

Arthritis Associated with Ulcerative Colitis: Our Experience in Palermo

Geraci A¹, Tomasello G², Termine S³, Damiani P⁴, Alongi G¹, Sanfilippo A¹ and D'Arienzo M¹

1 Orthopaedic and Traumatological division. 2 Gen.Ur.T.O: Department of Surgery. 3 Complex operating Unit for Dermatology and Sexually Transmitted Diseases. 4 Emergency Department of Emergency Medicine and First Aid Operating Unit University of Palermo, Italy

Key words: *Inflammatory Bowel Diseases, Arthritis, Spondylitis, Ulcerative Colitis.*

To The Editor: Ulcerative colitis (UC) is one of the inflammatory bowel diseases, which affects the small intestine and colon [1]. The pathophysiology of UC is not known [2-3]. The association between arthritis and UC is well known. The authors report the frequency of arthritis in 53 Sicilian patients with UC. The diagnosis of UC was made according to criteria described by Schachter and Kirsner [4]. The involvement of sacroiliac joints was assessed radiologically according to Bennett and Burch grade (0=normal joint, 1=suspicious sacroiliitis 2=abnormal joint with sclerosis and/or erosions, 3=unequivocally abnormal with erosions, sclerosis, widening or narrowing or partly ankylosed, 4=total ankylosis) [5]. All patients were screened for the presence of the antigen HLA B27.

Arthritis occurred in 11 patients (20.7%). Patients with arthritis had high erythrocyte sedimentation rate (>20) and high C-reactive protein (mean value 14mg/L) at presentation. Latex fixation test rheumatoid factor (RF) was negative in all except one patient who had monoarticular knee involvement (RF = 45 IU/ml). Peripheral arthritis was found in 9 patients (17%). Only three patients had polyarticular involvement. The joints involved in peripheral arthritis were most frequently the knee joint (4 patients), followed by the ankle (3 patients), elbow (2 patients), wrist (2 patients), proximal interphalangeal (2 patients), shoulder (1 patient), and the hip (1 patient). Spondylitis was diagnosed in 2 patients (3.8%), one with sacroiliitis grade 2 and the other with grade 3. Both patients with sacroiliitis showed positive HLA B27.

In conclusion, our observation of the association between UC and arthritis is in line with previous reports in the literature [6-7]. The

basis of this association is unknown. A better understanding of the role of genetics and environmental factors may improve the treatments and prevention of the disease.

References

1. Mayberry JF. Some aspects of the epidemiology of ulcerative colitis. *Gut* 1985; 26:968-74.
2. Lettre G, Rioux JD. Autoimmune disease: insights from genome-wide association studies. *Hum Mol Genet.* 2008 Oct 15;17(R2):R116-21.
3. Loftus EV Jr. Management of extraintestinal manifestations and other complications of inflammatory bowel disease. *Curr Gastroenterol Rep.* 2004 Dec;6(6):506-13.
4. Schachter H, Kirsner JB. Definitions of inflammatory bowel disease of unknown etiology. *Gastroenterology.* 1975 Mar;68(3):591-600.
5. Bennet PH, Burch TA. The epidemiology of rheumatoid arthritis. *Med Clin North Am.* 1968 May; 52(3):479-91.

6. Bywaters E.G., Ansell B.M. Arthritis associated with ulcerative colitis; a clinical and pathological study. *Ann Rheum Dis.* 1958 Jun;17(2):169-83.
7. Scarpa R, D'Arienzo A, Del Puente A, Panarese A, Girolamo G, Valle G, Oriente A, Lubrano E, Oriente P. Reverse correlation between extent of colon involvement and number of affected joints in patients with ulcerative colitis and arthritis. *Am J Gastroenterol* 1990; 85: 331-2.