

An Approach to Lower Abdominal Pain

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Patient-centred. Independent. Academic.





- Causes of abdominal pain
 - Commonest causes
 - My approach
-
- A few unusual cases
-
- Diverticulitis and current management

Common Causes Of Abdominal Pain

<ul style="list-style-type: none"> Costochondritis Biliary colic (Gallstones) Gallbladder infection Pulled Muscles Hepatitis Kidney stone Pneumonia 	<ul style="list-style-type: none"> Acid Reflux Heartburn Heart Attack Gastritis Stomach Ulcer Duodenal Ulcer Pancreatitis Epigastric Hernia 	<ul style="list-style-type: none"> Pneumonia Costochondritis Spleen Infection Enlarged Spleen Hepatitis Kidney Stone Constipation Trapped Wind
<ul style="list-style-type: none"> Kidney Stone Kidney Infection Trapped Wind Constipation Pulled Muscle Appendicitis 	<ul style="list-style-type: none"> Stomach Ulcer Intestinal Obstruction Constipation Worm Infestation Crohns Disease Food Poisoning Trapped Wind Umbilical Hernia 	<ul style="list-style-type: none"> Constipation Trapped Wind Diverticulitis Irritable Bowel Syndrome Kidney Stone / Infection Crohns Ulcerative Colitis
<ul style="list-style-type: none"> Appendicitis Urine Infection Constipation Ectopic Pregnancy Mid Cycle Pain Pelvic Infection (PID) Endometriosis Ovarian Cyst Trapped Wind Hernia 	<ul style="list-style-type: none"> Trapped Wind Constipation Bladder Infection (Cystitis) Retention Of Urine Menstrual Cramps Endometriosis Pelvic Infection (PID) Fibroids Miscarriage Symphysis Pubis Dysfunction 	<ul style="list-style-type: none"> IBS Crohns Ulcerative Colitis Diverticulitis Constipation Trapped Wind Mid Cycle Pain Endometriosis Pelvic Infection Ovarian Cyst Ectopic Pregnancy Hernia

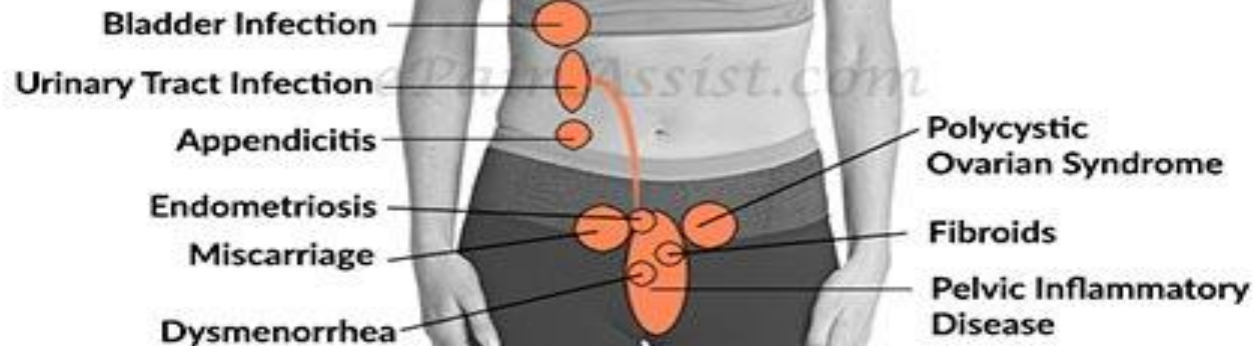
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Most Common Causes



Lower Abdominal Pain 9 Most Common Causes



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My Approach

History of pain

- Frequency and duration
- Character of the pain
- Relation to menses
- Site and radiation
- Aggravating or relieving factors

- Past history of similar pain



Further History

- Associated change in bowel habits
- Weight loss
- Bleeding
- Jaundice
- Family history (porphyria, Familial mediteranean fever, sickle cell disease, diabetes)



Examination

- General –temp, pulse rate, palor
- Inspection
- **Palpation**
- Auscultation
- Do not forget....hernial orifices, PR, spine
- Urine dipstick



Investigations

- ?????
- FBC, ESR, CRP, U&E, glucose
- Abdo and pelvic U/S
- AXR

- CT abdo/scopes/MRI



Mrs ST

- 27 year old female
- No past history of note.
- April 2017 presented to GP RIF pain and pus per rectum



What would you do as the GP?



