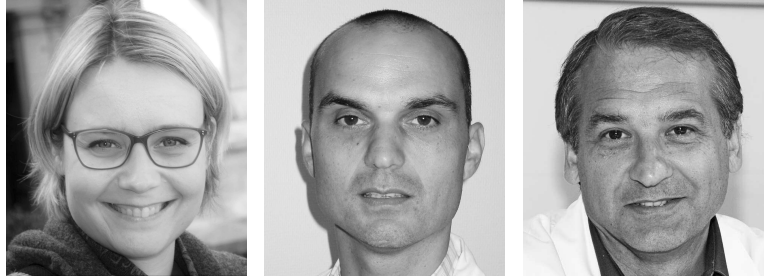


Shifting from a Rheumatologic Point of View toward Patient-centered Care in Rheumatoid Arthritis with an Integrated Management of Comorbidities



It has been well documented that patients with rheumatoid arthritis (RA) are at higher risk for many comorbidities¹, even in early RA². The concept of comorbidity refers to chronic conditions that coexist with the index disease, such as RA, with potential interactions between RA and comorbidities that may worsen patient global well-being. In fact, this concept does not seem so recent, because a global healthcare approach has always been the gold standard in the management of many chronic diseases. However, specifically regarding RA management, the innovative aspect lies in involving rheumatologists in addressing the field of comorbidities. Thanks to tight control of joint outcomes with targeted disease-modifying antirheumatic drugs (DMARD), the rheumatologists became involved in other dimensions of RA, such as quality of life or comorbidities. Evidenced-based and practical recommendations for screening and managing comorbidities in RA have been developed^{2,3,4,5,6}. Such comorbidities in RA include various conditions such as cardiovascular diseases, hypertension (HTN), diabetes, pulmonary diseases, depression, osteoporosis, and malignancies.

Comorbidities appear to be of utmost importance to consider, not only because of their high prevalence but also because of their potential involvement in RA outcome⁷. Comorbidities affect morbidity, increase mortality, impair quality of life, and affect response to treatment, while increasing the complexity of managing RA and its costs. This is also true in early RA. In the Canadian Early Arthritis cohort, comorbidities were associated with higher disease activity and worse functional status⁸. Indeed, comorbidities have been reported to be a negative predictor of achieving the treatment target, with lower rate of remission or of low disease activity in multimorbid patients with RA. Perhaps one reason may be that rheumatologists may have some concern about prescribing DMARD or biologic agents in

multimorbid patients. In the Comorbidities in Rheumatoid Arthritis study, the use of biologic DMARD, including tumor necrosis factor inhibitors, was reduced for each additional morbidity⁷.

In this issue of *The Journal*, Luque Ramos and colleagues highlight an increased prevalence of several comorbidities in 2535 patients with RA⁹. They studied patient-reported outcomes (PRO) including self-reported joint counts, quality of life, and effect of the disease based on patient questionnaires. These comorbidities were mostly cardiovascular risk factors such as HTN, in addition to others such as depression, osteoarthritis (OA), and osteoporosis, and have been associated with worse PRO and lower rheumatological care. Both the number of comorbidities and specific comorbidities, especially depression, were associated with worse PRO.

Although it seems interesting to consider that the more comorbidities patients with RA present, the more they may be at risk of experiencing poorer outcomes while benefiting less from specific rheumatologic care, the clinical relevance could be determined more precisely. It seems plausible that all comorbidities may not be of equal importance, depending on their severity. Moreover, they may not have the same effect on all RA outcomes, whether considering mortality, well-being, or functional status. Interactions between comorbidities may also impair outcomes. That is why, beyond the effect of the number of comorbidities, or of specific single comorbidities, it may be more relevant to examine the effect of different associations of comorbidities to identify subsets of patients with RA who need to be tightly monitored, and who might best benefit from a multi-disciplinary approach.

Comorbidities also lead to avoidable hospital admissions. Luque Ramos and colleagues⁹ reported that the proportion

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of hospitalization increased with the number of comorbidities (17.3% with 0–1 comorbidity; in contrast, to 55% with ≥ 8 comorbidities). In addition, they reported that patients with a high number of comorbidities added to RA received less rheumatological care. The authors hypothesize that these patients might attach less importance to RA management because of the burden of comorbidities and thus may not visit their rheumatologists. On the other hand, rheumatologists may also be reluctant to use targeted agents for fear of complications related to comorbidities¹⁰. Although understandable, this type of reasoning could be counterproductive given that systemic inflammation associated with RA may contribute to comorbidities, such as cardiovascular diseases, for instance. Hence, a vicious circle in these multimorbid patients with RA at higher risk to be undertreated could reinforce both RA and comorbidity burden, because of increased systemic inflammation. In this regard we should encourage patients with RA to regularly visit rheumatologists for tight control of RA disease activity, aiming for remission.

