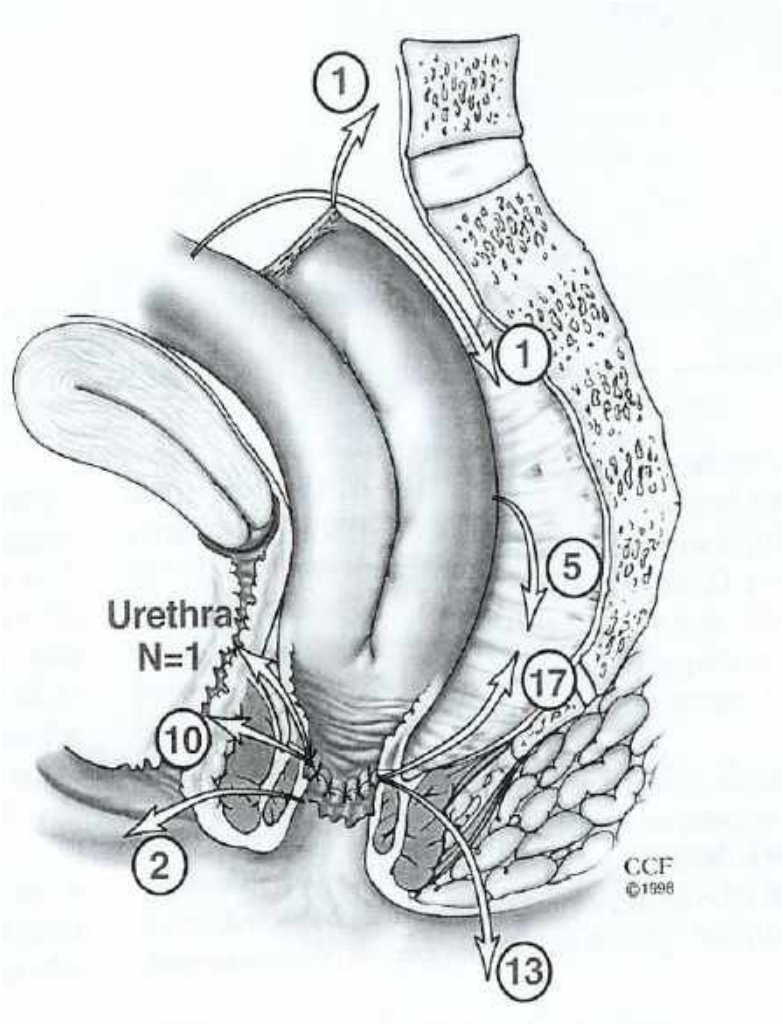
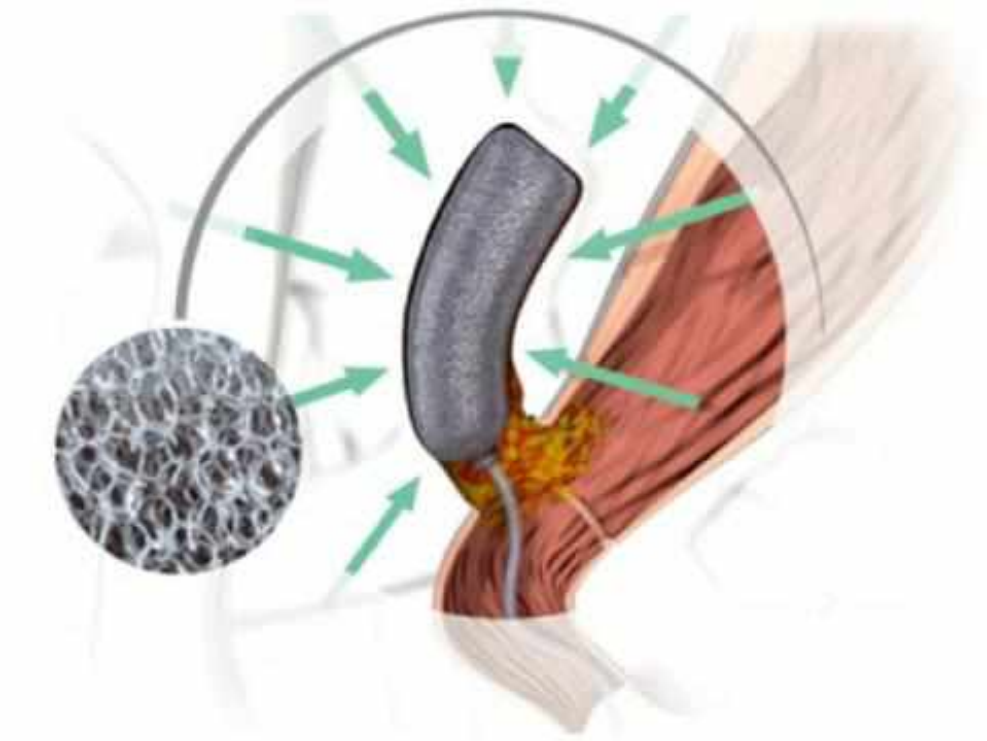
Sepsis

