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Editorial

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# How routine use of a treat to target approach in PsA might impact on clinical decision making

*Treating to target in PsA*

**This editorial refers to Residual disease activity in psoriatic arthritis: discordance between the rheumatologist's opinion and minimal disease activity measurement, Leonieke J.J. van Mens *et al.* doi: 10.1093/rheumatology/kex183**.

In recent years there has been increasing research focusing on the assessment of disease activity in PsA. PsA has been recognized as a potentially destructive and disabling arthritis and many observational studies have supported a link between inflammation and subsequent joint damage. The Tight Control of PsA trial subsequently showed that treating to target, using the minimal disease activity (MDA) criteria improved arthritis, skin, functional and quality of life outcomes [1]. In 2015, as a result of this study, the updated EULAR recommendations for the management of PsA stated that 'Treatment should be aimed at reaching the target of remission or, alternatively, minimal/low disease activity, by regular monitoring and appropriate adjustment of therapy' [2]. However this has not been widely implemented in clinical practice as yet, highlighting a delay in translating best practice from clinical trials to real-life clinical practice.

In this issue of *Rheumatology*, van Mens *et al*. report the results of an observational real-life study highlighting the potential discrepancy between current routine clinical practice and a target driven assessment [3]. They analysed patients who were felt by their physician to be in an acceptable disease state not requiring any change in treatment to establish their assessed disease activity levels. They then compared the patients who did and did not meet the MDA criteria.

The MDA criteria for PsA are a validated measure of an acceptable disease state including measures of arthritis (68/66 joint count) skin (psoriasis area and severity index or body surface area), enthesitis and patient reported pain, patient global and functional ability [4]. Achievement of the MDA criteria has been shown to correlate well with low impact of disease reported by patients [5] and result in better functional outcome and lower radiographic damage over 1–5 years' follow-up [6–8].

The study recruited 250 patients from routine rheumatology clinics who were considered by their treating rheumatologist to be in an acceptable disease state. They were recruited from two hospital sites but over 30 referring clinicians to remove bias from individual physicians' assessments. These patients had to have been stable for 6 months with no treatment change (or planned treatment change) but were accepted regardless of therapy. This inclusion criterion was designed to assess current clinical practice and so did not require any additional assessments of disease activity, just the physician's overall opinion. Unfortunately, patients not considered in acceptable disease states were not assessed so we do not know what proportion of patients they represent.

Following referral, patients underwent a full clinical assessment examining peripheral joints, skin, enthesitis, dactylitis and spinal disease as the principle domains of PsA disease. Patients also completed a wide range of questionnaires including assessments of function, quality of life, anxiety and depression, and work productivity.

Unsurprisingly, the average levels of disease activity were low in keeping with the physicians' opinion. However, of the 250 patients reviewed, only around two-thirds of them fulfilled MDA criteria ($MDA^+$), while one-third did not ($MDA^-$). When examining why MDA was not fulfilled in these patients, it was clear that residual disease activity was significantly higher across all domains. This was not limited to measures such as pain or functional impairment, which may be related to other conditions but also to specific PsA measures such as tender/swollen joint counts, skin scores, enthesitis and dactylitis counts. The physician global visual analogue score was also significantly higher suggesting that physicians were aware that disease was not as optimally controlled in these patients.

When examining these $MDA^-$ patients, multivariate analysis showed that they were more frequently female, older and had a higher BMI, all of which are in keeping with previous research. Analysis by treatment group showed no significant difference between those on NSAIDs alone (around 10% of cases), csDMARDs only (around 40% of cases) or those receiving TNF inhibitors (around 50% of cases). Of course this study only included those felt to be well controlled so this does not necessarily reflect the effectiveness of these therapies in PsA.

This study gives us the first real-life insight into the differences that may follow from implementing a treat to target strategy for PsA in routine clinical practice. Around one-third of these patients would have been considered for escalation of therapy if following a treat to target regime using MDA. Interestingly, it was clear in this study that doctors were aware of the higher levels of disease activity (significantly higher physician global scores median 23 mm for $MDA^-$ *vs* 7 mm for $MDA^+$) but they did not feel that treatment should be changed.

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Obviously in routine practice, there may be practical reasons in individual cases why escalation of therapy may not be appropriate: comorbidities, contraindications to therapies, patient refusal, or no other treatment options available. However, it seems likely that overall doctors accept a higher level of disease activity than seen in the MDA criteria.

This study also highlights the impact of that disconnect. The $MDA^-$ patients had significantly worse scores on all patient reported outcomes. Some of these (patient pain, global and HAQ) are included in the MDA criteria so it is unsurprising that these are higher. However, the difference was very marked in some cases, for example, functional impairment seen in 9.5% of $MDA^+$ patients but 72% of $MDA^-$ patients. In addition to these differences, independent measures of impact including quality of life, anxiety and depression, and work productivity all showed significantly higher impact on patients' lives for those who did not achieve MDA.

It is clear from this study that patients felt to be in an acceptable disease state who do not meet the MDA criteria have higher levels of disease activity and this is associated with a significant impact on their functional ability, quality of life, mental health and work productivity. Coupled with results from the The Tight Control of PsA study and the assertions of the EULAR recommendations for the care of PsA, this should challenge clinicians to incorporate these simple assessments into their routine patient care and strive for better outcomes for all patients.

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