1. Treat empirically...if so with what and for what?
2. Do further tests...if so which tests?
- 3 Refer on...if so to whom and explain why?
- 4 Other?

What I would Have Done

- FBC, CRP
- Urine dipstick

- U/S abdo and pelvis

- Considered colonoscopy



What was actually done

- Augmentin
- Referred to gynae
- Vaginal ultrasound
- Prescribed anti-inflammatories





What happened

- Pain settled
- Pus continued
- Stool sample sent for M,C &S



- Was the stool test necessary?
- How would it change management?

What next?

- Stool showed blood
- Started to lose weight
- Referred to general surgeon for colonoscopy



Colonoscopy result

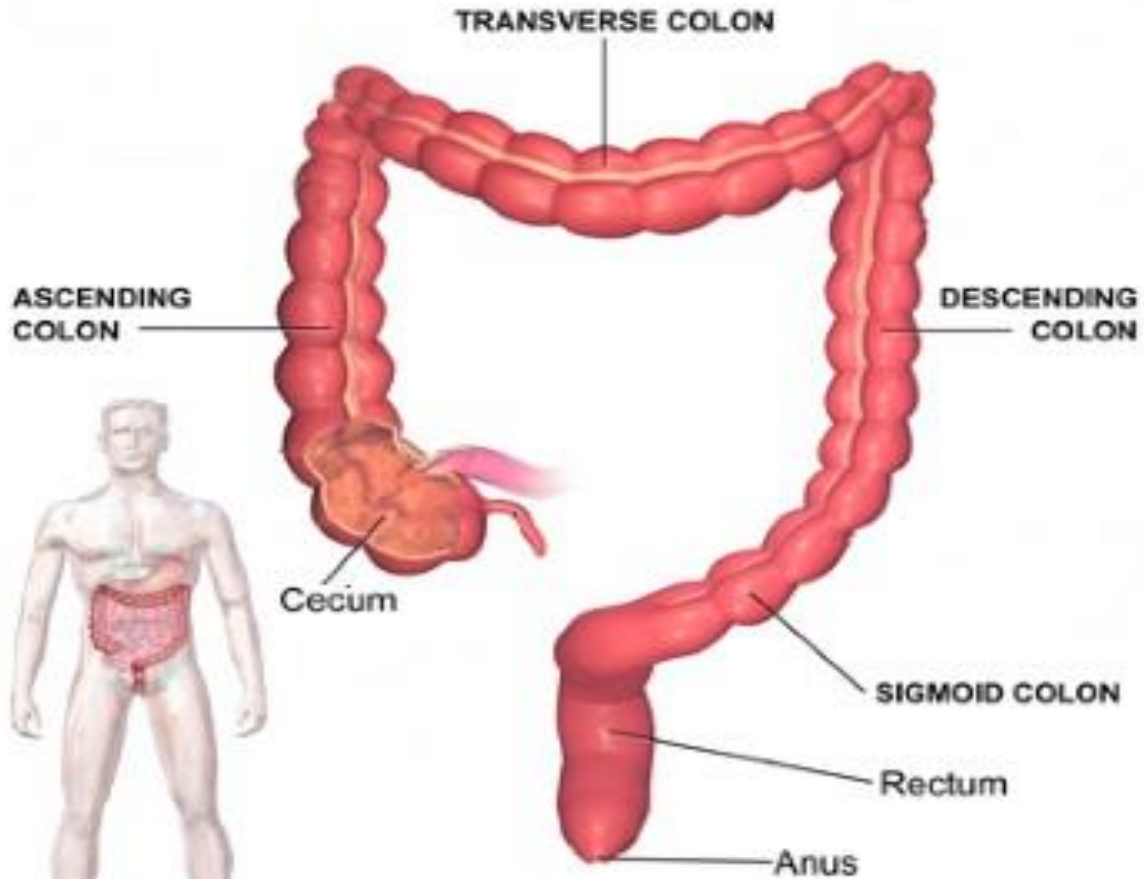


- “Colitis”
- Biopsies from transverse, descending, sigmoid colon and rectum.
- ? Right colon ? TI
- “Mild non specific chronic colitis”
- Normal architecture, no crypt abscesses, no intraepithelial lymphocytes
- Mild increase in chronic inflammatory cells