- Leakage at join 20%
  - 5 x long term failure
  - RFs – tension, poor blood supply, BMI >25, other diseases, steroids
- Fistulas 5-10%



Endosponge – vacuum assisted device



Causes of pouch failure

1. Sepsis
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Structural problems

- Strictures – Hegar dilators
- Small bowel obstruction
- Small volume pouch
- Anal sphincter problems

Causes of pouch failure

1. Sepsis
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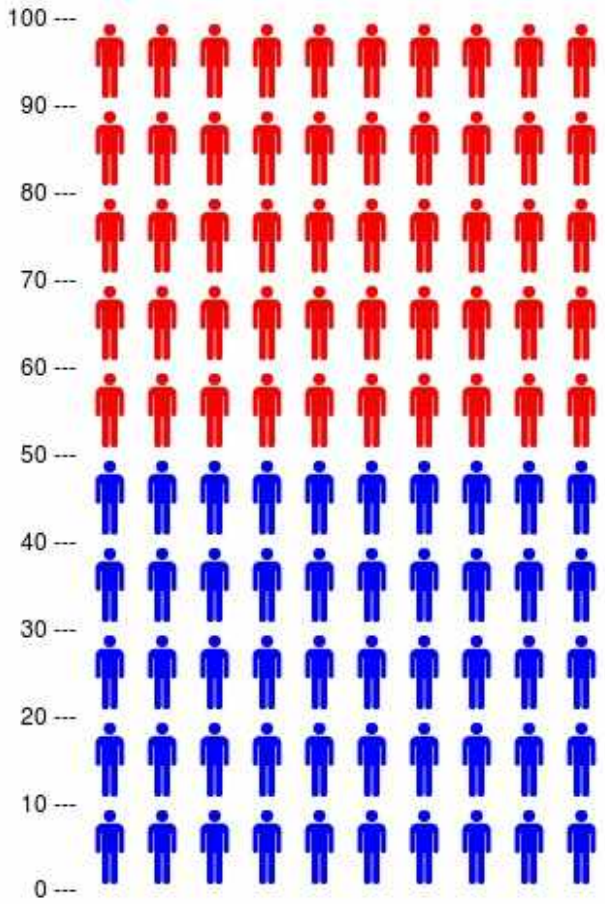
Inflammation

- Pouchitis
- Cuffitis
- Crohn’s disease
- Infection

Pouchitis

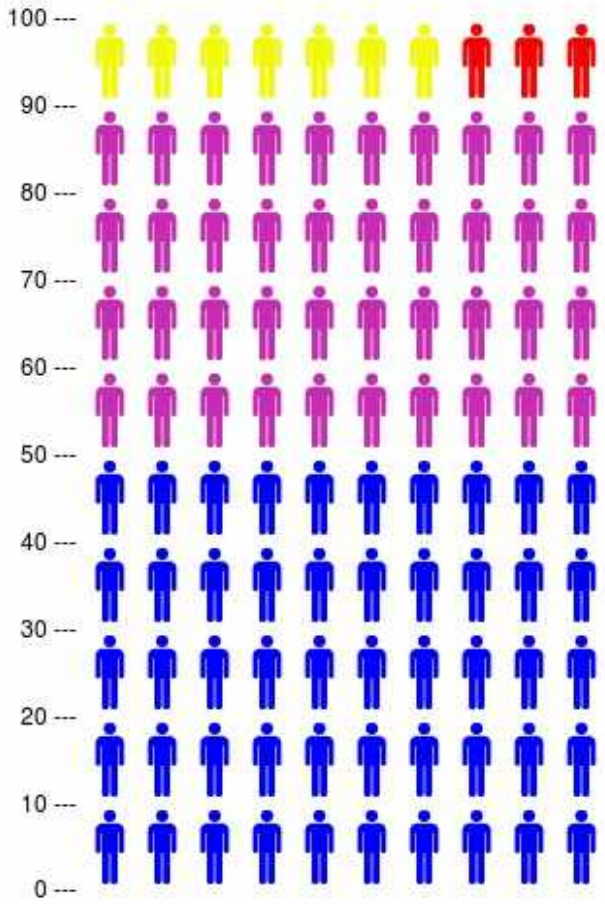


50% pouchitis

An inflammatory response to changes within the pouch

Possibly triggered by changes in intraluminal bacteria

Pouchitis



3% refractory pouchitis

7% recurrent inflammation

40% single episode

Symptoms

increased stool frequency

looseness

blood

urgency

incontinence

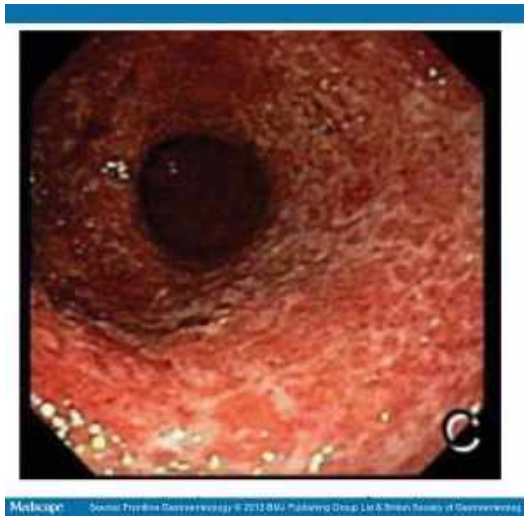
abdominal pain

fever

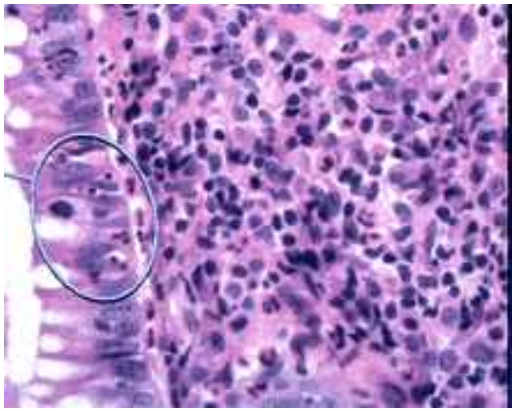
arthralgia

Pouchitis

Endoscopy



Histology

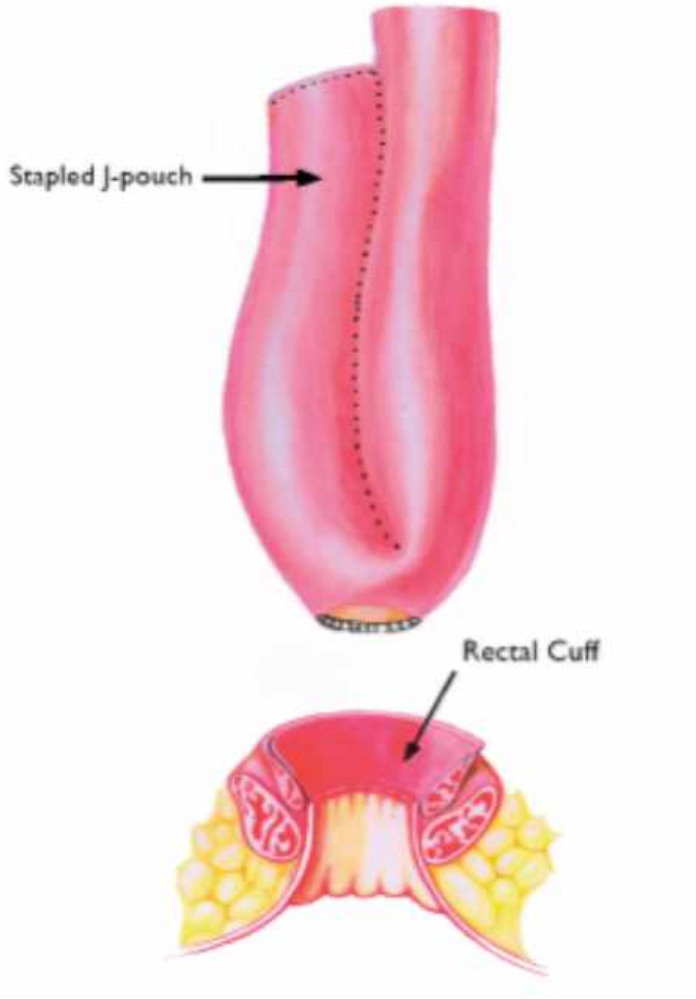


Treatment of pouchitis

- Cochrane review 2015
- Stop non-steroidal anti-inflammatory drugs
- Ciprofloxacin
- Metronidazole
- Rifaximin and lactobacillus no better than placebo

Cuffitis

- Symptoms (proctitis)
  - Burning, frequency
- Treatment
  - Mesalazine suppositories
  - Predsol suppositories
  - Revisional surgery



Causes of pouch failure

1. Sepsis
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4. Risk of cancer
5. Irritable pouch syndrome

Risk of cancer

- Rare - <1% meta-analysis
- Risk factors – dysplasia or cancer in colon, PSC
- Annual pouch surveillance with RFs

Causes of pouch failure

1. Sepsis
2. Structural problems
3. Inflammation
4. Risk of cancer
5. Irritable pouch syndrome

Irritable pouch syndrome

- Symptoms in the absence of structural, endoscopic or histological pouch abnormalities
- 20% patients with pouch dysfunction
- Specialist nurse support, biofeedback, exclusion diets

Symptoms of complications

- High pouch frequency and/or urgency
- Bleeding
- Abdominal pain
- Fever
- Lethargy
- Ineffective emptying of pouch
- Incontinence
- Symptoms of fistulae (wound breakdown, vaginal/peri-anal discharge, sepsis)

