

Fig. 1. Results of the ABI on the left and right lower extremities.

risk factors (especially diabetes and dyslipidemia) were superior. Other possible factors involved could be the adequate control of the disease, since only 3.3% of patients had no specific treatment and the value of the acute phase reactants was normal.

A major limitation to the study was accessibility, as the ABI was performed after the patient visit, so many of the patients excluded were those who refused to participate, claiming physical difficulty to go and get tested, which may have been a selection bias, having lost the sickest patients.

In conclusion, based on our results we do not consider routine ABI testing justified in asymptomatic patients with RA from a cardiovascular point of view.

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Etiology of sicca syndrome in a consecutive series of 199 patients with chronic fatigue syndrome

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Etiología del síndrome seco en una serie consecutiva de 199 pacientes con síndrome de fatiga crónica

Dear Sir,

Chronic fatigue syndrome (CFS) is a heterogeneous and multisystemic disorder of unknown pathogenesis and etiology. It is characterized by prolonged generalized and abnormal fatigue post-exercise (98%), recurrent headache (90%) and problems of concentration and memory (85%) that have lasted for at least 6 months. It is accompanied by such other symptoms as tender lymph nodes (80%), musculoskeletal pain (75%) and psychiatric problems (65%).^{1,2} The prevalence of CFS is estimated to be between 0.5 and 2.5%, predominantly in women (4:1).^{1,2} Many patients with CFS also complain of sicca symptoms in up to 30–87%, and are more

likely to have thyroid disorder and sleep disruption;^{2,3} that may suggest an underlying role of the immune system in these patients. Primary Sjögren' syndrome (PSS) is a systemic autoimmune disease, that presents chronic exocrine glands hypofunction leading to xerostomia and/or xerophthalmia, and extraglandular involvement, of which autoimmune hypothyroidism (AIHT) is the most common autoimmune disease developed⁴. Patients with PSS, also experience CFS-like musculoskeletal and neurocognitive symptoms more than 50%, and the two disorders share some similar immunologic defects.⁴ The purpose of this study was to determine the causality of sicca symptoms in 199 consecutive patients diagnosed as having CFS, and the possible association with PSS, although few studies that have examined this association (between 2010 and 2012 in our chronic fatigue unit of Joan XXIII University Hospital) according to the Fukuda' criteria of 1994. One hundred sixtyseven patients (84%) were women. The age of onset of symptoms was 41 ± 10 years. Mucosal sicca symptoms were complained by 160 patients (80.4%): 11/160 (6.8%) patients were diagnosed with PSS (9 patients were incomplete PSS and 2 patients were

complete PSS by positive lower lip biopsy that had MSG focus score >1, using the American-European criteria 2002^5). 110/160 patients (68.75%) were mainly duo to xerogenic medications. Severe obstructive sleep apnea syndrome (OSAS) was diagnosed in 6/160 patients (3.75%) (according to the American Academy of Sleep Medicine, Chicago Criteria 1999) by polysomnographic analysis. Thirty-eight (23.75%) patients were sero-positive for thyroperoxidase antibody (TPO-Ab) and/or thyroglobulin antibody (Tg-Ab) (of these patients 33/160 (20.6%) were diagnosed as having AIHT), 15 (10.2%) had a positive antinuclear antibody (ANA) assay (titer count >1:160), and 5 (3.5%) had a positive parietal cell antibody (titer count >1:160). All were sero-negative for anti-Ro/SS-A and anti-La/SS-B. In previous studies mucosal sicca symptoms were described as one of the common clinical manifestations of CFS^{6,7} as seen in our serie. Nishikai et al. and Sirois et al. had found sicca symptoms in 73% and 52% of their series respectively.^{6,7} As possible causes in our study, we determined that the prevalence of sicca symptoms (especially xerostomia) induced by psychotropic medications with anticholinergic side effects (amitriptyline, clonazepam, etc.) was high as described in several studies. Drugs with anticholinergic actions decrease salivary gland secretion by neurochemical blockade. It is usually dose related and reversible when medication is discontinued.⁷ We also found a group of CFS patients with sicca symptoms that may be attributed to AIHT and OSAS. This suggests that these two disorders share common pathophysiological features with CFS. Interestingly, in patients with OSAS, CFS symptoms were improved by using continuous nasal positive airway pressure (CPAP). Any potential relationship between CFS and PSS is complicated by the lack of a sensitive test or agreement regarding the diagnostic criteria for PSS. Nishikai et al. examined a group of 75 seronegative patients diagnosed with CFS and found that 22 (29%) met the European criteria 1993 for PSS.⁶ Sirois et al. also examined 25 patients diagnosed with CFS and found that 32% met diagnostic criteria for PSS according to the European criteria 1993.⁷ These results were not similar to ours in the study we present (11 patients if we included patients with incomplete PSS) as we described previously (Table 1). In searching of causes of this poor association, several considerations have to be taken into account in our study. 1st, in our study we used the 2002 criteria that require mandatory: (1) a positive salivary gland biopsy (only done in 5 patients), or (2) the presence of antibodies to SSA/Ro and/or to SS-B/La (negative in all patients). The serological item was also met in the 1993 criteria (used by Nishikai et al. and Sirois et al., 6,7) but only if a test for rheumatoid factor or ANA was positive. This condition has probably increased the prevalence of PSS in their studies. 2nd, symptoms or signs of PSS do not always begin at the same time and that patients with incomplete SS may be will met the diagnostic criteria 2002 at some point in the future. In summary, in our study about 70% of CFS patients with sicca syndrome

Table 1

Causes of sicca symptoms in chronic fatigue syndrome' patients.

Causes of sicca symptoms in chronic	N°. patients (%):
fatigue syndrome' patients	160 (80.4)
Xerogenic medications	110 (68.75)
Autoimmune hypothyroidism	33 (20.6)
Primary Sjögren syndrome	11 (6.8)
(incomplete/complete)	(9/2 patients)
Obstructive sleep apnea syndrome	6 (3.75)

are related to be drug-induced. Therefore, xerogenic medications, as possible cause, must be excluded. However, we recommend that patients who have been diagnosed with CFS and manifest mucosal sicca symptoms should be also screened for SS, AIHT and/or OSAS; and should be regarded as a comorbidity of CFS, not a diagnostic exclusion criterion.

Conflict of interest

The authors declare no conflict of interest.

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Pigmented villonodular synovitis diagnostic delay due to coexistence with ankylosing spondylitis



Retraso en el diagnóstico de sinovitis villonodular pigmentada por coexistencia con espondilitis anquilosante

Dear Editor,

A 57-year-old man with longstanding ankylosing spondylitis (AS) was treated successfully with etanercept since January 2006,

except for persistent left elbow swelling. Three local corticosteroid injections and radiosynovectomy with 3 mCi 186-Rhenium proved to be useless. Elbow involvement is sporadically seen in AS,¹ and the persistence despite the intra-articular treatment made us consider the possibility of a coexistent arthropathy, such as an opportunistic infections (mycobacteria, fungi), synovial sarcoma, joint metastasis or lipoma arborescens. A first magnetic resonance imaging (MRI) was ordered, showing an unspecific synovial hypertrophy. Joint aspiration revealed an inflammatory non-hemorrhagic fluid with repeatedly negative cultures, and an open biopsy resulted in non-specific synovitis, ruling out infections and malignancies.