Division of Gastroenterology and Hepatology

UNC Multidisciplinary Center for IBD Research and Treatment

Treatment of Crohn's disease

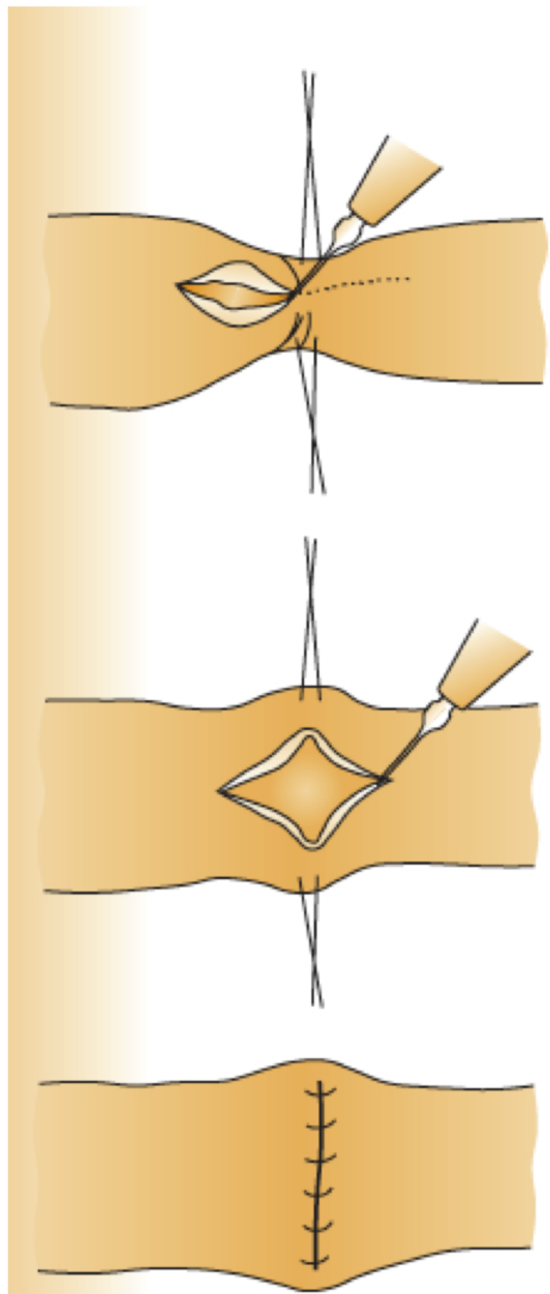
The treatment of Crohn’s disease is based on the same principles as that of ulcerative colitis. Because of the more divergent pattern of disease, symptoms and complications, however, it is more challenging to establish the optimum treatment for each individual patient.

Acute flare-ups are usually treated with cortisone preparations. There are preparations containing budesonide introduced for the treatment of Crohn’s disease (especially the last part of the small bowel, terminal ileum). Their efficacy is similar to that of cortisone and its derivatives. Because their effects are limited to the bowel and the overwhelming proportion of the drug is de-activated in the liver prior to reaching the general circulation, these agents are associated with a significantly lower rate of side effects. Crohn’s disease can also be tackled with dietary measures. Patients can convert their dietary intake to the so-called “elemental diet”, consisting of substances wholly digested and absorbed in the upper gastrointestinal tract. Nourishment can also be administered through infusions of nutrient solutions directly into the blood stream (called total parenteral nutrition -TPN). Dietary measures are usually associated with lower chances of success.

In cases in which the inflammation is restricted to the small bowel, cortisone preparations are normally used first. If the colon is affected, 5-aminosalicylic acid may also be tried. If patients do not respond to either of these drugs, intestinal antibiotics (metronidazole) or drugs that suppress the immune system (azathioprine, 6-mercaptopurine or methotrexate [IMURAN 6MP.pdf, Methotrexate.pdf] may be added. All of these drugs may be associated with side effects, such as itching sensations in the arms and legs, hair loss, anemia, increased risk of colds and the like. Should these or other side effects occur, it is important to consult your physician, who will advise you on the proper course of action. In any case, you should not stop taking your medication or change its dose without asking your doctor. In most cases, these drugs successfully treat acute flare-ups of Crohn’s disease. The same is true for manifestations of the disease occurring outside of the digestive tract. The use of 5-aminosalicylic acid preparations has been shown to reduce the recurrence of the disease after surgery, though this effect is unfortunately far less pronounced following successful treatment with cortisone. Newer treatment methods, such as inhibition of tumor necrosis factor (TNF), a messenger substance in the body (e.g. infliximab -Remicade® or adalimumab- Humira®), should only be tried if other therapeutical methods did not succeed (e.g. cortsione or azathioprine) or in patients with

severe fistulizing disease.

If these methods prove unsuccessful, or if complications such as intestinal obstruction or repeated stenoses occur, surgery may provide long-term relief. When surgery is recommended, emphasis is placed on techniques that preserve as much bowel as possible. Short areas of narrowing (stenoses or strictures) can be relieved using a technique called stricturoplasty (see figure "Stricturoplasty"). This involves placing a longitudinal (lengthwise) incision into the area of stenosis and then closing the bowel in a cross-wise fashion. This relieves the narrowing and normal passage of stool is again possible. The main advantage of this method is that no bowel must be sacrificed. Stricturoplasty can be performed on several segments of stenosed bowel during a single operation.



The technique of stricturoplasty. A longitudinal (lengthwise) incision is made in the area of stenosis and then the bowel is closed in a cross-wise fashion.

Surgery must also be considered for the treatment of fistulae. Abscesses are usually treated today by means of a drainage placed through the skin under ultrasound or computed tomographic guidance. Surgery, however, is usually required after the acute symptoms have subsided to treat the underlying cause, which may be a fistula or stenosis of the bowel. Following successful surgery, it is advisable to undergo regular follow-up conducted by experienced internists and surgeons working together. This permits early recognition and treatment of any complications that may arise.

Unlike ulcerative colitis, Crohn's disease is associated with a number of different nutritional deficiencies, including vitamins, trace elements, minerals and protein. This requires appropriate substitution (vitamins, calcium, iron, potassium, zinc). Your doctor will use regular blood tests to identify the exact nutrients that require substitution. One very

common deficiency is that of vitamin B12, where absorption from the bowel is often reduced in Crohn's disease. In order to prevent a deficiency of vitamin B12 and the resulting anemia, the life-long administration of the vitamin by injection every three months may often be necessary.

As in ulcerative colitis, patients with Crohn's disease must determine for themselves which foods they tolerate and which foods cause them problems. A balanced diet providing the necessary nutrients, vitamins and minerals should be the goal. To date, no special diet or nutritional form has been proven to either accelerate treatment or prevent recurrence.