Progress

- Commenced on pentasa suppositories
- Comments





The Large Intestine

Colitis Therapy

- Rectum suppositories
 - L sided disease enemas
 - Beyond splenic flexure oral medication
-
- THEN
 - Middle May, worsening anal symptoms and underwent anal fistula repair
 - Anal discharge ceased



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Thoughts and suggestions

Progress continued

- Then developed upper abdominal pain
- Nexium, UTI diagnosed on dipstick and prescribed urizone
- 5 days later seen in casualty with severe epigastric pain. Again told UTI, added buscopan and perfalgon
- 2days later still had severe upper abdominal pain. Saw GP...told UTI prescribed Zanor.
- Referred to clinical psychologist





- Saw psychologist the next day
- Not a psychological issue
- GP 3 days later, given librax and bevispas
- Passed no stool for 7days.
- By now lost 10kg in weight
- Presented to casualty with acute obstruction requiring emergency surgery

At Surgery

- Obstructed small bowel with mass in T1
- T1 and caecal resection with primary anastomosis.
- Breakdown of anastomosis, intra-abdominal sepsis requiring further surgery
- Ileostomy and ascending colon stapled.





- Discharged early August (3months after admission)
- 6 days later vaginal discharge treated for thrush
- Sought second opinion
- Remained unwell
- 30mg prednisone ? why
- Electrolyte disturbances, elevated inflammatory markers, draining sinus on abdomen

MRI

- Pelvic collection, fistula into vagina
- Fistula between small bowel loops
- Sinus tract confirmed, not communicating with bowel
- Perianal fistula with small collection
- Drainage of collections, fistula laid open and seton inserted



Outcome

- December 2017 sepsis controlled
- Commenced on immunosuppression and subsequently biologics
- November 2018 ileostomy reversed
- January 2019 recovered from surgery and wanting to start a family



Learning points



- If patient keeps coming back think and look again
- Not all white cells in urine = UTI
- If recurrent look for other causes
- Just because you have referred to a specialist it doesn't mean the specialist is right.



Leucocytes in the Urine

- Inflammation in urinary tract, interstitial cystitis etc
- **Pelvic & intra-abdominal infections/inflam**
- Radiation cystitis
- **Urinary fistula**
- Intrinsic renal disease
- TB
- Auto-immune diseases
- Drugs (diuretics, NSAIDS, olsalazine, antibiotics)

Other Learning Points

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- Anyone with “colitis” and perianal disease should be investigated for crohns
- Basic bloods can assist with diagnosis

Mrs C W

- 37 year old lady
- 4 month history of episodes of severe abdominal pain associated with elevated WCC and CRP
- G and C scope, CT, MRI
- Labelled WC scan – increased uptake in R colon



On review

- Also complained of fevers, joint pains
- Smoker
- obese
- Microcytosis on FBC
- ↑ GGT



