# *ULCERATIVE COLITIS*

***Edited by Dr. Vito Annese, MD and Alessia Settesoldi, MD***
***Gastroenterologia SOD2, AOU Careggi, Largo Brambilla 3, 50134 Firenze – Italy***
**annesev@aou-careggi.toscana.it – a.settesoldi@hotmail.it**

## What is Ulcerative Colitis?

Ulcerative Colitis (UC) is a chronic inflammatory bowel disease which primarily affects the rectum, and can possibly extend to different segments of the colon with a continuous pattern (proctitis, left-sided colitis, extensive colitis). It involves only the mucosa and it is characterized by a relapsing and remitting course.

## How often is it diagnosed and which are the causes?

In Italy, the incidence of UC is about 8 new cases every 100.000 inhabitants per year, and in the last decades it has had a stable trend. Although we don't know exactly the causes, it is clear that it derives from interactions between genetic and environmental factors. A higher incidence rate is found among industrialized countries; a positive family history, use of oral contraceptives, fatty diets and anti-inflammatory or antibiotics abuse are the major identified risk factors.

## Which are the symptoms?

The major symptom is rectal bleeding, in addition tenesmus (frequent evacuating stimulus, without fecal emission), diarrhea (often during nighttime) with or without mucus or pus, abdominal pain and weight loss can be reported. A number of extra-intestinal manifestations, rheumatologic (ankylosing spondylitis, sacroiliitis, peripheral arthtritis), dermatological (erythema nodosum, pyoderma gangrenosum, oral ulcers), ophthalmological (uveitis, episcleritis) and hepatobiliary (sclerosing cholangitis) are also observed.

## How can we diagnose UC?

The diagnosis of UC is based on medical history (clinical history and risk factors), physical examination (searching for signs and symptoms of UC), laboratory investigations (looking for blood and fecal markers of inflammation, excluding infective processes) and colonoscopy with multiple biopsies (allowing to assess macroscopic and microscopic lesions). In some cases it might be useful to add other instrumental investigations such as ultrasound and x-rays (plain abdominal x-ray, CT scan).

## How can we treat UC?

It is important to take into account the extension and activity of the disease. To induce remission in case of proctitis, mesalazine (anti-inflammatory drug with colonic topical effect) suppositories or enemas are used. In addition, topical steroids or oral mesalazine can be utilized. In left-sided colitis or extensive colitis combined oral and topical (enemas) mesalazine is used, with or without oral steroids. Patients with severe UC should be hospitalized and as first step intravenous steroids should be given. In patients intolerant or refractory to steroids, infliximab (anti-TNFα antibody) or eventually ciclosporin or tacrolimus (immunosoppressors) should be administered. To maintain remission in patients with mild to moderate UC, oral mesalazine is suggested, eventually combined with topical therapy. In patients with moderate to severe UC, immunosuppressors such as azathioprine or 6-mercaptopurine or biologic drugs such as infliximab, adalimumab or golimumab

should be used. Patients refractory to medical therapy should undergo surgery. The gold standard is the ileal pouch-anal anastomosis (IPAA), which is a proctocolectomy with an ileal reservoir (pouch). An alternative procedure is ileo-rectal anastomosis (IRA), a colectomy with rectum-sparing.

**Ulcerative Colitis and colorectal cancer**

The prolonged inflammation of colon and rectum increases the risk of developing colon-rectum cancer compared to healthy population, especially in patients with extensive and long-term disease. Other risk factors are a positive familial history for colorectal cancer, sclerosing cholangitis and presence of pseudopolyps. Therefore a careful endoscopic surveillance (colonoscopy with multiple biopsies for dysplasia detection) is suggested every 2-3 years, starting 8 and 15 years from symptoms appearance in extensive colitis and left-sided colitis, respectively. Conversely, in patients with proctitis the risk of colorectal cancer is similar to that of general population.

**Ulcerative Colitis: a disabling disease?**

UC is a disabling disease during flares up, because of frequent evacuations and blood losses with subsequent general malaise, dehydration, anemia and malabsorption. During remission, it allows a good quality of life, with no or minimal interference with everyday activities and general homeostasis (balance among the vital functions).

**Is UC easy to manage?**

The management of UC is best undertaken by Regional Referral Centres for IBD (Inflammatory Bowel Diseases) than by the general practitioner. In cases of mild to moderate severity, an out-patients management is feasible, with periodic specialistic consultations, laboratory and endoscopic exams. In patients with severe activity, hospitalization is advisable, in order to better monitor the disease and its complications.

***Bibliography:***


*1. Ulcerative Colitis. Danese S, Fiocchi C. N Engl J Med. 2011; 365(18):1713-25.*

*2. Guidelines for the management of inflammatory bowel disease in adults. Craig Mowat, Andrew Cole, Al Windsor, Tariq Ahmad, Ian Arnott, Richard Driscoll, Sally Mitton, Tim Orchard, Matt Rutter, Lisa Younge, Charlie Lees, Gwo-tzer Ho, Jack Satsang, Stuart Bloom, on behalf of the IBD Section of the British Society of Gastroenterology. Gut 2011;60:571-607.*

*3. Second European evidence-based consensus on the diagnosis and management of ulcerative colitis Part 1: Definitions and diagnosis Axel Dignass, Rami Eliakim, Fernando Magro , Christian Maaser , Yehuda Chowers, Karel Geboes, Gerassimos Mantzaris, Walter Reinisch, Jean-Frederic Colombel, Severine Vermeire, Simon Travis , James O. Lindsay , Gert Van Assche for the European Crohn's and Colitis Organisation (ECCO) Journal of Crohn's and Colitis (2012) 6, 965–990;*

*4. Second European evidence-based consensus on the diagnosis and management of ulcerative colitis Part 2: Current management Axel Dignass, James O. Lindsay, Andreas Sturm, Alastair Windsor, Jean-Frederic Colombel, Mathieu Allez, Gert D'Haens, André D'Hoore, Gerassimos Mantzaris, Gottfried Novacek, Tom Öresland, Walter Reinisch, Miquel Sans, Eduard Stange, Severine Vermeire, Simon Travis, Gert Van Assche for the European Crohn's and Colitis Organisation (ECCO) Journal of Crohn's and Colitis (2012) 6, 991–1030.*