Considering comorbidities in the daily management of patients with RA has created a new era in rheumatology practice, leading to a comprehensive standard of care. In addition to targeting RA itself, rheumatologists should now prevent, screen for, and manage all comorbidities that are associated with RA. This insightful recommendation may be subject to practical issues. Indeed, one of the remaining challenges is how to deal with comorbidities management in daily practice because of time constraints within a 20-min visit. As argued by others, such an integrated way of care requires time, and despite the best efforts, it seems difficult to incorporate comorbidity management into a classical visit focused on RA disease treatment itself¹¹. This may lead to an “RA paradox,” in which specialized care (targeted therapies, articular injections) may compete with a general plan of care.

Another important consideration is that medical time echoes with costs. Perhaps in the future, with some growing evidence from well-designed studies, we will be able to select the most relevant comorbidities and then prioritize the management of comorbidities that require the most active care in patients with RA. Besides, not all patients with RA will be receptive to this way of care. Thus perhaps clinicians should not attempt to manage all comorbidities at the same time but should prioritize some of them, taking into account patient preferences and needs.

Some rheumatologists may feel uncomfortable with such care, and may not consider themselves adequately qualified or experienced enough to cope with the management of HTN, depression, or diabetes, for instance. A clear leadership question still remains: who should be responsible for the screening and management of comorbidities in RA¹²? It has been proposed that rheumatologists or a rheumatology nurse perform a dedicated visit based on a systematic screening, which may help them to decide when to refer patients with

RA to specialists or general practitioners¹³. However, we could not exclude the possibility of loss of followup with this kind of management. A multidisciplinary care team model including not only rheumatologists but also other specialists such as cardiologists, pneumologists, psychiatrists, nurses, and physiotherapists, working together in some dedicated units, may become a new ideal of care, with specifically defined roles for each team member. In addition, polypharmacy is frequent in patients with RA, increasing with age and with the number of comorbidities, raising the question of including the pharmacist in such an integrated care. In any case, communication between all healthcare providers involved in management of patients with RA should be encouraged for now, to provide a personalized and coordinated care plan that could be shared between every caregiver around the patient. In this way of care, self-administered questionnaires may be used to screen comorbidities and help the physician or nurse during the visit¹³.

Despite some limitations (survey-based study, no clinical validation of diagnoses in claims data, cross-sectional design), the study by Luque Ramos and colleagues argues for an integrated management of comorbidities in RA, given their association with poorer PRO⁹. Notably, the management of comorbidities goes beyond the scope of RA. For instance, metabolic comorbidities have been associated with progression of knee OA¹⁴. In chronic heart failure, screening for comorbidities is also recommended, as well as treating them to improve symptoms, well-being, and/or prognosis¹⁵. Let us keep in mind that whatever the disease index, patients with comorbidities are heterogeneous and a poor coordination of fragmented healthcare might be harmful. Patients with RA need personalized comorbidities management strategies to improve their quality of life and disability outcomes.

CAMILLE ROUBILLE, MD,

Department of Internal Medicine,
Centre Hospitalier Universitaire (CHU) Montpellier,
University of Montpellier,
and Laboratoire Physiologie & Medecine Experimentale
(PhyMedExp), INSERM U1046,
Centre National de la Recherche Scientifique (CNRS)
Unite Mixte de Recherche (UMR) 9214
Université de Montpellier;

PIERRE FESLER, MD, PhD,

Department of Internal Medicine,
CHU Montpellier, University of Montpellier,
and Laboratoire PhyMedExp, INSERM U1046,
CNRS UMR 9214, Université de Montpellier;

BERNARD COMBE, MD, PhD,

Department of Rheumatology,
CHU Montpellier,
University of Montpellier,
Montpellier, France.