Symptoms

Symptom	N (%)
High frequency of defaecation	83 (69)
Abdominal pain	45 (37)
Incontinence	45 (37)
Perianal pain	44 (36)
Difficult evacuation	33 (27)
Bleeding from the anus	30 (25)
Urgency	24 (20)
Watery faeces	22 (18)
Mucous anal discharge	18 (15)
Faecal vaginal discharge	17 (14)
Purulent anal discharge	8 (7)
Vomiting	8 (7)
Enterocutaneous fistula	6 (5)
Purulent perianal discharge	5 (4)
Abdominal distension	5 (4)
Pouch prolapse	3 (3)
Weight loss	3 (3)
Pneumaturia/ faecaluria	2 (2)

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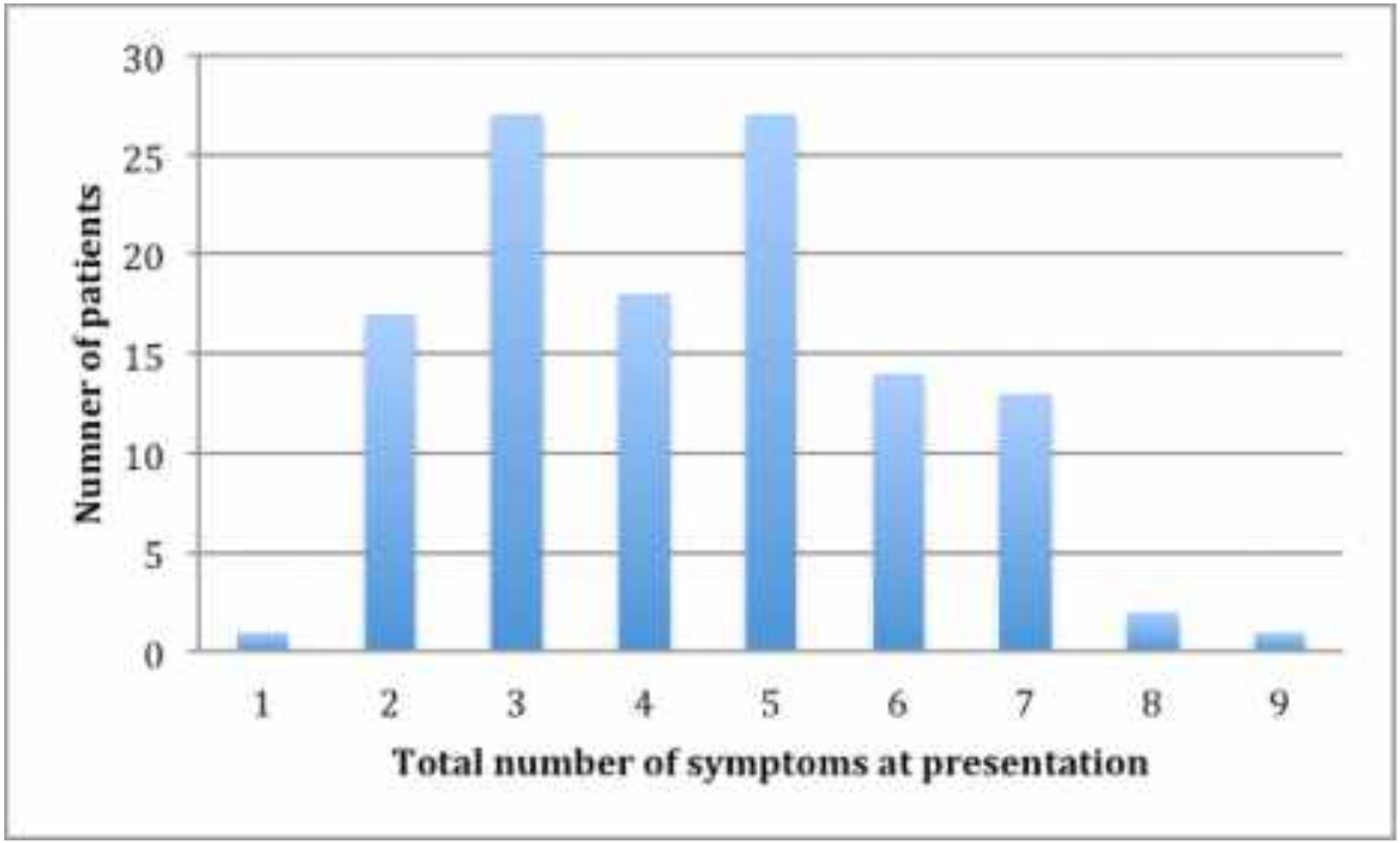
Symptoms



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My approach

- Find out if there is a problem that can be solved
- If so, solve it
- If not offer excision/diversion
- Manage expectations, identify needs
- Support

Pouch clinic

Table 2: Symptoms of pouch dysfunction	
Symptom	**Differential diagnosis**
High defecatory frequency	Pouchitis – primary or secondary to chronic pelvic sepsis Stricture Crohn's disease
Anal pain	Impaired continence and excoriation Sepsis Fistula Fissure
Incontinence	Sphincter insufficiency Structural abnormality with incomplete emptying
Difficult evacuation	Stricture Functional disorder

