



## Inflammatory bowel disease-associated spondyloarthropathies

Walter Fries

Walter Fries, Department of Internal Medicine and Medical Therapy, University of Messina, 98125 Messina, Italy  
Author contributions: This paper was written by Fries W.  
Correspondence to: Walter Fries, MD, Department of Internal Medicine and Medical Therapy, University of Messina, 98125 Messina, Italy. [fwalter@unime.it](mailto:fwalter@unime.it)  
Telephone: +39-90-2212373 Fax: +39-90-2935162  
Received: February 6, 2009 Revised: March 13, 2009  
Accepted: March 20, 2009  
Published online: May 28, 2009

### Abstract

This issue presents a symposium held in Messina talking about inflammatory bowel disease (IBD) and associated spondyloarthropathies. The topic covers epidemiology and clinical manifestations of IBD-related arthropathies, common genetic and immunologic features, combined therapies for gut and joint inflammation, and future biologic therapies *etc.* I believe this series of articles will deeply facilitate understanding of and the approach to IBD and associated arthropathies.

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**Key words:** Inflammatory bowel disease; Spondyloarthropathies; Anti-tumor necrosis factor  $\alpha$

Fries W. Inflammatory bowel disease-associated spondyloarthropathies. *World J Gastroenterol* 2009; 15(20): 2441-2442 Available from: URL: <http://www.wjgnet.com/1007-9327/15/2441.asp> DOI: <http://dx.doi.org/10.3748/wjg.15.2441>

In January 2008, a symposium was held in Messina on inflammatory bowel disease (IBD) and associated arthropathies with the aim to improve cooperation between gastroenterologists dealing with IBD and rheumatologists. In an era of highly specialized medicine, it was felt that a better knowledge concerning the clinical features and pathogenic mechanisms of spondylarthritides would lead to an earlier recognition of such extra-intestinal complications among gastroenterologists and, finally, to a more appropriate therapeutic approach involving both specialists.

In the past decades, the relation between IBD and

spondyloarthritides has been investigated mainly in epidemiologic studies and in studies concerning HLA-B27 associations. Most studies from the sixties through the eighties focused mainly on axial forms, like ankylosing spondylitis (AS) and sacroiliitis (SI) whereas peripheral manifestations were addressed very much later.

This apparent lack of interest is reflected also by the fact that guidelines on IBD up to 2005 did not mention IBD-associated arthritis. Only in 2006 with the publication of the European Crohn's and Colitis Organization (ECCO) evidence-based consensus on "special situations in Crohn's disease", articular manifestations are briefly discussed<sup>[1]</sup>.

With the introduction of two new topics, genetics and especially biologic therapies, new efforts were made in combination of both kinds of pathology.

Until the end of the former century, only few therapeutic agents like salazopyrin, steroids, and methotrexate were available for the treatment of peripheral arthritis associated with IBD, whereas no disease modifying treatment did exist for axial forms.

With the introduction of the new biologic anti-tumor necrosis factor  $\alpha$  (TNF  $\alpha$ ) therapies, a new chapter for combined treatment options has been opened. Whereas in arthropathies, all available anti-TNF strategies (receptors and antibodies) yielded positive results, in IBD only anti-TNF antibodies, chimeric (Infliximab) or human (Adalimumab), or their fragments (Certolizumab) were shown to effectively down-regulate mucosal inflammation. A possible explanation for the lack of a class effect of anti-TNF strategies may be found in their different mode of action (apoptosis of proinflammatory cells, binding to membrane-bound TNF, *etc.*), may be dose-related, or due to immune-related effects from interference with TNF.

In a recent review of studies concerning patients with AS treated with different anti-TNF agents, the odds ratio of flares of an already diagnosed intestinal disease was calculated in comparison with infliximab (odds ratio 1) to be 4.2 for adalimumab and 18 for etanercept<sup>[2]</sup>. In this paper, a new onset of IBD was reported only for etanercept but not for infliximab or adalimumab.

This TOPIC HIGHLIGHT addresses these different aspects of IBD-associated spondyloarthropathies like epidemiology and clinical manifestations of IBD-related arthropathies, common genetic and immunologic features, diagnostic gastroenterological interventions in pa-

tients with arthritis and endoscopic findings, combined therapies for gut and joint inflammation, and future biologic therapies<sup>[3-8]</sup>. The papers are written by clinical experts in the field of IBD and experts in the field of gastrointestinal immunology together with their counterparts in the field of rheumatology. The symposium was organized under the auspices of the Italian Society of Gastroenterology (SIGE), the Italian Group for the Study of Inflammatory Bowel Diseases (IG-IBD), and the local academic authorities.

## REFERENCES

- 1 **Caprilli R**, Gassull MA, Escher JC, Moser G, Munkholm P, Forbes A, Hommes DW, Lochs H, Angelucci E, Cocco A, Vucelic B, Hildebrand H, Kolacek S, Riis L, Lukas M, de Franchis R, Hamilton M, Jantschek G, Michetti P, O'Morain C, Anwar MM, Freitas JL, Mouzas IA, Baert F, Mitchell R, Hawkey CJ. European evidence based consensus on the diagnosis and management of Crohn's disease: special situations. *Gut* 2006; **55** Suppl 1: i36-i58
- 2 **Braun J**, Baraliakos X, Listing J, Davis J, van der Heijde D, Haibel H, Rudwaleit M, Sieper J. Differences in the incidence of flares or new onset of inflammatory bowel diseases in patients with ankylosing spondylitis exposed to therapy with anti-tumor necrosis factor alpha agents. *Arthritis Rheum* 2007; **57**: 639-647
- 3 **Orlando A**, Renna S, Perricone G, Cottone M. Gastrointestinal lesions associated with spondyloarthropathies. *World J Gastroenterol* 2009; **15**: 2443-2448
- 4 **Salvarani C**, Fries W. Clinical features and epidemiology of spondyloarthritides associated with inflammatory bowel disease. *World J Gastroenterol* 2009; **15**: 2449-2455
- 5 **Colombo E**, Latiano A, Palmieri O, Bossa F, Andriulli A, Annese V. Enteropathic spondyloarthropathy: A common genetic background with inflammatory bowel disease? *World J Gastroenterol* 2009; **15**: 2456-2462
- 6 **Dal Pont E**, D'Incà R, Caruso A, Sturniolo GC. Non-invasive investigation in patients with inflammatory joint disease. *World J Gastroenterol* 2009; **15**: 2463-2468
- 7 **Atzeni F**, Ardizzone S, Bertani L, Antiville M, Batticciotto A, Sarzi-Puttini P. Combined therapeutic approach: Inflammatory bowel diseases and peripheral or axial arthritis. *World J Gastroenterol* 2009; **15**: 2469-2471
- 8 **Fantini MC**, Pallone F, Monteleone G. Common immunologic mechanisms in inflammatory bowel disease and spondylarthropathies. *World J Gastroenterol* 2009; **15**: 2472-2478

S- Editor Tian L L- Editor Wang XL E- Editor Ma WH