Address correspondence to Dr. C. Roubille, Department of Internal Medicine, 371 Avenue du Doyen Gaston Giraud, CHU Montpellier, University of Montpellier, 34295 Montpellier, France.
E-mail: c-roubille@chu-montpellier.fr

REFERENCES

1. Dougados M, Soubrier M, Antunez A, Balint P, Balsa A, Buch MH, et al. Prevalence of comorbidities in rheumatoid arthritis and evaluation of their monitoring: results of an international, cross-sectional study (COMORA). *Ann Rheum Dis* 2014;73:62-8.
2. Combe B, Landewe R, Daien CI, Hua C, Aletaha D, Alvaro-Gracia JM, et al. 2016 update of the EULAR recommendations for the management of early arthritis. *Ann Rheum Dis* 2017;76:948-59.
3. Agca R, Heslinga SC, Rollefstad S, Heslinga M, McInnes IB, Peters MJ, et al. EULAR recommendations for cardiovascular disease risk management in patients with rheumatoid arthritis and other forms of inflammatory joint disorders: 2015/2016 update. *Ann Rheum Dis* 2017;76:17-28.
4. Roubille C, Richer V, Starnino T, McCourt C, McFarlane A, Fleming P, et al. Evidence-based recommendations for the management of comorbidities in rheumatoid arthritis, psoriasis, and psoriatic arthritis: expert opinion of the Canadian Dermatology-Rheumatology Comorbidity Initiative. *J Rheumatol* 2015;42:1767-80.
5. Daien C, Hua C, Gaujoux-Viala C, Cantagrel A, Dubremetz M, Dougados M, et al. Update of French Society for Rheumatology Recommendations for Managing Rheumatoid Arthritis. *Joint Bone Spine* 2018 Oct 10 (E-pub ahead of print).
6. Smolen JS, Landewe R, Bijlsma J, Burmester G, Chatzidionysiou K, Dougados M, et al. EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2016 update. *Ann Rheum Dis* 2017;76:960-77.
7. Radner H, Yoshida K, Hmamouchi I, Dougados M, Smolen JS, Solomon DH. Treatment patterns of multimorbid patients with rheumatoid arthritis: results from an international cross-sectional study. *J Rheumatol* 2015;42:1099-104.
8. Hitchon CA, Boire G, Haraoui B, Keystone E, Pope J, Jamal S, et al. Self-reported comorbidity is common in early inflammatory arthritis and associated with poorer function and worse arthritis disease outcomes: results from the Canadian Early Arthritis Cohort. *Rheumatology* 2016;55:1751-62.
9. Luque Ramos A, Redeker I, Hoffmann F, Callhoff J, Zink A, Albrecht K. Comorbidities in patients with rheumatoid arthritis and their association with patient-reported outcomes: results of claims data linked to questionnaire survey. *J Rheumatol* 2019;46:564-71.
10. Armagan B, Sari A, Erden A, Kilic L, Erdat EC, Kilickap S, et al. Starting of biological disease modifying antirheumatic drugs may be postponed in rheumatoid arthritis patients with multimorbidity: Single center real life results. *Medicine* 2018;97:e9930.
11. Boyd T, Kavanaugh A. Clinical guidelines: addressing comorbidities in systemic inflammatory disorders. *Nat Rev Rheumatol* 2015;11:689-91.
12. Gossec L, Baillet A, Dadoun S, Daien C, Berenbaum F, Dernis E, et al. Collection and management of selected comorbidities and their risk factors in chronic inflammatory rheumatic diseases in daily practice in France. *Joint Bone Spine* 2016;83:501-9.
13. Baillet A, Gossec L, Carmona L, Wit M, van Eijk-Hustings Y, Bertheussen H, et al. Points to consider for reporting, screening for and preventing selected comorbidities in chronic inflammatory rheumatic diseases in daily practice: a EULAR initiative. *Ann Rheum Dis* 2016;75:965-73.
14. Yoshimura N, Muraki S, Oka H, Tanaka S, Kawaguchi H, Nakamura K, et al. Accumulation of metabolic risk factors such as overweight, hypertension, dyslipidaemia, and impaired glucose tolerance raises the risk of occurrence and progression of knee osteoarthritis: a 3-year follow-up of the ROAD study. *Osteoarthritis Cartilage* 2012;20:1217-26.
15. Ponikowski P, Voors AA, Anker SD, Bueno H, Cleland JGF, Coats AJS, et al. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC) — Developed with the special contribution of the Heart Failure Association (HFA) of the ESC. *Eur Heart J* 2016;37:2129-200.

J Rheumatol 2019;46:545–7; doi:10.3899/jrheum.181379