Rheumatology Advances in Practice, 2023, **7(3)**, rkad102
https://doi.org/10.1093/rap/rkad102
Advance access publication 15 November 2023
Letter to the Editor

British Society for Rheumatology
RHEUMATOLOGY ADVANCES IN PRACTICE
OXFORD

Letter to the Editor (Other)

How do clinicians prescribe bridging glucocorticoids in people starting or escalating disease-modifying anti-rheumatic drugs for rheumatoid arthritis: a service evaluation survey

James A. Prior [1,2,*], Edward Roddy[1,2], Ivonne Solis-Trapala[1], Nicola Cornwall [1], Clare Jinks[1], Abhishek Abhishek [3], Marwan Bukhari[4], James Galloway [5], Nicola Goodson[6], Sue Jowett[7], Samantha Hider [1,2]

[1]School of Medicine, Keele University, Keele, UK
[2]Rheumatology Department, Midlands Partnership University NHS Foundation Trust, Newcastle-Under-Lyme, UK
[3]Academic Rheumatology, School of Medicine, University of Nottingham, Nottingham, UK
[4]Rheumatology Department, University Hospitals of Morecambe Bay NHS Foundation Trust, Lancaster, UK
[5]Centre for Rheumatic Diseases, Kings College London, London, UK
[6]Rheumatology Department, Liverpool University Hospitals NHS Foundation Trust, Liverpool, UK
[7]Institute of Applied Health Research, University of Birmingham, Birmingham, UK
*Correspondence to: James A. Prior, School of Medicine, Keele University, Keele, Staffordshire ST5 5BG, UK. E-mail: j.a.prior@keele.ac.uk

Key message
- We identified variation in glucocorticoid prescribing route, dose, and duration of treatment.

Dear Editor, The National Institute for Health and Care Excellence (NICE) RA guideline recommends bridging treatment with glucocorticoids in people starting DMARDs or biologics to reduce symptoms until the DMARD/biologic takes effect [1]. Glucocorticoids are commonly used in people with RA, with 82% of those with a new RA diagnosis in the UK receiving glucocorticoids within 3 months of diagnosis [2].

In routine practice, when suppressing an RA flare or as bridging therapy, glucocorticoids are frequently administered orally, i.v. or via i.m. or IA injection. Although all modes of administration are effective at reducing symptoms and controlling inflammation [3, 4], a recent systematic review highlighted the lack of evidence to guide practitioners in choice of route, dose or duration in their use for RA and indicated this as a future research priority [3].

Adverse events with glucocorticoids, such as mood disturbance, weight gain, adrenal suppression and (at injection sites) lipoatrophy, remain a key concern for patients and practitioners [5–7]. Although these are, in part, dose and duration dependent [6], the risk of adverse events with short courses of glucocorticoids is less clear.

To understand the current prescribing practice concerning i.m. and oral glucocorticoids in people with RA starting DMARDs, we undertook a service evaluation survey, registered with Midlands Partnership University NHS Foundation Trust. This comprised 17 questions with ~7 min total completion time in the format of a Microsoft Form anonymous e-survey (for survey, see Supplementary Data S1, available at *Rheumatology Advances in Practice* online). This was distributed by the authors to their clinical and regional UK networks across the Midlands, North-West and London. The survey was live for 6 weeks (February–March 2023).

A total of 71 rheumatology health-care professionals responded, including consultant rheumatologists (51, 71.8%), trainee doctors (11, 15.5%) and rheumatology nurse specialists (9, 12.7%). Considering preferred route of administration, 61 (85.9%) reported typically using i.m. injection over oral prednisolone. For i.m. administration, 57 (80.3%) would choose Depo-Medrone 120 mg compared with 5 (7.0%) choosing Depo-Medrone 80 mg and 7 (9.9%) Kenalog. When prescribing oral prednisolone, the majority suggested a starting dose of 15 mg (33, 47.1%) or 20 mg (28, 40.0%) once daily (Fig. 1), with 59 (84.3%) typically reducing the dose by 5 mg weekly.

In people with severely active RA, responders did not typically alter their i.m. dosing regime, although when using oral glucocorticoids, free-text data suggested that oral prednisolone was started at higher doses, weaned more slowly, or prescribed for longer. When asked about use of glucocorticoids in older people or those with frailty or significant co-morbidities, most