Further investigations

- Repeated G and C scope
- FBC and film
- Iron study

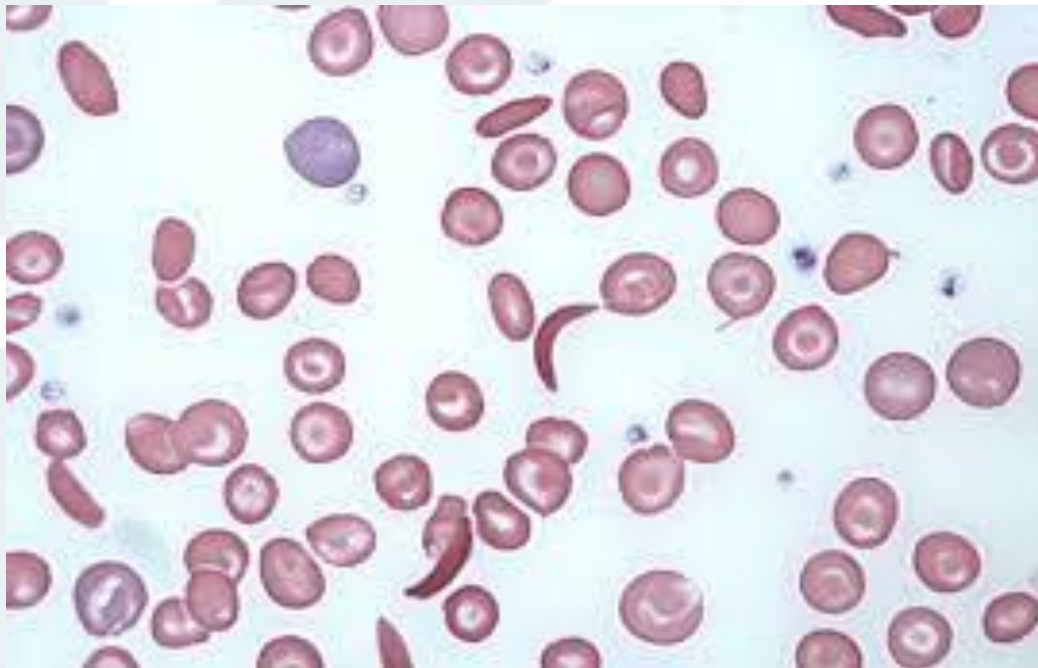


Blood Film

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Blood Film

- Microcytosis
- Sickle cells
- Iron studies normal



Causes of microcytosis

- Iron deficiency
- Anaemia of chronic disorder

- Thalassaemia

- Sideroblastic anaemia
- Lead poisoning
- Copper deficiency



Diagnosis



- Combined sickle cell disease and thalassaemia trait
- Episodes of pain were sickle cell crises
- Advised to stop smoking, maintain hydration
- Extremely rare
- Learning point...if things unclear review even the basics



