

Do Rheumatologists Need More Clues to Diagnose Fibromyalgia?



In this issue of *The Journal*, Gibson, *et al* have demonstrated that certain subscales of the Multidimensional Health Assessment Questionnaire (MDHAQ) can be combined to provide clues to the diagnosis of comorbid fibromyalgia (FM) in patients with rheumatic diseases¹. An FM assessment screening tool (FAST) compared favorably to the 2011 self-report FM criteria, developed for clinical and epidemiologic studies², and both agreed moderately with the clinical diagnosis of FM. The authors suggest that because MDHAQ is already frequently used in rheumatology centers, adapting the FAST indices can alert clinicians to concurrent FM without adding new self-administered screening instruments.

This paper also reconsiders a number of important issues involving rheumatologists and FM. First, rheumatologists have become more aware of the frequency and effect of FM in every rheumatic disease. Whether using the FAST indices, the 2011 FM criteria, or the gold standard (Dr. Gibson's clinical diagnosis), FM was present in about 20–30% of patients with rheumatic disease. This is consistent with reports of FM in 13–40% of cases of rheumatoid arthritis (RA)^{3,4}, 10–20% of osteoarthritis (OA)⁵, 10–30% with psoriatic arthritis or a spondyloarthropathy [SpA; such as axial SpA (axSpA)]^{5,6}, and 20–40% with systemic lupus erythematosus (SLE)⁷.

Patients with rheumatic diseases in this study who met the 2011 FM criteria had more pain, greater joint counts, and worse scores for function and global well-being than those not meeting FM criteria. This is also consistent with recent studies. For example, RA patients with comorbid FM compared to those without FM have higher scores on all disease activity measures despite lower disease activity measures, such as the erythrocyte sedimentation rate or ultrasound^{3,4}. In more than 1500 subjects with axSpA, the 21% who met criteria for FM had worse disease activity scores, global severity scores, and quality of life, and more mood disturbances and fatigue. They also experienced a greater likelihood of receiving biologic therapy and much greater damage to their work situation⁶. In patients with OA, chronic

widespread pain and evidence for central sensitization correlated with pain sensitivity and poor outcome after knee or hip replacements⁸.

As the authors note, without a “gold standard diagnostic marker,” various FM classification criteria have been developed by the American College of Rheumatology (ACR) during the past 3 decades to identify patients with FM. Such criteria are determined by and matched to expert (rheumatologists') opinion. In this study, agreement between the clinical and 2011 FM criteria was quite good (83.8%, κ 0.50, $p < 0.001$). However, a number of studies have found significant discordance between clinical-based and criteria-based FM diagnoses^{9,10}. These studies suggest that criteria-based diagnosis, based on validated, large, epidemiologic studies, represents “true” FM, whereas clinical criteria are “biased,” particularly regarding FM being a female-dominant condition.

Gibson, *et al* caution that FM criteria are not used in most routine clinical care and that a definitive diagnosis of FM requires a careful history and physical examination, with prudent evaluation of laboratory tests and other data¹. FM criteria-based diagnoses fail to gather the total history, including associated conditions, family history, and symptom variability over time. Clinical FM is appropriately “biased” by the clinical encounter, as are all medical diagnoses. Diagnoses based on a list of pain regions and symptoms are appropriate for epidemiologic studies, and in the office can provide clues to diagnosis. However, the FM diagnosis can only be validated by the clinician.

This brings us to the final issue when thinking about this study: Do rheumatologists want to be responsible for the clinical diagnosis of FM? Rheumatologists put FM on the medical map but have been conflicted about its very character and diagnostic utility. There has been concern that diagnostic labels such as FM medicalize everyday symptoms, promoting illness behavior and driving up healthcare costs. However, studies from UK primary care practices found that an FM diagnosis decreased subsequent

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testing, specialty referrals, and healthcare costs¹¹. Rheumatologists have also been frustrated by the lack of effective FM therapy. Longitudinal surveys from rheumatology centers with special interest and expertise in FM found that, on average, patients did not get better over a 7-year followup¹². The ACR has recommended that rheumatologists not be the primary care providers for patients with FM, particularly because there is no evidence that patients with FM fare better under our care¹³.

Rheumatologists do not consider themselves to be pain specialists. We are drawn to better understanding and treating of immune diseases such as RA and SLE. Until recently, rheumatology training programs provided little formal training in chronic pain despite acknowledging the primary role that pain plays in our patients' lives¹⁴.

More than two-thirds of Canadian rheumatologists recommended that rheumatologists should not retain ownership of FM¹⁵. Ninety percent of the rheumatologists believed that the family physician should be the main FM care provider. Rheumatologists consider that lack of effective therapy, absence of objective diagnostic tools, and the influence of psycho-social issues are key factors in not shouldering the main responsibility for patients with FM¹⁵.