Hancock, Sagar et al 2016

Investigations

- Abdominal examination
- Digital examination
- Bloods

Investigations

- Inside the pouch – EUA, Pouchoscopy, Pouchogram/MRI
- Outside the pouch – MRI/CT
- Below the pouch – Anal physiology/USS/proctogram
- Above the pouch – MRE/SB follow through, coeliac screen, SeCAT test

Table 3: Management of pouch dysfunction

Investigation	Diagnosis	Non-surgical management	Surgical management
Assess inside the pouch			
EUA	Stricture	Dilate with Hegar dilators	Pouch advancement flap Re-do surgery
Pouchoscopy and biopsy	Pouchitis	Treat for pouchitis	
	Cuffitis	Treat as proctitis	Re-do surgery
Pouchogram (+/- MRI)	Ileal pouch rectostomy	Treat proctitis	Re-do with handsewn IPAA
	Long efferent limb		Revision with excision of redundant limb
	Small volume pouch		Revision with augmentation of pouch or re-do surgery
	Twisted pouch		Excision of pouch and re-do
	Small bowel obstruction		Re-do or revision surgery
Assess outside the pouch (pelvis)			
Pelvic MRI / CT	Pelvic collection	Drain sepsis	Defunctioning ileostomy
	Fistula	Seton	Mucosal advancement flap or interposition flap
Assess below the pouch (pelvic floor)			
Endo-anal ultrasound Anal physiology Defecating pouchogram	Weak sphincter	Medical management Biofeedback	Consider ileostomy and pouch excision
Assess above the pouch (rest of the bowel)			
Small bowel follow-through Magnetic resonance enterogram Coeliac screen Bile salt malabsorption	Crohn's disease Coliac disease Bile salt malabsorption	Medical management	Consider ileostomy and pouch excision

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Pouch Outcomes

Function
Failure
Fecundity

Fecundity

- The ability to produce offspring
- Global infertility rate 20%
- Open pouch surgery increases infertility 50%
- Laparoscopic pouch surgery better 30%

