

## What is Crohn's Disease?

Crohn's Disease is an inflammatory bowel disease with a chronic inflammatory process involving all of the gastrointestinal tract, particularly the small bowel, large bowel, the rectum and the anus. The cause is unknown.

## Incidence

Crohn's Disease affects males and females equally at the rate of about 5 per 100,000 of the population. Occasionally more than one family member is affected. Children and adults of any age may suffer from Crohn's Disease, but there are increased peaks of incidence around 25 and 65 years of age.

## How Does Crohn's Disease Affect the Bowel?

Inflammation occurs in a patchy manner involving the lining of the bowel and will extend through the full thickness of the bowel wall. This inflammation causes ulceration, scarring and narrowing of the bowel resulting in bowel symptoms and/or feeling generally unwell. Bleeding from the bowel can cause anaemia. Abscesses can form adjacent to the inflamed bowel and burst into other organs causing an abnormal track between the two organs (fistula). The bowel ulceration causes diarrhoea often with blood and mucous and may lead to malnutrition. Narrowed bowel causes intermittent or constant crampy pain caused by the incomplete blockage. If the anus is involved, fissures, fistulae and watery mucous discharge with some bleeding may occur.

## Can Other Organs be Involved?

Other organs can be involved, resulting in inflammation of the joints, skin rashes and inflammation of the eyes. Some of these conditions respond to treatment with medication but others may require surgery.

## Symptoms

Abdominal pain, diarrhoea, passage of blood and mucous, malaise and fever occur in a chronic manner with acute exacerbations. Bleeding, when present, may be mixed with the stool, but is often not that

obvious and may lead to anaemia and iron deficiency. Abdominal pain may be localised to one point, particularly in the lower right side of the abdomen and can mimic appendicitis. Painful mouth ulcers can occur as does weight loss and tiredness. Sometimes anal symptoms may be the presenting complaint.

## Diagnosis

Crohn's Disease can be difficult to diagnose as it may mimic other bowel disorders, particularly irritable bowel syndrome. Large bowel disease (colitis) is best diagnosed by endoscopy (colonoscopy or flexible sigmoidoscopy). Biopsy and barium enema x-rays are sometimes helpful. Small bowel Crohn's Disease may require imaging such as a barium meal and follow-through series of x-rays for diagnosis (small bowel series), CT enterogram, MRI or PillCam. Rarely an isotope labelled white cell nuclear scan can identify the disease. Certain blood tests may be helpful in the assessment of the severity of the disease. Often the diagnosis is made at surgery when other conditions are anticipated. Crohn's Disease may be difficult to distinguish from Ulcerative Colitis, another form of inflammatory bowel disease.

## Treatment

There is no cure for Crohn's Disease. Medication may control the inflammation and some of the symptoms. The main drugs prescribed are anti-inflammatory medications e.g. Prednisone and Salazopyrine with anti-diarrhoeals and anti-spasmodics, iron and nutritional supplements for symptom relief. Occasionally immune suppressants such as Azathioprine are used. New medications are being made available with advances in medical research. The most recent is Infliximab, which aids to block the inflammatory process causing Crohn's. Where there is a localised complication of Crohn's Disease such as narrowing or abscess causing troublesome symptoms that do not respond to medication, then surgery may be necessary.

## What Operation Might I Have?

The surgical procedure is tailored to the specific problem. If short segments of small bowel are involved a widening operation called stricturoplasty is carried out. If a longer length is involved, that section of bowel is removed and the bowel ends joined. A stoma either of the large bowel (colostomy) or small bowel (ileostomy) is sometimes necessary and this can be permanent if the anus has been removed. A temporary stoma may be used to allow residual bowel inflammation to subside or defunction a join in the bowel. Abscesses require surgical drainage and occasionally other organs may need surgical treatment.

## Who Should do my Surgery?

A surgeon who has specialised training in the management of inflammatory bowel disease, who works closely with your gastroenterologist and who is interested in your wellbeing and quality of life. The members of the Colorectal Surgical Society of Australia and New Zealand have this expertise.

## Is More Than One Operation Likely?

About half the patients who require an operation have a second operation at some stage in their life, often years after the first operation and of these, another half will require further surgery. Surgery is used to relieve symptoms and complications of Crohn's Disease and to improve the quality of life.

## What About the Future?

Most people with Crohn's Disease lead relatively normal lives, working and raising families, playing sport and enjoying a good life expectancy. Pregnancy is not contraindicated. Patients with chronic colitis should undergo long term surveillance with colonoscopy because of a slight increase in the risk of developing large bowel cancer. Crohn's Disease may "burn out" after many years but the clinical course of the condition is always unpredictable.

## History

In 1932 at the Mt Sinai Hospital in New York, Drs. Crohn, Ginzburg and Oppenheimer described 14 removed specimens of chronic inflammation of the small bowel which they named regional ileitis. In 1960 Drs. Lockhart-Mummery and Morson from St Mark's Hospital, London published a detailed account of the surgical pathology of this condition affecting the large bowel. The inflammation may affect any part of the gastrointestinal tract and is now known as Crohn's disease.



Photograph of Dr B Crohn visiting Australia in 1966.

### Colorectal Surgical Society of Australia and New Zealand (CSSANZ)

*Members of the Society are surgical specialists practising exclusively in colorectal surgery - the management of diseases of the large bowel (colon), rectum, anus and small bowel. After completing general surgery training they have completed a further period of training and research in colorectal surgery. The Society's mission is the maintenance of high standards in colorectal surgery and colonoscopy in Australia and New Zealand through the training of colorectal surgeons and the education of its members, and to promote awareness, prevention and early detection of colorectal diseases in the community.*

*The CSSANZ Foundation is a trust with a board of governors whose objective is to support high quality research projects for colorectal surgeons in training and our members. Donations to the CSSANZ Foundation are fully tax deductible in Australia and can be sent to:*

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