Disparities in foot care – is inflammatory arthritis still a poor relation?

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Disparities between diabetes and rheumatoid conditions footcare in the UK has been recently highlighted in an article published in *Rheumatology Advances in Practice* (1). People with high-risk foot problems such as diabetes or inflammatory arthritis face many challenges in everyday activities. Specialised podiatrists have a prominent role to play in symptom relief and improving quality of life because involvement of the feet, even to a mild degree for all people with high-risk foot problems (2). However, the role of specialist podiatrists as members of hospital based multidisciplinary teams managing diabetic foot disease is well established in the UK (3). In contrast, the number of podiatrists as members of rheumatology multidisciplinary teams in the UK is highly variable (4).

Clinical guidelines in diabetes are more advanced than compared to inflammatory arthritic conditions across the globe. In the UK, diabetes prevention and management of diabetic foot ulceration requires complex, well-coordinated multidisciplinary care across all healthcare settings as recommended by the National Institute of Health and Care Excellence (NICE) and the 'Putting Feet First' National Framework (5,6). Normahani et al (7) reported that care pathways are structured to include a Foot Protection Team to work in the community, comprising healthcare professionals, often podiatrists, with specialist expertise in diabetic foot assessment and management. The team work closely with a multidisciplinary foot care

team who manage diabetic foot problems in hospitals as well as more complex cases in the community.

In the last decade there has been a significant expansion in the body of knowledge on the effects of rheumatoid arthritis (RA) and other inflammatory arthropathies such as gout, psoriatic arthritis and systemic lupus erythematous on the foot and the management of these problems (2). In a dedicated rheumatology foot health service, callus reduction, footwear advice and provision, and orthosis prescription are mainstays of management. Foot and ankle management for RA features in many clinical practice guidelines recommended for use. Unfortunately, supporting evidence in the guidelines is low quality. Agreement levels are predominantly 'expert opinion' or 'good clinical practice'. Hennessy et al (8) suggested more research investigating foot and ankle management for RA is needed prior to inclusion in clinical practice guidelines.

Although UK national guidelines and expert opinion call for timely and appropriate foot care (9). Provision of dedicated foot care services for inflammatory arthritis is variable and service provision reportedly poor (10,11). An annual review of patients' feet and access to foot care services has been recommended in UK guidelines (11, 12). However, surveys of rheumatology departments in the UK, Netherlands, Singapore, Australia and New Zealand have shown the provision of dedicated foot care services for patients with inflammatory arthritis is variable. In a UK study, Backhouse et al (13) concluded that despite the known high prevalence of foot pathologies in rheumatoid arthritis, only one-third of 1237 patients with RA accessed podiatry. Multidisciplinary care is important in managing rheumatology patients, and there are two arguments to this. On the one hand, rheumatology patients are often complex medically. it is essential that the practitioner managing the foot problems has a dialogue with,

and good back up from, the patient's rheumatology physician. For example, the increasing use of biologic agents and risks of foot ulceration require early and aggressive management. Conversely, expertise in dealing with foot problems is often limited among rheumatologists, and a strong case can be made for better integration of foot health services into rheumatology (10-12). Indeed, close collaboration between clinicians for access and management of foot problems in rheumatoid arthritis has long been advocated (14). Wilson et al (11) reported that the extent of current problems suggests that the provision of effective, timely and targeted care a pressing need. Clinicians need to have the clinical expertise in foot assessments and knowledgeable of the clinical management of foot problems. Additionally, foot care needs to be co-ordinated and tailored to individual patient's needs in order to improve outcomes for patients. Commissioning integrated pathways for footcare in rheumatology has an important role and guideline that currently exist for diabetes would be welcome.

In summary, the article recently published in *Rheumatology Advances in Practice* [1] illustrates disparities in footcare between diabetes and inflammatory arthritis. Although the audit was conducted in a major city in the UK, previous studies have highlighted variability of care across the UK. Future consideration by funders and healthy policy makers should ensure that provision of foot care services for patients with inflammatory arthritis could reflect the diabetes model.

References

1. Joyce C, Rajak R. A clinical audit into the adherence of foot health management standards of rheumatoid arthritis compared to the foot health management standards of diabetes mellitus in North-East London. Rheumatol Adv Pract (in press).
2. Williams AE, Graham AS, Davies S et al. Guidelines for the management of people with foot health problems related to rheumatoid arthritis: a survey of their use in podiatry practice. J Foot Ankle Res 2013; 6, 23.
3. Krishnan S, Nash F, Baker N, Fowler D, Rayman G. Reduction in diabetic amputations over 11 years in a defined UK population. Diabetes Care 2008; 31:99–10
4. Ndosi M, Ferguson R, Backhouse MR et al. National variation in the composition of rheumatology multidisciplinary teams: a cross-sectional study. Rheumatol Int 2017; 37, 1453–1459.
5. National Institute for Health and Care Excellence (NICE). Diabetic foot problems: prevention and management (NICE guideline; NG 19). August 2015. Accessed 18th January 2021.
6. Putting feet first: National Minimum Skills Framework 2011. Accessed 18th January 2021.
7. Normahani P, Mustafa C, Standfield NJ. et al. Management of peripheral arterial disease in diabetes: a national survey of podiatry practice in the United Kingdom. J Foot Ankle Res 2018; 11, 29.
8. Hennessy K, Woodburn J, Steultjens M. Clinical practice guidelines for the foot and ankle in rheumatoid arthritis: a critical appraisal. J Foot Ankle Res 2016; 9, 31.

9. Woodburn J, Hennessy K, Steultjens MP et al. Looking through the 'window of opportunity': is there a new paradigm of podiatry care on the horizon in early rheumatoid arthritis? J Foot Ankle Res 2010; 3, 8.
10. McCulloch L, Borthwick A, Redmond A et al. UK podiatrists' experiences of podiatry services for people living with arthritis: a qualitative investigation. J Foot Ankle Res 2018; 11, 27.
11. Wilson O, Hewlett S, Woodburn J et al. Prevalence, impact and care of foot problems in people with rheumatoid arthritis: results from a United Kingdom based cross-sectional survey. J Foot Ankle Res 2017; 10, 46.
12. Graham AS, Williams AE. Foot health education provision for people with rheumatoid arthritis–an online survey of UK podiatrists' perceptions. J Foot Ankle Res 2016; 9, 13.
13. Backhouse M, Keenan AM, Hensor FM et al. Use of conservative and surgical foot care in an inception cohort of patients with rheumatoid arthritis. Rheumatology 2011; 50:1586-95.
14. Helliwell PS. Lessons to be learned: review of a multidisciplinary foot clinic in rheumatology. Rheumatology 2003; 42:1426–7.

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