- C-section recommended

European Crohn's and Colitis Organisation

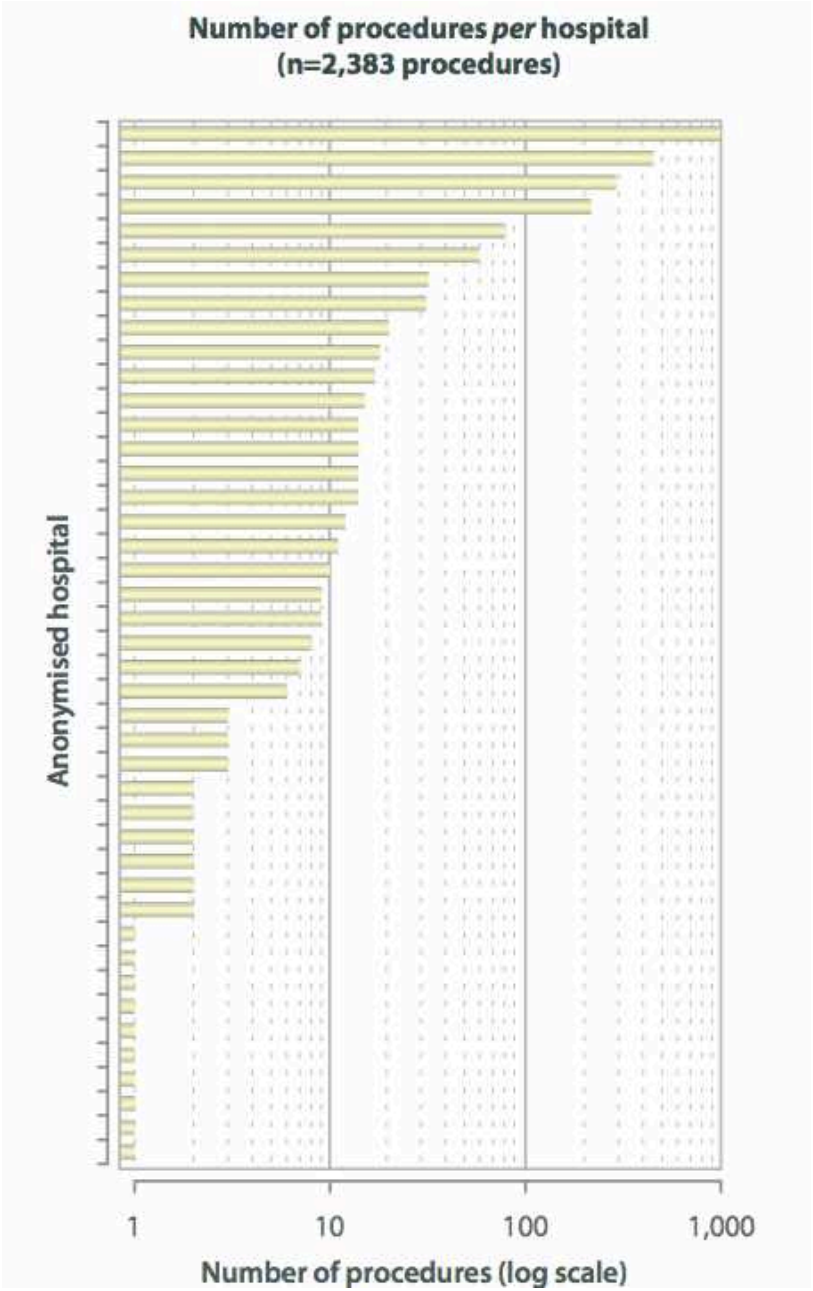
Sexual function

2.10.1.1. ECCO Statement 7A

Active UC is associated with poor sexual function. In general terms sexual function improves after IPAA. However proctectomy can risk impotence and loss of ejaculatory function in men and reduced fecundity and dyspareunia in women (EL2). Sexual function should be discussed when counseling patients about treatment options (EL5)

