Letters to the Editors

Reply to

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

Sirs,

We wish to extend our appreciation for the thoughtful letter by Sbrana and Dal Pino (1) in response to our article (2), which delves into the multifaceted realm of the management of fibromyalgia (FM) patients with concurrent hyperlipidaemia.

First and foremost, we certainly appreciate their observation regarding the heightened necessity for FM patients to manage hyperlipidaemia and other associated cardiovascular comorbidities (1). These comorbidities may often arise due to the pronounced overlap between FM and obesity, which, as corroborated by Atzeni *et al.* (3), can exacerbate FM severity. This substantiates the imperative of a comprehensive approach that considers both the cardiovascular and musculoskeletal aspects of patient care.

The intricacies of the relationship between lipid-lowering therapies (LLT), among which statins, and FM or FM-like symptoms are indeed worthy of attention. As highlighted by Sbrana and Dal Pino, a substantial proportion of FM patients in their cohort exhibit poor adherence to LLT due to musculoskeletal symptoms, but just some of them can be attributed to statins (1). As emerging evidence suggests, the association between statins and muscle symptoms may not be as significant, whether patients have FM or not (4-6). This underscores the need to carefully evaluate the benefit-risk profile of statin therapy and LLT in general on an individual basis, taking into account the potential for the nocebo effect.

Specifically, there is relevance of the nocebo effect in statin-associated muscle symptoms (SAMS), as discussed in the paper by Pedro-Botet *et al.* (7). This study brings to light the importance of considering the psychosocial dimensions of treatment in the context of SAMS. Notably, patients who reported SAMS experienced subjective symptom alleviation and objective improvements in muscle function following statin withdrawal (8). Furthermore, the susceptibility of FM patients to the nocebo effect accentuates the necessity of patient education, shared decision-making, and a patient-centred approach when contemplating treatment options, including LLT (9). It is also paramount to underscore the significance of non-pharmacological approaches in FM management. This recommendation aligns with the EULAR guidelines for FM management (10) and holds promise, not only for FM symptoms but also for those contending with mild hyperlipidaemia and cardiovascular risk factors, including obesity (11). The potential benefits of lifestyle interventions, such as diet and exercise, for both FM and hyperlipidaemia, substantiates the value of a more comprehensive patient care approach.

Finally, the recognition of the importance of personalised lipid-lowering therapy, particularly for FM patients who may be susceptible to muscular symptoms with traditional statins, is apt. The advent of newer lipid-lowering drugs offers a compelling alternative with reduced impact on muscular symptoms, as Sbrana and Dal Pino inferred in their letter (1).

In conclusion, the management of hyperlipidaemia in FM patients is a multifaceted endeavour that warrants a comprehensive strategy. Personalised care, incorporating nonpharmacological interventions and newer lipid-lowering agents, holds the potential to enhance therapeutic adherence while effectively addressing the distinctive needs of FM patients.

V. GIORGI¹, *MD* P. Sarzi Puttini², *MD*

¹Unità di Ricerca Clinica, Gruppo Ospedaliero Moncucco, Lugano, Switzerland; ²Rheumatology Unit, IRCCS Ospedale Galeazzi Sant'Ambrogio, Milan, Italy.

Please address correspondence to: Valeria Giorgi Unità di Ricerca Clinica, Gruppo Ospedaliero Moncucco, 6900 Lugano, Switzerland. E-mail: vale.gio@fastwebnet.it

Competing interests: none declared.

© Copyright CLINICAL AND EXPERIMENTAL RHEUMATOLOGY 2024.

References

- SBRANA F, DAL PINO B: Fibromyalgia and hyperlipidemia: a balance between cardiovascular risk reduction and muscular side effects. *Clin Exp Rheumatol* 2024, in press.
- GIORGI V, BAZZICHI L, BATTICCIOTTO A et al.: Fibromyalgia: one year in review 2023. Clin Exp Rheumatol 2023; 41(6): 1205-13.
- https://doi.org/10.55563/clinexprheumatol/257e99
 3. ATZENI F, ALCIATI A, SALAFFI F et al.: The association between body mass index and fibromyalgia severity: data from a cross-sectional survey of 2339 patients. Rheumatol Adv Pract 2021; 5(1): rkab015. https://doi.org/10.1093/rap/rkab015
- D'SOUZA RS, WHIPPLE MO, VINCENT A: Statin therapy and symptom burden in patients with fibromyalgia: a prospective questionnaire study. *Mayo Clin Proc Innov Qual Outcomes* 2021; 5(6): 1036-41.

https://doi.org/10.1016/j.mayocpiqo.2021.10.001

- CHOLESTEROL TREATMENT TRIALISTS' COL-LABORATION: Effect of statin therapy on muscle symptoms: an individual participant data meta-analysis of large-scale, randomised, double-blind trials. *Lancet* 2022; 400(10355): 832-45. https://doi.org/10.1016/s0140-6736(22)01545-8 Erratum in: *Lancet* 2022; 400(10359): 1194.
- 6. PEDROSO AF, BARRETO SM, TELLES RW et al.: Uncovering the relationship between statins and muscle problems in the ELSA-Brasil MSK Cohort. *Cardiovasc Drugs Ther* 2023 Jun 1.
- https://doi.org/10.1007/s10557-023-07476-7 7. PEDRO-BOTET J. CLIMENT E, BENAIGES D: Muscle and statins: from toxicity to the nocebo effect. *Expert Opin Drug Saf* 2019; 18(7): 573-9. https://doi.org/10.1080/147740338.2019.1615053
- 8. PEYREL P, MAURIÈGE P, FRENETTE et al.: Impact of statin withdrawal on perceived and objective muscle function. PLoS One 2023; 18(6): e0281178. https://doi.org/10.1371/journal.pone.0281178
- MITSIKOSTAS DD, CHALARAKIS NG, MANTO-NAKIS LI, DELICHA EM, SFIKAKIS PP: Nocebo in fibromyalgia: meta-analysis of placebo-controlled clinical trials and implications for practice. *Eur J Neurol* 2012; 19(5): 672-80.
- https://doi.org/10.1111/j.1468-1331.2011.03528.x
 10. MACFARLANE GJ, KRONISCH C, DEAN LE *et al.*: EULAR revised recommendations for the management of fibromyalgia. *Ann Rheum Dis* 2017; 76(2): 318-28.
- https://doi.org/10.1136/annrheumdis-2016-209724
 11. CIAFFI J, LISI L, MARI A et al.: Efficacy, safety and tolerability of very low-calorie ketogenic diet in obese women with fibromyalgia: a pilot interventional study. Front Nutr 2023; 10: 1219321. https://doi.org/10.3389/fnut.2023.1219321