Editorial

Early arthritis management in Africa: moving on to a reality

Moots RJ¹, Mwachai SD²

¹University of Liverpool, Clinical Sciences Centre, Aintree University Hospital, Longmoor Lane, Liverpool, L9 7AL United Kingdom ²Consultant Physician & Lecturer, Department of Biomedical Sciences, Pwani University, Malindi Road, Kilifi, P O Box 88830 – 80100, Mombasa, Kenya

Corresponding author: Prof RJ Moots. Email: rjmoots@liv.ac.uk

Rheumatoid arthritis is associated with considerable morbidity and disability in African patients as well as the rest of the world¹. In western countries, even though there is provision for considerable patient support, studies have shown that almost a third of patients who were gainfully employed at disease onset have to retire due to the disease within five years². The situation in Africa, where there is less resources for health care, is likely to be even worse. In Britain, work disability at five years is observed more in patients who are manual labourers and/or with a high baseline HAQ2. Although it has been suggested that RA in Africa is of a mild phenotype, some studies report a high mean HAQ, probably reflecting high disease activity. In the African continent, where a large proportion of the labour force occupies manual positions and where the vast majority of patients have high HAQ scores, it is imperative that African rheumatologists develop measures to facilitate the early diagnosis of rheumatoid arthritis and improve the devastating disease outcomes that occur at present¹.

The approach to managing RA worldwide has changed dramatically over the years, to emphasize early diagnosis and treatment, which is associated with enhanced outcomes. There is accruing evidence to suggest that the optimal time to intervene therapeutically and improve outcomes lies within three months from symptom onset, which may only be vague symptoms such as fatigue^{3,4}. With prolonged delays in diagnosis in African countries, high morbidity and disability are sadly to be expected¹.

Early diagnosis of RA is now possible with highly sensitive imaging, such as ultrasound and MRI⁵. Many African tertiary centres may be equipped with some of this equipment, yet lack staff familiar with musculoskeletal techniques. The inadequate provision of rheumatologists in tertiary centres is long standing and the gap in service provision too large to fill as fast as we would wish. There is also a huge need in Africa to understand musculoskeletal diseases in the community and at basic hospital levels. Identifying MSK diseases at the community level, with appropriate simple treatment and referral on, when required, is a paramount issue. Unless clear referral systems, involving the community, are established, with specific emphasis on screening, early diagnosis will remain elusive.

We believe that treatment should not be delayed because of lack of access to imaging, even simple radiography, especially in the setting of persistent symptoms. We recommend that GALS, a validated screening tool for MSK disease, is taught and rolled out widely to community health workers, to expedite early identification of patients with these problems⁶. It may also be practical to educate the community workers on how to cautiously begin steroids, as temporary bridging therapy, under appropriate supervision.

Whilst therapeutic options for RA have evolved tremendously, with biologic therapies further enhancing outcomes, these agents will be unaffordable for most African patients, even as the biosimilars emerge, for the foreseeable future. However, if African countries focus on early diagnosis and an expedited referral system, the continent may still achieve good outcomes. Targeted early therapies using low cost DMARDs such as methotrexate are the type of strategies that will benefit the African continent most. Following up rheumatoid patients with CDAI assessments in a targeted approach has been shown to be a simpler and more cost effective in this setting⁸. Even though some of the studies may have been underpowered, treat to target strategies in early arthritis that utilised DMARDs, plus or minus systemic glucocorticoids, have been very successful in inducing remission in a large percentage of patients within two to five years⁹⁻¹¹, even suggesting a suppression in MRI inflammation and prevention of structural damage in some cases. These encouraging studies suggest that only a minority of patients with an early diagnosis will not respond to a treat to target strategy, with remission occurring in a large proportion. Other lifestyle factors that may influence outcome, including obesity and smoking, should also be addressed by the attending rheumatologists and appropriate actions implemented¹³.

Finally, much remains to be learnt about the different genetic variants

associated with RA in African populations, building on the work of Govind and colleagues in South Africa¹⁴. We strongly urge researchers to replicate such studies in other African regions, to help identify genetic loci that confer increased risk of RA in the diverse population groups present in Africa. Prognostic markers need to be clearly identified and long term outcome studies are required. It is also time to try the different therapies in our population, to clearly understand our pharmacokinetics and pharmacodynamics to the different drugs used in rheumatoid arthritis. As better systems for the care of rheumatic diseases develop, more rheumatologists are trained in Africa and education about rheumatic diseases occur in African medical schools and to community doctors, we strongly believe that the time has come for African rheumatology to begin to grow and flourish.

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