1 in 7 patients with a pouch have sexual dysfunction

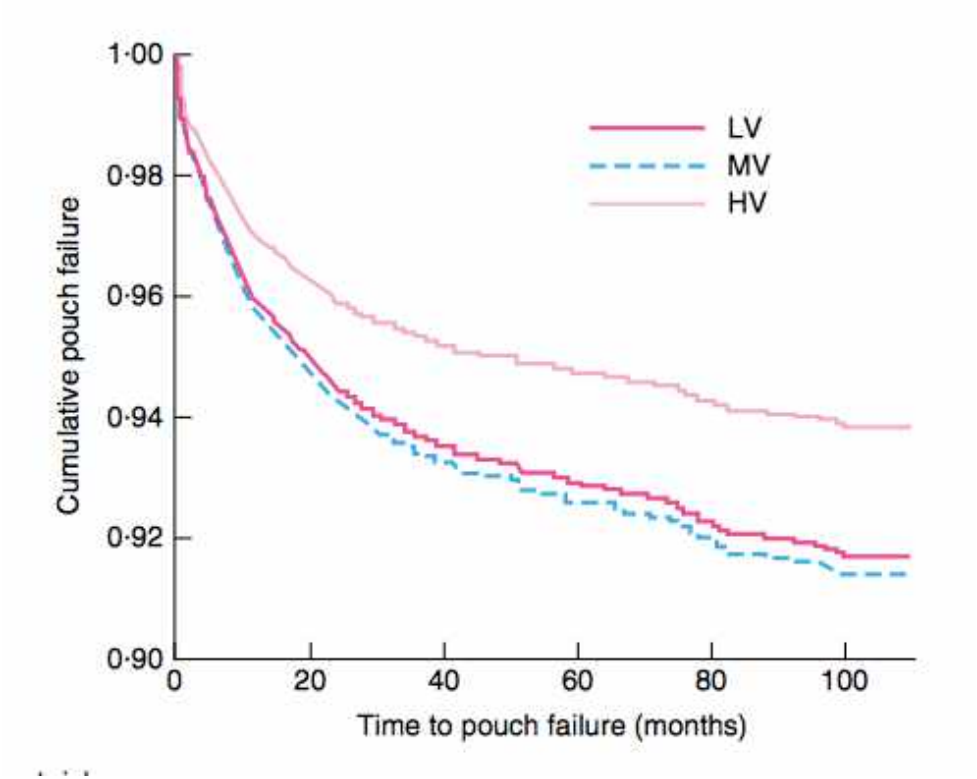
Surgical volume and outcome



Disparity in experience

ACPGBI Pouch Registry 2012

Volume and pouch failure



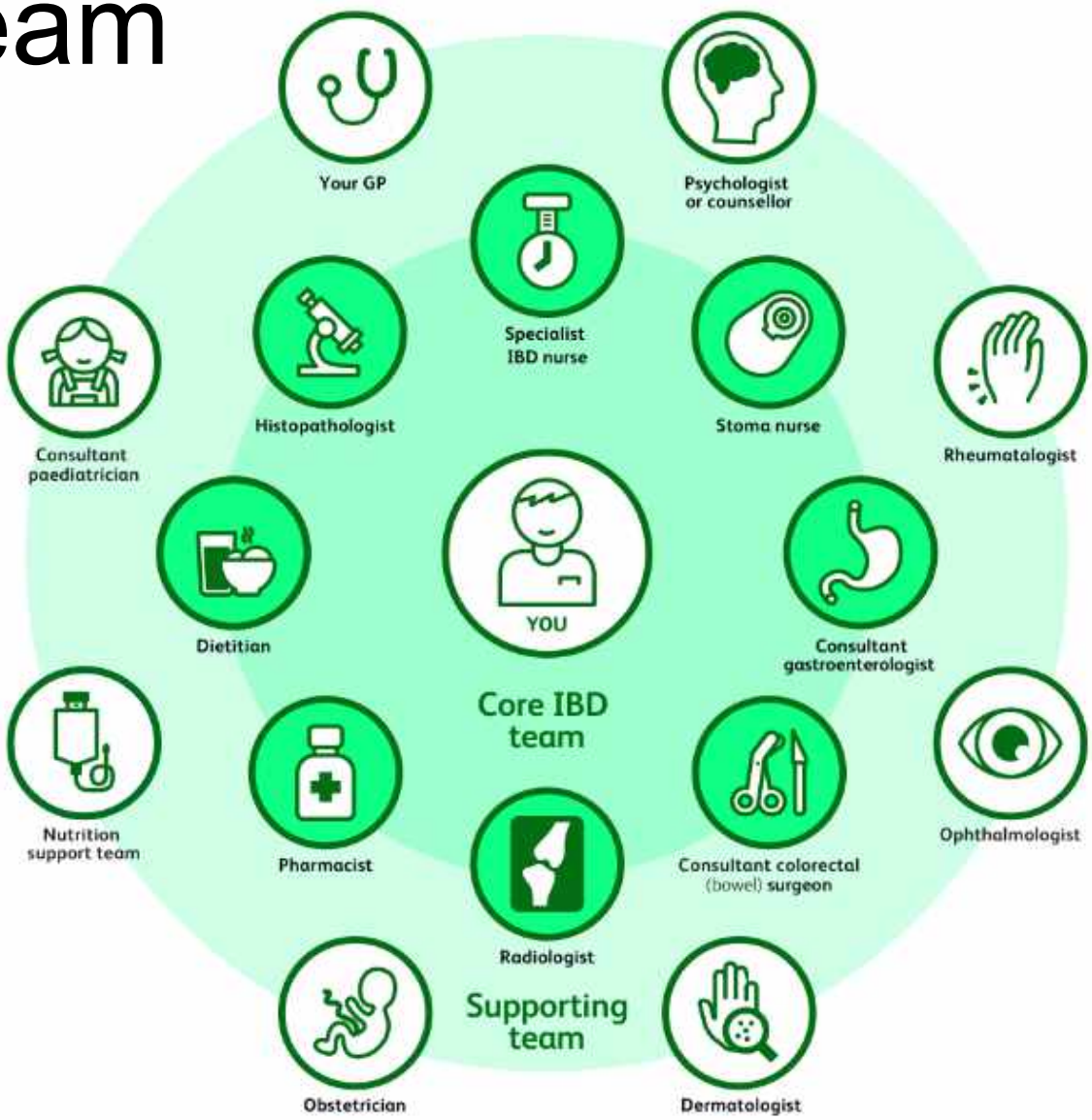
- >60% performed at low or med volume centres (0.1-3.5/yr)

