

Fibromyalgia and hyperlipidaemia: a balance between cardiovascular risk reduction and muscular side effects

Sirs,

We read with interest the paper by Giorgi *et al.* (1) highlighting the diagnostic and therapeutic approach to a chronic musculoskeletal syndrome as fibromyalgia (FM) is. This disease had a high worldwide prevalence (2) and patients with FM may have other concomitant diseases, such as dyslipidaemia. Despite the widespread prescription of highly effective lipid-lowering therapies (such as HMG-CoA reductase inhibitors, or statins), most of the population has LDL cholesterol levels higher than the recommended targets (3). Failure to reach the lipid target has been attributed to a different cause, and the most relevant is poor adherence to treatment (4) sometimes secondary to statin-associated muscle symptoms (5). The association between hyperlipidaemia and FM had a negative impact on the lipid-lowering therapy (LLT) persistence due to sharpen up FM symptoms as chronic pain and persistent fatigue with the related consequence on patients' health-related quality of life (6).

Our institute is a cardiopulmonary tertiary-level (123 beds, more than 5000 hospital admissions per year), with hub for acute coronary syndrome, adult and paediatric cardiac surgery centre, referral facility for heart failure and pulmonary arterial hypertension, reference centre for diagnosis and treatment of inherited dyslipidaemias with lipoprotein apheresis unit. In a charter revision of 7750 outpatient, FM was present in 82 (1%) subjects (female 100%, age 54±14 years) and 5/82 (6%) patients had a previous cardiovascular event. Due to muscular symptoms, only 37/82 (45%) are adherent to LLT (Fig. 1) and any statins, the first line therapeutic option, are only used in 12/82 (15%) patients.

Our FM patients are all female and mainly in the postmenopausal age. Nowadays, in postmenopausal women with multiple risk factors guidelines recommended LLT because the benefits of pharmacological therapy were greater than those of men with the same clinical conditions (7).

Statin therapy should be offered to dyslipidaemic FM patients with an appropriate medical indication and in previous study no association between statin use and symptoms severity and/or tender point count were recorded (6).

However, during the "dyslipidaemias" outpatient visit, are important: i) considered anamnestic factors relate to FM disease as age at onset of muscular symptoms, first-line family history of neurological diseases, exposure to levels of stress and personal history of chronic widespread pain (2); ii) improve the use of questionnaire able to evalu-

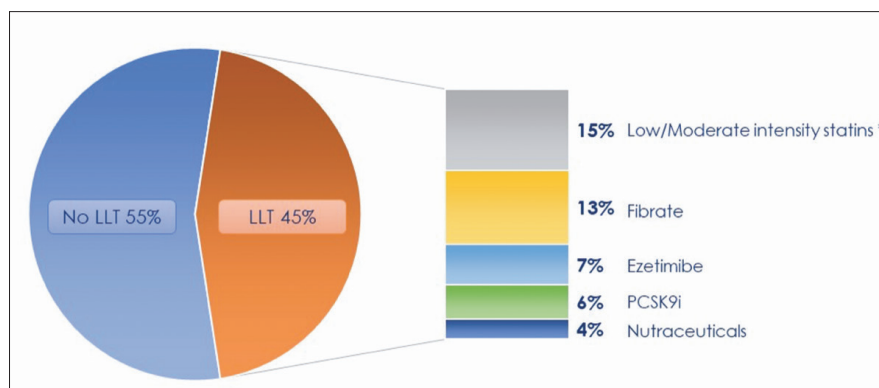


Fig. 1. Lipid lowering therapies in hypercholesterolemic women with fibromyalgia (82 subjects).

*atorvastatin (10 and 20 mg), rosuvastatin (5 and 10 mg), simvastatin (any dosage), lovastatin (any dosage), pravastatin (any dosage), fluvastatin (any dosage); LLT: lipid lowering therapies; PCSK9i: proprotein convertase subtilisin/kexin type 9 inhibitors.

ate the modification in FM severity and symptoms (8); iii) suggest to the patients non-pharmacological approach able to improve the LLT tolerability as mindfulness, yoga and/or acupuncture (1, 9), and iv) prescribed, in accordance with the reglementary rules (3, 10), "new" lipid-lowering drugs. On the other hands, in the Italian PROSISA cohort, statin-associated muscle symptoms were reported in the 9.6% of patients and are a major determinant of poor treatment adherence and/or statin discontinuation (5). Monoclonal antibodies against Proprotein Convertase Subtilisin/Kexin type 9 (PCSK9) inhibitors, RNA-based agent that blocks PCSK9 synthesis (inclisiran) and inhibitor of ATP citrate lyase, a key enzyme in the cholesterol biosynthesis (bempedoic acid) represents an opportunity to improve the clinical management dyslipidemic patients with low impact on muscular symptoms.

With the progressive growth of scientific evidence that unequivocally shows a causal relationship between cholesterol levels and cardiovascular events, such as myocardial infarction and stroke, reducing cholesterol has become a crucial therapeutic goal in the management of cardiovascular diseases. All these aspects underline the importance of personalising LLT in patients with FM in order to obtain the highest therapeutic adherence.

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