The evolving role of Surgery in IBD
An interactive case presentation

The Gastroenterology Foundation of South Africa
IBD Interest Group
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THE GASTROENTEROLOGY FOUNDATION OF SOUTH AFRICA

Wits University Donald Gordon Medical Centre
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MEDICLINIC

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

Ms PP

- 56 year old female
- First Presentation: 1/10/2001
- Referred by GP - 4 day history of perianal abscess + fever

- Episodes of diarrhoea
- Describes stool bubbling through vagina
- No extra-intestinal manifestations of IBD
- Smoker (since 25 years old; 40 cigarettes a day)

Relevant history:

- Diagnosed at Kings College Hospital with Crohn's disease in 1968 following a haemorrhoidectomy
- 1969 - Gastroscopy: "Coarse mucosal pattern in the 2nd part of the duodenum "

  - Barium Meal: "There were several abnormal segments of small bowel strictures and in the right side deep ulceration. The terminal ileum was abnormal and narrowed."

- 1971 - Johannesburg General Hospital - Terminal ileal resection
- only complaint being diarrhoea.
- CaCX, radiation
- Recurrent perianal abscess which was managed by her GP

- COPD
- Medication: On HRT
- Occupation - Project manager at FNB - Stress at work
- No children
- Family history - diabetes

Impact of changes in management over time

Surgery

- Terminal ileal resection

Medical therapy

- Steroids
- Immunosuppressants – Azathioprine + Methotrexate
- **Biologics – Infliximab**
- Antibiotics

Examination

- Pyrexial
- BP 120/80
- HR 75
- Abdomen – previous scars
- PV – nil apparent
- Perineum: abscess on the left which was closely related to the anus and evidence of a chronic fistulous tract

Assessment

- perianal abscess & complex fistula – in the background of Crohn's

- 2/10/2001
  - Drainage of perianal abscess + placement of Seton
  - Sigmoidoscopy + Biopsy

- 3/10/2001
  - Referred to gastroenterologist
  - therapy for Crohn's– Asacol 400mg tds, Methotrexate ; Flagyl 400mg tds

  - SSRI/HRT

- 5/10/2001
  - Healing but still a lot of pain
  - Continue Crohn's treatment
  - Additional analgesia

Evolution of drugs

Medical therapy

- Mesalazine widely used in the past now generally considered little benefit
- Now:
  - Steroids
  - Azathioprine
  - Methotrexate
  - Biologics – Infliximab
  - Antibiotics

- 24/10/2001
  - Colonoscopy – active disease
    - Reached caecum
    - Ileocolonic stenosis at anastomosis
    - Rectum – multiple areas of inflammation
    - Rectal and anal stenosis
    - Inflamed polyp anteriorly

- 8/5/2002
  - EUA / Relook perineum
  - Washout + Closure of rectal defect with monocryl 2.0
  - Laparotomy + ileostomy

- 27/8/2002
  - Closure of ileostomy

- 13/9/2002
  - Laparotomy – small bowel stenotic stricture – resection + anastomosis

- 5/8/2013
  - EUA
    - Rectovaginal fistula - tract from posterior vaginal wall to rectum at 12 ‘0 clock
    - Placement of Seton
      - Biopsy of fistulous tract - moderately differentiated adenocarcinoma 2cm granulomatous lesion on left labia
      - Biopsy Small cystic deposit of mucinous secreting adenocarcinoma

- **Neoadjuvant chemo + DXT**
- 21/8/2013
  - Gastroscopy mild gastritis; Hpylori negative
  - Sigmoidoscopy mucosal lesion at anorectal junction - Biopsy – no features of malignancy

- 21/8/2013
  - MRI
    - Ulcer with Fistula tract at anterior anorectal junction
    - No definitive malignant masses but malignant ulcer is possible
  - CT chest/abdomen/pelvis
    - Diffuse emphysematous changes
    - No evidence of mets
- 13/1/2014
  - **Abdominoperineal resection + posterior vaginectomy (pT1N0M0)**
  - **Permanent end colostomy**
  - **IGAP flap**

Q1. Risk of anal adenocarcinoma in perianal fistulas secondary to Crohn's disease?

What is the incidence ?

A. 20/1000 patient years
B. 200/1000 patient years
C. 0.2/1000 patient years
D. 2/1000 patient years

Answer C

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In patients with CD, adenocarcinoma complicating perianal or enterocutaneous fistula tracts can occur but is rare.

1. Meta-analysis of 20 clinical trial 1965-2008 – incidence of cancer relating to CD associated fistula was 0.2/1000 patient years.
2. 17 year follow up study of 6058 CD patients -> only 4 developed fistula associated adenocarcinomas

Fistula-related adenocarcinomas

- can arise in patients with long-standing perianal CD
- may be associated with adenomatous transformation

- factors associated with malignant transformation
  - Early onset disease
  - Disease duration > 10 years
  - Chronic colitis/high inflammatory activity
  - Persistent chronic fistulas and stenosis
  - More common in females, tend to be younger

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Q2. What is the proportion of squamous carcinoma to adenocarcinoma in malignant crohn's perianal fistula?

A. SCC
B. Adenomatous

Answer B

A. SCC 31%
B. Adenomatous 59%

Rectum 59%

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Q3. Frequency and modality of surveillance?

- Regular surveillance recommended for CD patients with chronic persisting perianal fistula to detect ano-rectal carcinomas
    - Routine biopsy of any suspicious lesion
    - Biopsy under anaesthesia
    - Curettage of fistula tract when needed

Red flags
Long duration
Change in symptoms – new onset pain***

ECCO guidelines 2016

Treatment of Simple perianal fistulae

Uncomplicated low anal fistula

- simple fistulotomy
- perianal abscess – incision + drainage

Symptomatic simple perianal fistulae

- seton placement
- +antibiotics (metronidazole and/or ciprofloxacin)

- Recurrent/ refractory (not responding to antibiotics)
  - thiopurines or **anti-TNFs** can be used as second line therapy

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Treatment of Complex perianal fistulae

Surgical treatment of sepsis

- incision + drainage of abscess
- seton placement
  - Timing of removal depends on subsequent therapy

Medical treatment

- **first line therapy - infliximab** (adequate source control sepsis surgically)
- ciprofloxacin +anti-TNF improves short term outcomes
- anti-TNF treatment + thiopurines – to enhance the effect of anti-TNF

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Continuing therapy for perianal Crohn's disease

Combination of drainage and medical therapy = maintenance therapy

- Thiopurines
- Infliximab
- seton drainage

Medical treatment failure

- considered for a diverting ostomy
- proctectomy

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Anti TNF therapy – Carcinogenic risk

- Lymphoma
- Leukaemia
- Carcinoid tumor
- Ca Colon
- Breast Lung
- Melanoma
- Non Melanotic skin cancers (BCC SCC)

TNF inhibitors: are they carcinogenic? Raval et al. Drug Healthc Patient Saf. 2010; 2: 241-247.

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