

## Subclinical Atherosclerosis in Ankylosing Spondylitis

To the Editor:

An issue of growing interest in the management of patients with chronic inflammatory rheumatic diseases is the identification of high-risk individuals who may benefit from active therapy to prevent the development of cardiovascular events. Ultrasound techniques based on flow velocity and intima thickness offer a unique opportunity to study the relation of surrogate markers to the development of atherosclerosis. Recently, Bodnár, *et al* assessed 40 patients with ankylosing spondylitis (AS) and confirmed the presence of subclinical atherosclerosis in them<sup>1</sup>. These results are in agreement with observations of our group that disclosed the presence of endothelial dysfunction and abnormally increased values of common carotid intima-media wall thickness (IMT) in patients with psoriatic arthritis (PsA), another disease included within the spondyloarthropathies<sup>2,3</sup>. Of note, our studies included a previously selected group of PsA patients without clinically evident cardiovascular disease and absence of classic cardiovascular risk factors<sup>2,3</sup>.

We also note the extremely interesting data reported by Bodnár, *et al*<sup>1</sup> showing increased common carotid IMT in patients with AS. In this regard, using high-resolution B-mode ultrasound in 64 patients with AS and 64 matched controls, we observed that carotid plaques were more common in patients with AS [19 (29.7%)] than in controls [6 (9.4%);  $p = 0.03$ ]<sup>4</sup>. However, although in the elegant study by Bodnár, *et al* it is said that in our series the common carotid IMT was unchanged, we also observed that AS patients exhibited greater carotid IMT than matched controls (mean  $0.74 \pm 0.21$  mm vs  $0.67 \pm 0.14$  mm;  $p = 0.01$ ; differences of means:  $0.077$ , 95% CI  $0.016-0.139$ )<sup>4</sup>.

Considering all this evidence, along with recent observation of the potential value of carotid ultrasonography as a predictor of cardiovascular events in patients with rheumatoid arthritis<sup>5</sup>, we support the potential use of carotid ultrasonography to establish a subgroup of patients with chronic inflammatory rheumatic diseases and high risk of cardiovascular complications.

MIGUEL A. GONZALEZ-GAY, MD, PhD, Rheumatology Division, Hospital Universitario Marques de Valdecilla, IFIMAV, Santander; CARLOS GONZALEZ-JUANATEY, MD, PhD, Cardiology Division, Hospital Xeral-Calde, Lugo; JAVIER LLORCA, MD, PhD, Division of Preventive Medicine and Public Health, School of Medicine, University of Cantabria, IFIMAV, Santander, Spain. Address correspondence to Dr. Gonzalez-Gay: E-mail: miguelaggay@hotmail.com

## REFERENCES

1. Bodnár N, Kerekes G, Seres I, Paragh G, Kappelmayer J, Némethné ZG, et al. Assessment of subclinical vascular disease associated with ankylosing spondylitis. *J Rheumatol* 2011; 38:723-9.
2. Gonzalez-Juanatey C, Llorca J, Miranda-Filloo JA, Amigo-Diaz E, Testa A, Garcia-Porrua C, et al. Endothelial dysfunction in psoriatic arthritis patients without clinically evident cardiovascular disease or classic atherosclerosis risk factors. *Arthritis Rheum* 2007;57:287-93.
3. Gonzalez-Juanatey C, Llorca J, Amigo-Diaz E, Dierssen T, Martin J, Gonzalez-Gay MA. High prevalence of subclinical atherosclerosis in psoriatic arthritis patients without clinically evident cardiovascular disease or classic atherosclerosis risk factors. *Arthritis Rheum* 2007;57:1074-80.
4. Gonzalez-Juanatey C, Vazquez-Rodriguez TR, Miranda-Filloo JA, Dierssen T, Vaqueiro I, Blanco R, et al. The high prevalence of subclinical atherosclerosis in patients with ankylosing spondylitis without clinically evident cardiovascular disease. *Medicine* 2009;88:358-65.
5. Gonzalez-Juanatey C, Llorca J, Martin J, Gonzalez-Gay MA. Carotid intima-media thickness predicts the development of cardiovascular events in patients with rheumatoid arthritis. *Semin Arthritis Rheum* 2009;38:366-71.

*J Rheumatol* 2011;38:9; doi:10.3899/jrheum.110335