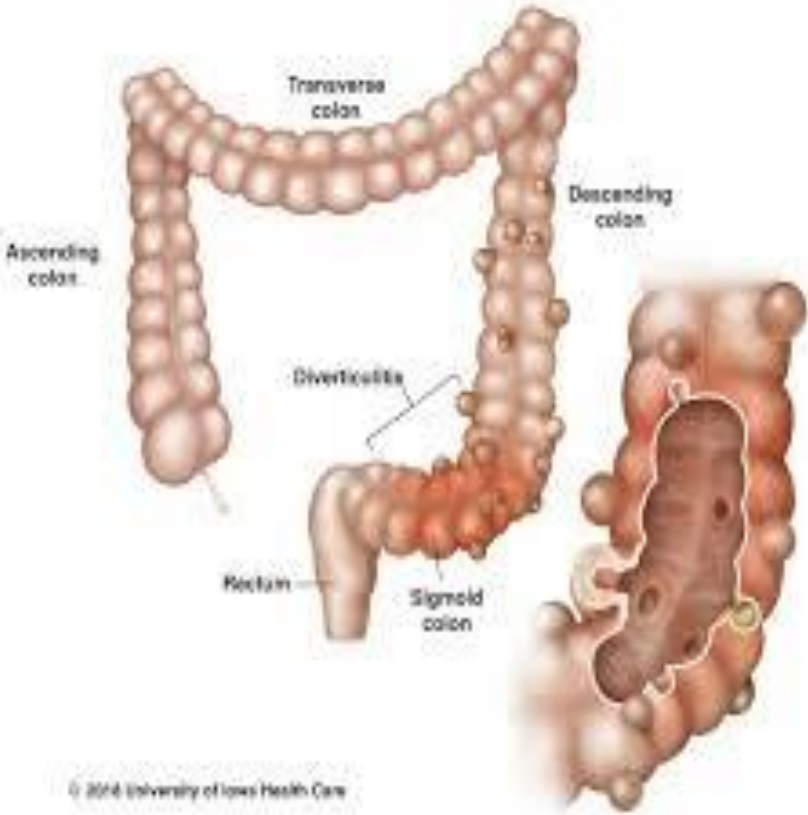
Diverticular Disease



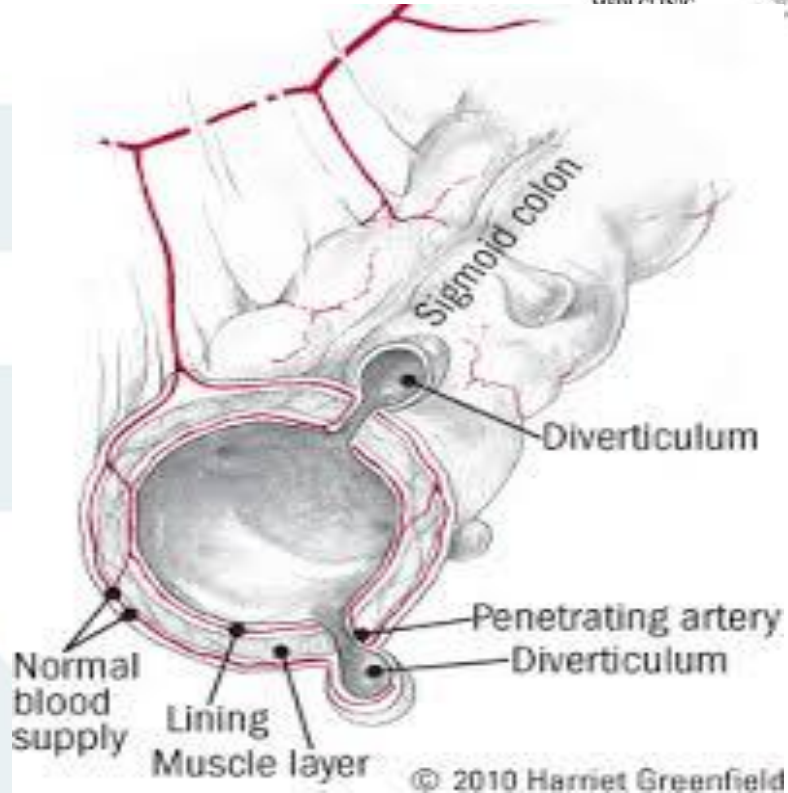


Diverticulitis

- Inflammatory process that most commonly affects the sigmoid colon
- Diverticulae occur where blood vessels enter colonic wall
- Uncomplicated
- Complicated (abscess, fistula, stricture, perforation)
- 5% < 40 years, 50% > 60 years



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Risk Factors

- Smoking
- NSAIDS
- Physical inactivity
- Obesity

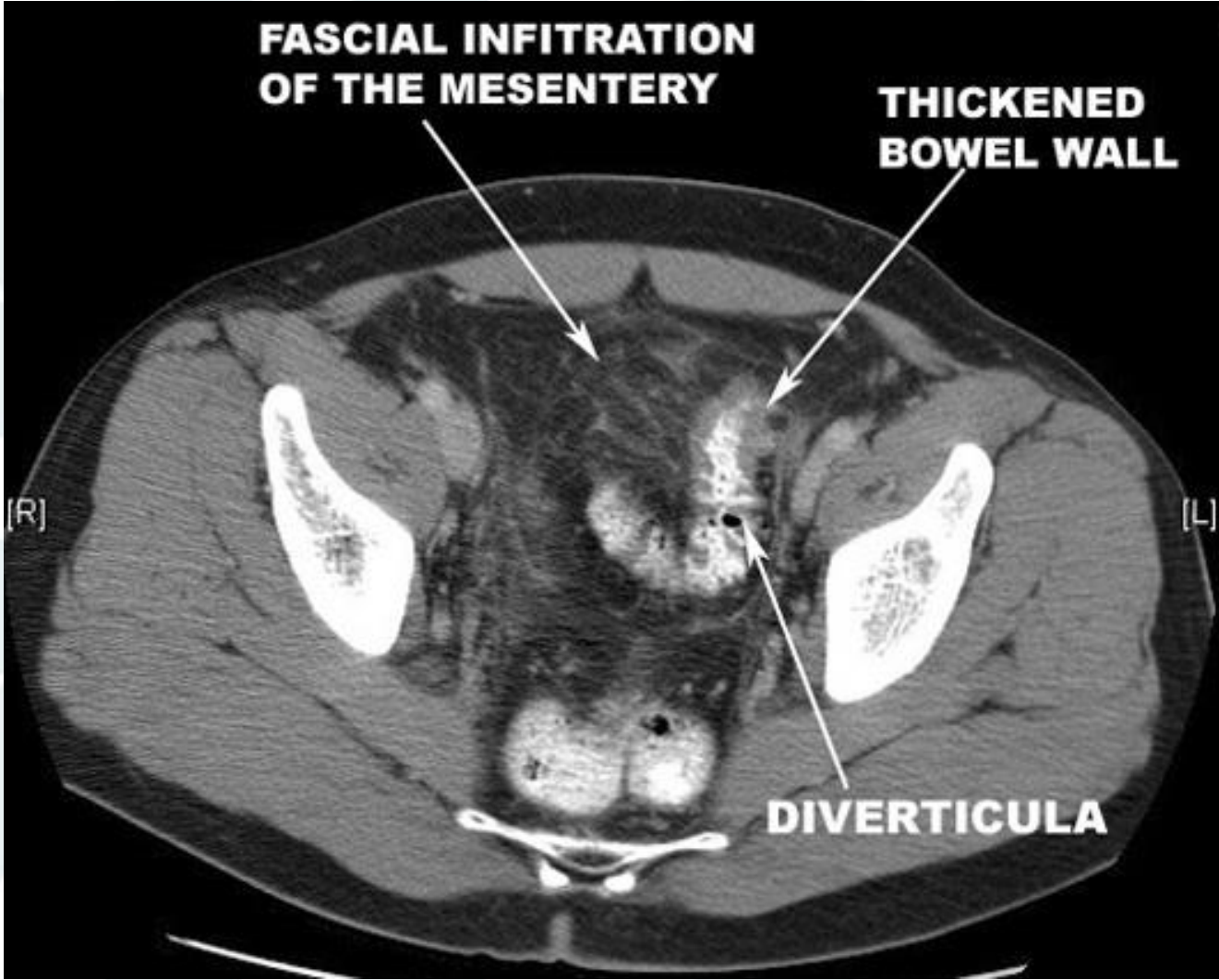
- Low fibre diets associated with higher rates of diverticulitis



