

CROHN' S DISEASE

Characteristics

The entire intestinal tract can be affected with chronic inflammation. Any age is susceptible but a bimodal peak is present in the young adult and the 7th decade. Any combination of areas may be present, the commonest being ileocaecal disease with or without perianal involvement. Other systemic manifestations may occur including sero-negative arthritis, iritis, oxalate renal calculi, inflammatory skin lesions, and sclerosing cholangitis. Like ulcerative colitis, their presence reflects the disease severity. Increasing scientific knowledge of Crohn's disease is yielding associations with genetic loci. The CARD-2 gene may be mutated in certain families. This may disturb epithelial cell membrane integrity to allow transmigration of certain luminal bacteria and a granulomatous reaction. Smoking is associated with increased risk and activity of the disease.

Presentation

Patients with severe colonic involvement are extremely unwell with anaemia, diarrhoea, and rectal bleeding. Small bowel disease often has obstructive cramps with chronic diarrhoea. The history may, on average, be 7 years before diagnosis. Tenderness or a mass may present in the right iliac fossa.. Malabsorption can develop. Perianal disease can present with abscesses and fistulae. Recurrent suppurative infection and faecal soiling gives a poor quality of life.

Diagnosis

The diagnosis is usually easy in the younger patient with chronic diarrhoea, weight loss and abdominal pain. Many patients do not have classical symptoms and are difficult to diagnose. Stool microscopy and culture, FBC, CRP and ESR may not always be abnormal. Small bowel barium follow-through is likely to detect the majority of cases of ileal disease. In some, only a colonoscopy and ileoscopy will be accurate. Aphthous ulcers, deep fissuring ulcers, and inflammation with skip areas are characteristic. Granulomas may not always be found on biopsy. The diagnosis is then to be made on the clinical pattern of the disease.

Treatment

This depends on the site of the disease and its severity. Prednisone 25-50mg daily is beneficial for acute disease. Maintenance with 5-10mg daily may be required in a small subset of patients who relapse frequently. Oral budesonide, a topical poorly absorbable steroid, can be used as an alternative in mild to moderate disease (3-9mg daily). Azathioprine or 6-Mercaptopurine are used as steroid-sparing agents or monotherapy in resistant cases and have a 50% response. Small bowel disease is maintained with Mesalazine granules 1-3gm/day, and colonic disease Mesalazine tablets 1-4 gm/day or Sulphasalazine 1-3 mg/day. Surgery is reserved for complications (abscess, fistula, obstruction, bleeding). Perianal disease requires drainage of suppuration, antibiotics (Metronidazole, Ciprofloxacin) or a long-term Seton drainage suture. Severe malnutrition may require TPN or an elemental diet. Severe fistulous disease may respond to the anti-TNF antibody Infliximab. Fistulae will close in about 70% of patients. Treatment is expensive, costing about \$12,000 for 3 infusions over 12 weeks. Maintenance therapy may be necessary.

Prognosis

Remissions and relapses are standard. Patients with mild disease require minimal medical intervention. Others can run a severe or protracted course and eventually require surgery (resection, ileostomy, colectomy etc). 70% of patients will have post-surgical recurrence by 7 years. Mesalazine delays relapse. Long term steroids require risk management for metabolic bone disease, vascular complications and diabetes. Colonic disease requires surveillance colonoscopy after 10 years for dysplasia assessment. The risk of colorectal carcinoma is increased.