ACUPUNCTURE today

Crohn's Disease

WESTERN AND ORIENTAL PERSPECTIVES, PART I

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Western Medicine

Definition: Crohn's disease is a chronic, nonspecific, idiopathic gastrointestinal inflammatory disease first reported by Dr. Burrill Bernard Crohn in 1932. It may affect any part of the gastrointestinal tract, but is most common in the ileum and colon.

Crohn's disease is sometimes referred as regional enteritis, ileitis or ileocolitis: regional enteritis because it may be characterized by segments of diseased bowel with sharp borders on the affected regions; ileitis if only the ileum is involved; and ileocolitis if both the ileum and the colon are involved.

Etiology: Crohn's disease has no known etiology. Many factors have been suggested, but none are proven. Possible risk factors include immunologic factors; infectious agents (such as bacteria, virus or amoeba); and dietary factors (including chemicals and drugs). Crohn's disease usually begins before age 35, with peak incidence between 14-24.

Clinical Manifestation: Crohn's disease usually begins with aphthoid ulcerations of the mouth, abdominal pain, diarrhea, fever, anorexia and weight loss. As inflammation continues, patients may develop a right lower quadrant mass or fullness that mimics appendicitis. The mass is palpable during physical examination. Some patients may experience intestinal stenosis and partial obstruction characterized by severe colic, abdominal distention, and constipation and vomiting. Pus, mucous and blood may be present in the stool if the rectum is involved. Chronic cases of stenosis and obstruction will lead to scarring, luminal narrowing and stricture formation.

In severe cases, abdominal fistulas and abscess may develop, causing fever, painful abdominal masses, generalized malnutrition and muscle wasting. Fistulas may remain in the gastrointestinal tract, or they may invade the surrounding areas such as the stomach, peritoneum and urinary bladder. Though rare, cancer has been observed in chronic Crohn's patients.

In addition to various gastrointestinal symptoms, Crohn's disease is often associated with other complications involving the eyes, mouth, skin and joints. These complications may be caused by immunologic response, microbiologic concomitants, genetic interrelationships, or unknown reasons. Involvement of the eyes includes episcleritis. Mouth lesions include aphthous stomatitis. Skin problems include erythema nodosum, pyoderma gangrenosum and pustular lesions. Joint involvement is characterized by arthritis of the larger joints such as the knees, ankles, hips and elbows. Other complications include ankylosing spondylitis, sacroiliitis and cholangitis.

Diagnosis: Definitive diagnosis is made by barium enema x-ray, which demonstrates thickening of the bowel wall, narrowing of ileal lumen, separation of the bowel loops and formation of fistulas. Colonoscopy can be done to confirm the diagnosis via direct visualization of the ulcers and fissures. Biopsy is also an option to confirm the diagnosis or rule out cancer.

Other laboratory exams are nonspecific but help assess the severity of the illness. Anemia is common due to loss of blood, folate or chronic disease itself. Electrolyte imbalance is common with severe diarrhea. Hypoalbuminemia is commonly associated with malabsorption and malnutrition. Lastly, fatty liver or cholangitis may cause liver enzyme abnormalities.

Treatment: Since there is no known etiology for Crohn's disease, there is no specific therapy available. Drug treatment focuses on relieving the symptoms and are divided into the following classes:

1. Antidiarrheal. Diarrhea is commonly treated with diphenoxylate (Lomotil), loperamide (Imodium) and other drugs containing codeine or opium. The most common side effects of these drugs are dizziness, drowsiness and sedation. Drugs containing codeine and opium may also cause dependence with long-term use. In addition, antidiarrheal drugs must be given with caution because they may cause toxic megacolon, an emergency condition characterized by dilation of the colon.
2. Antibiotics. Use of antibiotics has been helpful in patients with possible bacterial, viral or amebic infections. Metronidazole (Flagyl) is the most commonly used antibiotic and is especially helpful in treating peri-anal lesions. The side-effects of metronidazole include metallic taste, dyspepsia and paresthesias. Metronidazole also interacts with alcohol causing symptoms such as severe nausea, vomiting and headache.
3. Salicylate drugs. These drugs suppress low-grade inflammation and are commonly used for mild to moderate Crohn's disease. Their usefulness, however, is limited by their frequent side-effect profiles. Dose-related side-effects include anorexia, dyspepsia, nausea and vomiting. Commonly used salicylate drugs include sulfasalazine (Azulfidine), olsalazine (Dipentum) and mesalamine (Pentasa).
4. Corticosteroids. Acute stages of Crohn's disease with fever, diarrhea, severe abdominal pain and tenderness may require the use of oral or IV corticosteroids. Though corticosteroids have excellent anti-inflammatory effects, long-term use may have numerous side-effects including (but not limited to) osteoporosis, glucose intolerance, cataract formation, fluid retention, dependence and muscle wasting.
5. Immunosuppressive drugs. Azathioprine (Imuran) and 6-mercaptopurine (Purinethol) are two immunosuppressive drugs commonly used to replace corticosteroids, heal internal and external fistulas, and suppress acute attacks. Common side-effects include allergic reaction with fever and joint pain, pancreatitis, hepatitis and leukopenia.
6. Surgery. Because Crohn's disease is known to recur after surgery, other treatment modalities should be tried first. However, if Crohn's disease is complicated with frequent intestinal obstruction or intractable abscess or fistulas, surgery may become necessary. The rate of recurrence after the first surgery is approximately 20% after two years; 30% after three years; and between 40-50% after four years. Fortunately, recurrence is much lower after the second surgery should it required.

In part II of this series, we will examine Chron's disease from the perspective of Oriental medicine.

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