Presentation

- LIF pain
 - Fever
 - Change in bowel habit
 - Mass in LIF
-
- CT thickening of colonic wall, fat stranding, micro perforations, abscesses





Surgery as Treatment



- Evidence of sepsis or peritonitis
- If patients fail to respond or deteriorate with medical treatment (antibiotics and/or drainage)
- 20% of all patients



Simple Diverticulitis

- Absence of high fever, no significant lab or radiological abnormalities.
- Not immunosuppressed
- Outpatient
- ? Antibiotics



Cochrane Database Systematic Review, 2012:11

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- 3 RCTs Xray confirmed, L sided disease
- Complications
- Emergency surgery
- Recurrence
- Length hospital stay
- Conclusion no difference between antibiotics and no therapy



Daniels L, Onlu C, de Korte N et al
Randomised Controlled Trial of observational V
Antibiotic Treatment for a first episode of CT-Proven
uncomplicated acute diverticulitis

Br J Surg 2017; 104: 52-61

- L sided disease
- 528 patients from 22 sites in Netherlands
- Followed for 6 months
- Median time to recovery 14 V 12 days but with a shorter hospital stay if no antibiotics
- No difference in recurrent episodes, readmission rates, sigmoid resection, development of complicated disease or mortality



- Antibiotic or no antibiotic?
- Ciprofloxacin and flagyl....but now?
- Augmentin
- Liquid diet

- High fever, leucocytosis, immunosuppression, serious co-existing conditions.....admit

Post an episode of diverticulitis

- Consider colonoscopy to excluded concomitant colon ca especially if no imaging performed
- At least 6-8weeks post
- Low pickup rate for ca



Risk of recurrence

- Varies widely 10-35%
- Severity likely to be similar to first episode
- High fibre diet may reduce frequency
- No supportive evidence to exclude popcorn, seeds and nuts



? surgery for recurrent disease



- Decisions should be individualised
- Severity and frequency of attacks
- Co existing conditions
- Laparoscopic V open – cochrane review, meta-analysis

Other Treatments

- 5 ASAs
- Rifaxamin
- Probiotics



Summary

- Categorise simple V complicated
- Antibiotic or no antibiotic
- Monitor
- Liquid diet followed by high fibre
- Interval colonoscopy
- Stop smoking, exercise, avoid NSAIDS