ECCO Guideline

- There is clear evidence that high volume surgeons in high volume units achieve lower pouch failure rate as well as better pouch salvage

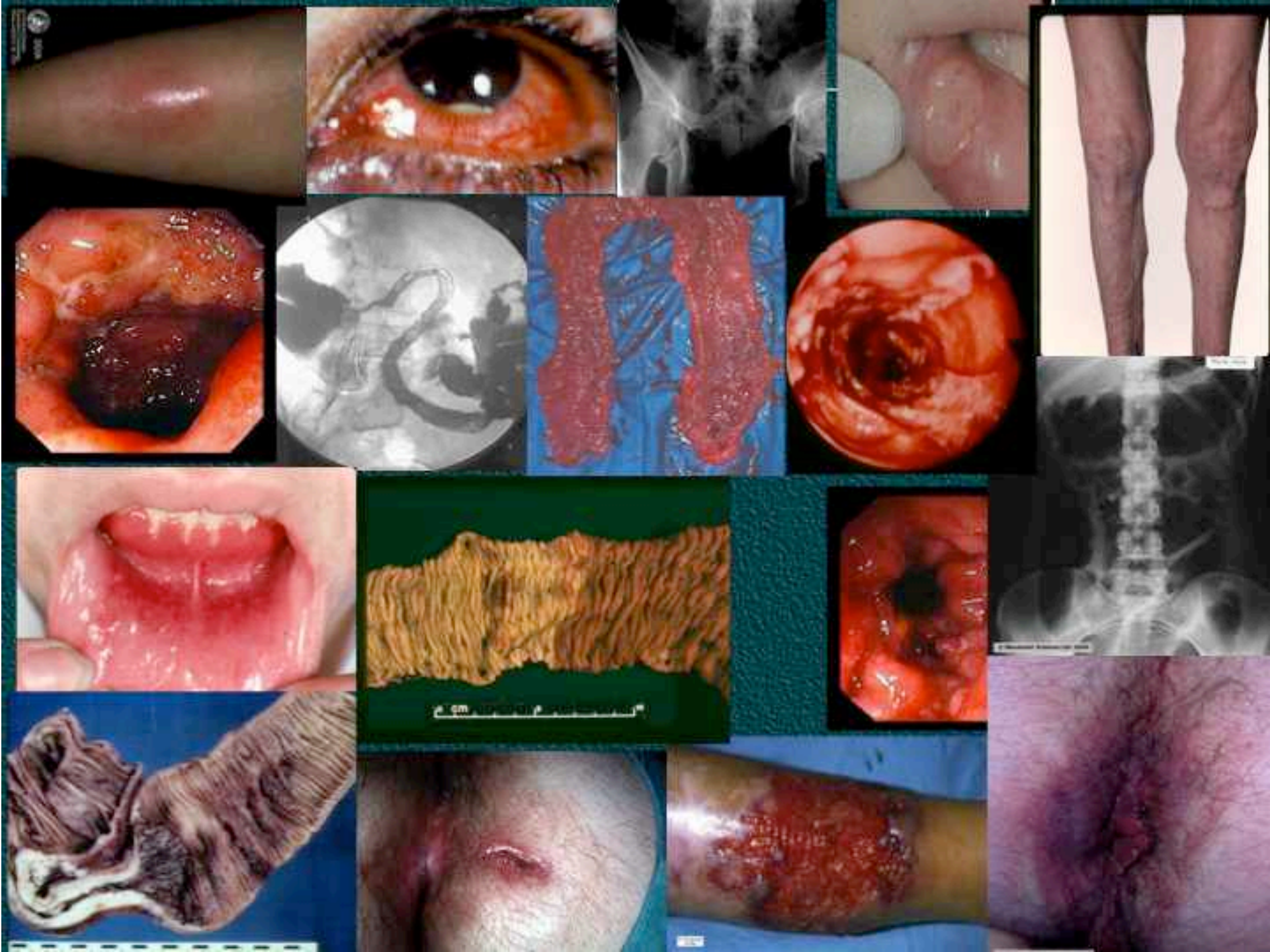
- Patients should be referred to centres that perform **at least 10 pouches per year**