Nevertheless, rheumatologists cannot abandon their leadership role in understanding the mechanisms of chronic, widespread pain, as well as its effect in systemic rheumatic diseases and regional pain. In a survey of more than 1600 physicians, including 50% primary care physicians (PCP) and the other 50% divided equally among rheumatologists, neurologists, pain specialists, and psychiatrists, more than half reported difficulty diagnosing FM¹⁶. Eighty-seven percent of rheumatologists were confident in making a diagnosis of FM compared to 53% of PCP and 46% of psychiatrists. Rheumatologists will always be the final FM authority and any clues to its presence can only be helpful to us, our colleagues, and our patients.

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REFERENCES

1. Gibson K, Castrejón I, Descallar J, Pincus T. Fibromyalgia Assessment Screening Tool (FAST): Clues to fibromyalgia on a Multidimensional Health Assessment Questionnaire (MDHAQ) for routine care. *J Rheumatol* 2020;47:761-9.

2. Wolfe F, Clauw DJ, Fitzcharles MA, Goldenberg DL, Hauser W, Katz RS, et al. Fibromyalgia criteria and severity scales for clinical and epidemiological studies: a modification of the ACR preliminary diagnostic criteria for fibromyalgia. *J Rheumatol* 2011;38:1113-22.
3. Lage-Hansen PR, Chrysidis S, Lage-Hansen M, Hougaard A, Ejstrup L, Amris K. Concomitant fibromyalgia in rheumatoid arthritis is associated with the more frequent use of biological therapy: a cross-sectional study. *Scand J Rheumatol* 2016;45:45-8.
4. Joharatnam N, McWilliams DF, Wilson D, Wheeler M, Pande I, Walsh DA. A cross-sectional study of pain sensitivity, disease-activity assessment, mental health, and fibromyalgia status in rheumatoid arthritis. *Arthritis Res Ther* 2015;17:11.
5. Haliloglu S, Carlioglu A, Akdeniz D, Karaaslan Y, Kosar A. Fibromyalgia in patients with other rheumatic diseases: prevalence and relationship with disease activity. *Rheumatol Int* 2014;34:1275-80.
6. Macfarlane GJ, Barnish MS, Pathan E, Martin KR, Haywood KL, Siebert S, et al. The co-occurrence and characteristics of patients with axial spondyloarthritis who meet criteria for fibromyalgia: results from a UK national register (BSRBR-AS). *Arthritis Rheumatol* 2017;69:2144-50.
7. Wolfe F, Petri M, Alarcón GS, Goldman J, Chakravarty EF, Katz RS, et al. Fibromyalgia, systemic lupus erythematosus (SLE), and evaluation of SLE activity. *J Rheumatol* 2009;36:82-8.
8. Brummett CM, Urquhart AG, Hassett AL, Tsodikov A, Hallstrom BR, Wood NI, et al. Characteristics of fibromyalgia independently predict poorer long-term analgesic outcomes following total knee and hip arthroplasty. *Arthritis Rheumatol* 2015;67:1386-94.
9. Wolfe F, Walitt B, Perrot S, Rasker JJ, Hauser W. Fibromyalgia diagnosis and biased assessment: sex, prevalence and bias. *PLoS One* 2018;13:e0203755.
10. Wolfe F, Schmukler J, Jamal S, Castrejon I, Gibson KA, Srinivasan S, et al. Diagnosis of fibromyalgia: disagreement between fibromyalgia criteria and clinician-based fibromyalgia diagnosis in a university clinic. *Arthritis Care Res* 2019;71:343-51.
11. Annemans L, Wessely S, Spaepen E, Cackelbergh K, Caubère JP, Le Lay K, et al. Health economic consequences related to the diagnosis of fibromyalgia syndrome. *Arthritis Rheumatol* 2008;58:895-902.
12. Solomon DH, Liang, MH. Fibromyalgia: scourge of humankind or bane of a rheumatologist's existence? *Arthritis Rheumatol* 1997;40:1553-5.
13. Garcia-Campayo J, Magdalena J, Magallón R, Fernandez-Garcia E, Salas M, Andres E. A meta-analysis of the efficacy of fibromyalgia treatment according to level of care. *Arthritis Res Ther* 2008;10:R81.
14. Borenstein DG, Hassett AL, Pisetsky D. Pain management in rheumatology research, training, and practice. *Clin Exp Rheumatol* 2017;35:2-7.
15. Ghazan-Shahi S, Towheed T, Hopman W. Should rheumatologists retain ownership of fibromyalgia? A survey of Ontario rheumatologists. *Clin Rheumatol* 2012;31:1177-81.
16. Perrot S, Choy E, Petersel D, Ginovker A, Kramer E. Survey of physician experiences and perceptions about the diagnosis and treatment of fibromyalgia. *BMC Health Serv Res* 2012;12:356.

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