Correspondence on: Perioperative management of disease-modifying antirheumatic drugs and other immunomodulators

Pinho AM[1], Duarte C[2], Ferreira RJO[3]

[1] USF Soure, ACES Baixo Mondego
ORCID: https://orcid.org/0000-0003-4377-6733

[2] Rheumatology, Centro Hospitalar Universitário de Coimbra
ORCID: https://orcid.org/0000-0001-9327-6935

[3] Nursing Research, Innovation and Development Centre of Lisbon (CIDNUR)/Nursing School of Lisbon (ESEL)
ORCID: https://orcid.org/0000-0002-2517-0247

Correspondence to
Ricardo Ferreira
E-mail: ferreira.rjo@gmail.com

Submitted: 27/04/2023

Accepted: 30/04/2023

Accepted article

This article has been accepted for publication but has not been through the copyediting, typesetting, pagination and proofreading process which may lead to differences between this version and the Version of Record. Please cite this article as an 'Accepted Article'

© 2023 Portuguese Society of Rheumatology

This article is protected by copyright. All rights reserved.

Dear Editor,

We read with interest the review from Moreira *et al.*[1] published in ARP Rheumatology, guiding the perioperative management of Disease-Modifying Anti-Rheumatic Drugs (DMARDs) and other immunomodulators in people with inflammatory rheumatic diseases (IRDs) undergoing elective surgery. One of the biggest concerns of clinicians is that the maintenance of DMARDs in the perioperative period may hinder the healing of the surgical wound and increase the risk of infections, while its suspension can lead to an exacerbation of the disease (flare) and complicate the rehabilitation process. Therefore, there is a grey zone decision regarding withholding these drugs during the postoperative period[2]. Furthermore, this situation is very common, as people with musculoskeletal and rheumatic diseases (RMDs) are frequently proposed for elective orthopedic surgery and are at high risk of perioperative complications, namely superficiality and deep periprosthetic joint infection[3], with surgical wound dehiscence[4], imposing suffering, costs and impairing return to normal life[1].

The manuscript from Moreira *et al.*[1] is based on recent literature available in PubMed database, as well provides a recap of the most recent recommendations from different international societies of rheumatology and of the data presented in these guidelines from studies performed in people with RMDs. In summary, they conclude that treatment with conventional DMARDs (methotrexate, hydroxychloroquine, sulfasalazine and leflunomide) can be continued perioperatively; targeted synthetic DMARDs should be withheld at least 3-7 days before surgery, depending on the drug, and restarted 3-5 days after the procedure; while biologic DMARDs should be withheld in a dosing cycle prior to surgery and resumed at least 14 days after the procedure, with evidence of complete wound healing. In the case of Systemic Lupus Erythematosus (SLE), the severity of the condition must be considered when deciding to discontinue immunomodulators.

We agree with Moreira *et al.*[1] that the perioperative management of people with RMDs is challenging and that standard conduct regarding the suspension of therapy and scheduling the procedure is needed, with a multidisciplinary approach and open and clear communication between rheumatologist, anesthesiologist and surgeon, but we would also add the collaboration with nurses who support self-management and medication adherence and other health professionals who intervene in the rehabilitation process[2,5,6] and handle dedicated telephone advice lines, often dealing with questions on when to withhold or not DMARDs[7].

Accepted article

One of the key challenges here is the determination of the infection risk of a given individual. According to the German Society recommendations, these factors relate to the rheumatic disease (current disease activity, disease duration/ progression, severity, glucocorticoids >10 mg requirement), to patient-related factors (older age, male gender, smoking, alcohol consumption, malnutrition; comorbidities including anemia, obesity, diabetes, chronic lung diseases; previous infections; skin lesions, skin contamination, psoriatic plaques), and the surgical procedure (type, size, duration, localisation)[8].

Another key challenge, without almost no clues on how to intervene, relates to the restart of the medication when there is no "complete wound healing, at least 14 days after surgery, (…) and in the absence of local or systemic infection, confirmed or suspected"[1]. The number of studies to inform this post-complication decision is very limited, and we would like to help raise attention to this problem and call out for more observational and interventional studies. Future recommendations should go beyond the DMARDs decision and address how to assess biofilms, wound bed management (treatments, type of dressing, etc.), including nutrition and other patient education instructions (e.g. rest versus activity promotion etc.)[9,10]. Even more challenging is the care of wounds other than surgical, like leg ulcers, for which the challenges are even harder, starting with the classification of the wound (e.g. venous, arterial, mixed), the decision of adjuvant treatment and the implementation of a real multidisciplinary approach. We hope these can be addressed in the near future.

Accepted article

References

1. Moreira PM, Correia AM, Cerqueira M, et al. Perioperative management of disease-modifying antirheumatic drugs and other immunomodulators. ARP Rheumatol 2022;1:218-224.

2. Rocha A, Abreu P. O Doente Reumatológico Proposto para Cirurgia: Manuseamento dos Agentes Antirreumáticos no Perioperatório. Revista da Sociedade Portuguesa de Anestesiologia 2019;28:223-231. doi: 10.25751/rspa.17927

3. Goodman SM, Springer BD, Chen AF, et al. 2022 American College of Rheumatology/American Association of Hip and Knee Surgeons Guideline for the Perioperative Management of Antirheumatic Medication in Patients With Rheumatic Diseases Undergoing Elective Total Hip or Total Knee Arthroplasty. Arthritis Care Res (Hoboken) 2022;74:1399-408. doi: 10.1002/acr.24893

4. Prabhakar TS. Post-operative complications for patients with Rheumatoid arthritis undergoing elective orthopedic procedures with or without methotrexate. Int J Orthop Sci 2021;7(1):324-26. doi: 10.22271/ortho.2021.v7.i1f.2503

5. Bech B, Primdahl J, van Tubergen A, et al. 2018 update of the EULAR recommendations for the role of the nurse in the management of chronic inflammatory arthritis. Ann Rheum Dis. 2020;79:61-68. doi: 10.1136/annrheumdis-2019-215458

6. Santos EJF, Duarte C, Ferreira RJO, et al. Portuguese multidisciplinary recommendations for non-pharmacological and non-surgical interventions in patients with rheumatoid arthritis. Acta Reumatol Port. 2021;46:40-54. [published Online First: 2021/04/07]

7. Ferreira R, Marques A, Mendes A, et al. Rheumatology telephone advice line - experience of a Portuguese department. Acta Reumatol Port. 2015;40:163-8.

8. Albrecht K, Poddubnyy D, Leipe J, et al. Perioperative management of patients with inflammatory rheumatic diseases : Updated recommendations of the German Society for Rheumatology. Zeitschrift fur Rheumatologie 2023;82(Suppl 1):1-11. doi: 10.1007/s00393-021-01150-9.

9. Isoherranen K, O'Brien JJ, Barker J, et al. Atypical wounds: Best clinical practice and challenges. Journal of Wound Care 2019; 28. https://ewma.org/fileadmin/user_upload/EWMA.org/EWMA_Documents_PDF/Atypical_Wounds.pdf.

10. Probst S, Apelqvist J, Bjarnholt T, et al. Antimicrobials and Non-healing Wounds: An update. Journal of Wound Management 2022. https://viewer.ipaper.io/jowm/1035279jowm20222303/sup01/?page=1.

Accepted article