IBD Team


Your GP
Psychologist or counsellor
Specialist IBD nurse
Histopathologist
Stoma nurse
Consultant paediatrician
Rheumatologist
Dietitian
YOU
Consultant gastroenterologist
Core IBD team
Nutrition support team
Pharmacist
Consultant colorectal (bowel) surgeon
Ophthalmologist
Radiologist
Supporting team
Obstetrician
Dermatologist

Patient first

- Patient experience
- Patient education
- Patient support

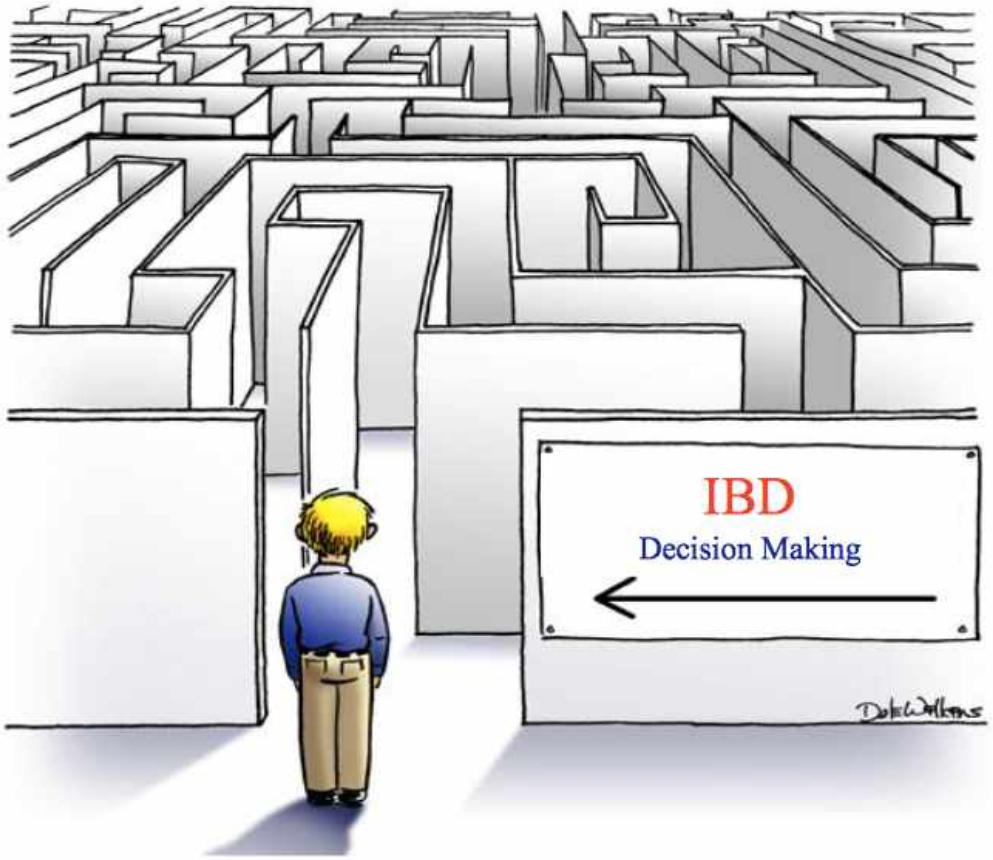


Summary

- In one generation we have seen..

- The creation of pouch surgery
- Technical refinement
- Advances in medical therapy
- The age of re-do surgery

Get it right first time!



- Right operation
- Right patient
- Right time

Thank you

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