Accepted: 29 October 2023

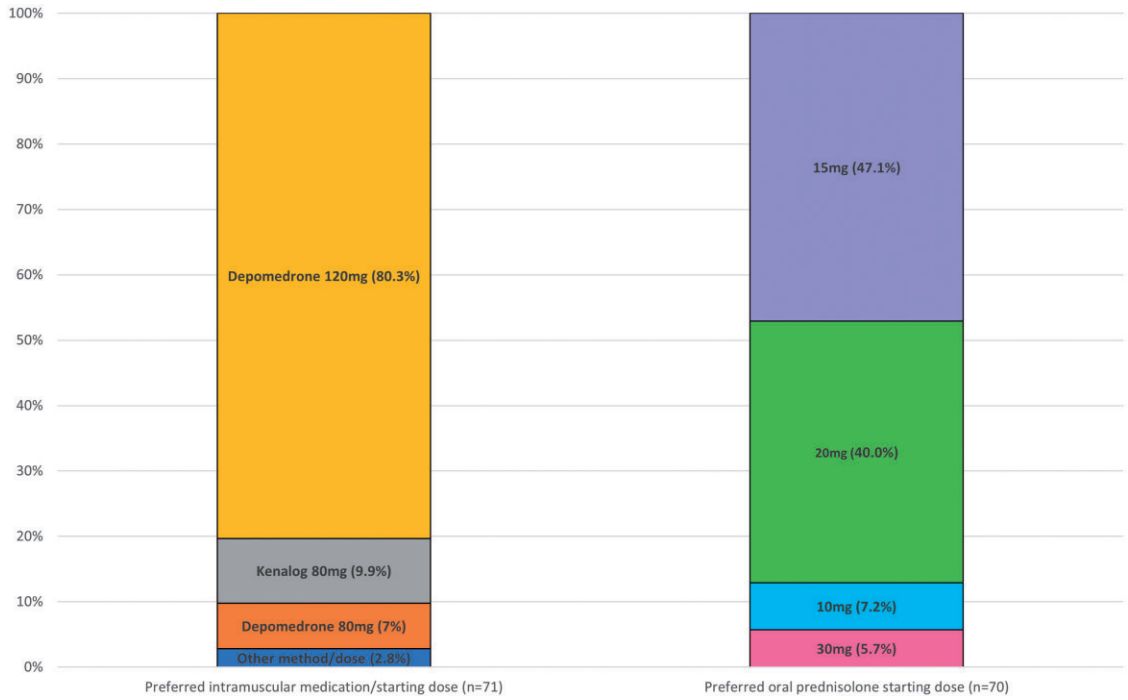

Figure 1. Prescribing preferences of rheumatology health-care professionals in relationship to i.m. and oral glucocorticoid provision

respondents suggested considering lower starting doses of oral prednisolone or tapering prednisolone more rapidly. Finally, although nearly all responders (98.6%) were aware that lipoatrophy was a possible adverse event related to i.m. injection, only just over half (57.1%) had ever seen a case.

Although this small survey covers a limited geographical area and considered only oral and i.m. glucocorticoids, it highlights the present substantial variation in prescribing practice for glucocorticoids in people with RA, in terms of mode of delivery and dosing regimens, especially for oral glucocorticoids. Given that clinical management choices can be similar within departments, we tried to include rheumatology health-care professionals from several UK regions; however, owing to the anonymous nature of the survey, we are unable to determine where our responders were located, and as such, our results need to be considered in this context.

The reasons for the variation identified require further exploration; however, our results support the call for further research in this area [3] to ensure optimal effectiveness and safety outcomes for people with RA.

Supplementary material

Supplementary material is available at *Rheumatology Advances in Practice* online.

Data availability

The data underlying this article will be shared on reasonable request to the corresponding author.

Contribution statement

All authors were involved in the design of the survey, discussed the interpretation of data and contributed to the writing of the letter. J.A.P. constructed the online survey and undertook the data analysis.

Funding

No specific funding was received from any bodies in the public, commercial or not-for-profit sectors to carry out the work described in this article.

Disclosure statement: The authors have declared no conflicts of interest.

Acknowledgements

We would like to thank those health-care professionals who took the time to complete the survey. C.J. is part funded by National Institute for Health (NIHR) Research Applied Research Collaboration (ARC) West Midlands. A.A. has received Institutional research grants from AstraZeneca and Oxford Immunotech; and personal fees from UpToDate (royalty), Springer (royalty), Cadilla Pharmaceuticals (lecture fees), NGM Bio (consulting), Limbic (consulting) and personal fees from Inflazome (consulting) unrelated to the work.

References

1. National Institute for Health and Care Excellence (NICE). Rheumatoid arthritis in adults: management. NICE guideline [NG100]. https://www.nice.org.uk/guidance/ng100 (17 March 2023, date last accessed).
2. Ledingham JM, Snowden N, Rivett A *et al.* Achievement of NICE quality standards for patients with new presentation of inflammatory arthritis: observations from the National Clinical Audit for Rheumatoid and Early Inflammatory Arthritis. Rheumatology (Oxford) 2017;56:223–30.

3. Hua C, Buttgereit F, Combe B. Glucocorticoids in rheumatoid arthritis: current status and future studies. RMD Open 2020;6:e000536.
4. Sanmartí R, Tornero J, Narváez J *et al*. Efficacy and safety of glucocorticoids in rheumatoid arthritis: systematic literature review. Reumatol Clin (Engl Ed) 2020;16:222–8.
5. Tieu J, Cheah JTL, Black RJ *et al*. Improving benefit-harm assessment of glucocorticoid therapy incorporating the patient perspective: the OMERACT glucocorticoid core domain set. Semin Arthritis Rheum 2021;51:1139–45.
6. Palmowski A, Nielsen SM, Boyadzhieva Z *et al*. Safety and efficacy associated with long-term low dose glucocorticoids in rheumatoid arthritis: a systematic review and meta-analysis. Rheumatology (Oxford) 2023;62:2652–2660.
7. Santiago T, Voshaar M, de Wit M *et al*. Patients' and rheumatologists' perspectives on the efficacy and safety of low-dose glucocorticoids in rheumatoid arthritis—an international survey within the GLORIA study. Rheumatology (Oxford) 2021; 60:3334–42.