Antibiotics alone may be sufficient to resolve some small Crohn’s abdominal and pelvic abscesses. Larger abscesses may resolve completely with percutaneous drainage. When drainage of an abscess continues, an abscess recurs, or when there is an associated fistula or obstructive luminal lesion, surgery may be indicated. Drug therapy alone for established abdominal fistulas is not well proven. Most such patients are likely to require surgical therapy.

Abdominal and Pelvic Abscesses

Abdominal and pelvic abscesses occur at some stage in 10 to 30 percent of all patients with Crohn’s disease. Abdominal entero-enteric, entero-visceral and entero-cutaneous fistulas are less common, and can occur spontaneously or after abdominal surgery. Some fistulas occur in association with an intra-abdominal collection, frank abscess or inflammatory phlegmon. Most of these abscesses and fistulas are apparent clinically. However with the advent of sensitive, high-resolution, cross-sectional imaging it is clear that there is a significant incidence of clinically silent small abscesses and internal entero-enteric fistulas. This discussion, however, will focus on those abscesses and fistulas that present clinically. Intra-abdominal abscesses are the result of bowel perforations in relation to diseased bowel that become walled-off and contained. Some of these are micro-perforations, such that local treatment of the abscess will suffice. Other perforations are more substantial to the extent that the bowel content forms a fistula or common cavity with the abscess. The latter will usually require surgical intervention. In one series of 36 patients with an abscess a mass was present in two-thirds of patients, and an entero-cutaneous fistula was present or formed in one quarter. Seventeen percent had sub-acute obstruction related to co-existing luminal disease (Jawhari et al, Brit J Surg 1998). Historically the accepted wisdom was that intra-abdominal or intra-pelvic abscesses resulted from severely diseased bowel, and that surgical treatment was required to deal with the abscess and resect the diseased bowel. In recent years it has become apparent that minimally-invasive methods, or drug treatment alone, may be sufficient treatment for many abscesses. In an early series of 36 patients admitted with an abscess, followed for 3 months to 4 years (median 18 months), one tenth of patients were treated by percutaneous drainage with abscess resolution (Jawhari et al, Brit J Surg 1998). Of 28 patients who underwent surgery 12 had major post-operative complications: 9 abscess recurrence, 4 entero-cutaneous fistula, 3 bowel obstruction, 2 wound infection, 1 anastomotic leak, 6 short bowel syndrome (long-term TPN needed in 2), and 3 septicemia (1 of which led to bacterial endocarditis). Such operative problems, and the existence of a less-invasive, or non-invasive, alternative, should lead to consideration of primary conservative therapy where possible for this problem. Percutaneous drainage has the advantages of allowing control of sepsis, optimising well being, nutrition & drug therapy, and may allow surgery to be avoided. If surgery is later required then the operative field is uninfected. When percutaneous drainage is performed, after drainage leave the drain in situ till dry. Frequent saline flushes should be used to prevent drain blockage. Withdraw the draining catheter gradually to allow track closure. Concurrent antibiotics may be needed. In one centre where percutaneous abscess drainage was actively pursued, technical success was achieved in 88% of post-operative abscesses and 74% of spontaneous abscesses. Half the patients avoided surgery in the long term. A recurrent abscess occurred in one fifth of patients, but re-drainage was usually successful. Percutaneous drainage was unsuccessful if there was a wide fistula or post-operative dehiscence.
(Gervais et al, Radiology 2002). Lee et al reported on the outcome of a vigorous conservative, non-interventional approach to abdominal abscesses with a median follow-up of 4 years. They found that antibiotics alone may be effective in a proportion of patients. Of 24 patients admitted with an abscess 19 patients were treated initially with antibiotics only, resulting in a successful outcome in 14 patients and the need for surgery in 5. Five patients received initial antibiotic plus drainage, with a successful outcome in 4 and the need for surgery in one. The presence of a fistula and steroid use were associated with a higher chance of failure of conservative therapy (Lee et al, Dig Liver Dis 2006). Fazio and surgical colleagues from the Cleveland Clinic surgeons concluded that “when feasible percutaneous drainage is the most effective strategy from the perspective of patients and third-party payers” (da Luz Moreira et al, Dis Colon Rectum 2009). In conclusion antibiotics alone may be sufficient for a localised small well defined abscess. The presence of a bowel lesion is not an absolute indication for surgery. Any abscess should be followed clinically, with ultrasound or with MRI to ensure abscess resolution. Percutaneous drainage can be utilised when there is a localised well defined abscess and the associated bowel lesion does not absolutely demand surgery. It will often be necessary to proceed to surgery for an abscess when:

- there is a mass or phlegmon and the abscess poorly defined
- an abscess is multi-loculated
- an abscess is inaccessible for drainage
- an abscess is communicating with the bowel (on imaging)
- drainage continues with the drain tube in place
- drainage has been undertaken previously but the abscess re-accumulates
- there is associated gut pathology that needs resecting, such as a tight stenosis, obstruction, or fistula
- there is an associated fistula that is not healing Abdominal and Pelvic Fistulas Abdominal and pelvic fistulas can occur spontaneously as part of the Crohn’s disease process. Some of these are associated with inflammatory collections or abscesses. There is no good evidence for healing with any drug. In the ACCENT 2 study infliximab was effective in healing perianal fistulas. Abdominal fistulas constituted approximately 10% of all the reported fistulas, but the outcome in these patients was not reported separately (Sands et al, 2004). In the CHARM study adalimumab was used to treat too few abdominal fistulas (n=4) to analyse (Colombel et al, 2007). Surgery will be needed for most entero-cutaneous or substantial internal enter-enteric or entero-visceral fistulas. Abdominal and pelvic fistulas can occur in the immediate post-operative period as an operative complication. These may heal with nutritional support. There may be an inflammatory component – treatment with anti-inflammatory, immunosuppressive therapy may allow fistula healing in some of these patients. Once they become chronic they will often require further surgical therapy.

**REFERENCES**


**POLICY OF FULL DISCLOSURE**

None declared