Plantar heel pain: should you consult a general practitioner or a podiatrist?

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In *British Journal of Sports Medicine*, Rasenberg and colleagues[1] report the findings of the Soles as Treatment Against Pain in feet (STAP) randomised trial comparing the effectiveness of usual general practitioner (GP) care to referral to a podiatrist for custom insoles or sham insoles in 185 people with plantar heel pain.[1] After 12 weeks, the usual GP care group reported less pain during activity compared with the custom insole group (assessed using an 11-point Numerical Rating Scale), although this difference was small (less than one point) and did not meet the minimal clinically important difference for this outcome measure. Secondary outcomes favoured the GP group but were mostly small in magnitude. The authors concluded that referral to a podiatrist for custom insoles does not lead to better outcomes compared with usual GP care, and as such, healthcare providers should be 'reserved' in prescribing custom insoles for the treatment of plantar heel pain.

This is a generally well-designed pragmatic trial and the first to be undertaken in a primary care setting, so it makes a valuable contribution to the research literature. Nevertheless, there are three key issues to consider when interpreting the findings of the STAP study which relate to the characteristics of the interventions being compared. First, as acknowledged by the authors, the GPs provided

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more interventions than is typical for the management of this condition in Dutch primary care.[2] In particular, there was a higher rate of 'heel cups or other biomechanical interventions' (41%) and corticosteroid injections (15%), and participants randomised to the GP group also attended more consultations. Therefore, rather than concluding that treatment with custom insoles provides no additional value compared with usual GP care, it could instead be argued that the outcomes were similar between the groups, despite the GPs using a wider range of effective treatment options and seeing participants more frequently.

Second, the prescription and manufacture of the custom insoles were left to the discretion of the 50 different podiatrists involved in the trial. Although the general characteristics of the insoles are reported in the paper, it would appear that no prescription algorithm was used to guide the customisation process. Whether insole customisation is necessary or beneficial is an ongoing debate within the foot orthosis literature, and indeed, our recent systematic review and meta-analysis found no difference in outcomes of custom insoles and generic, prefabricated devices in the treatment of plantar heel pain.[3] However, the clinical variation allowed in this study, although justifiable in a pragmatic trial, makes it difficult to ascertain exactly what was provided and the underlying reasons for these treatment decisions. For example, the Shore A of the custom insoles ranged from 30 to 60—an equivalent hardness range from a rubber band to a car tyre—so they are likely to have had variable biomechanical effects.

Third, the authors used a sham insole as a comparator to the custom insole. This is a recommended methodological strategy to minimise ascertainment bias and resentful demoralisation.[4] However, it is now recognised that when using sham insoles in clinical trials, it is important to either quantify the mechanical effects of the insole or select an insole that is known to provide as minimal effect as possible.[5] The sham insole in this study was contoured to the participants' individual foot shape based on a three-dimensional scan and incorporated a 12 mm heel cup—features that are likely to have had at least some mechanical effect.[5 6] Unfortunately, no biomechanical testing was performed in this trial, so it is not possible to determine the how 'inert' the sham insole was compared with the custom insole.

So, what do these findings mean clinically? In the context of Dutch primary care, Rasenberg and colleagues could perhaps argue that that there is no compelling need for GPs to refer patients with plantar heel pain to podiatrists to be provided with custom insoles, as their outcomes were similar. However, it is important not to oversimplify or overgeneralise this finding—it is only true if GPs in routine primary care provide a similar multifaceted treatment approach to that administered during the trial, and it may not translate to other clinical contexts where GP and podiatry management of plantar heel pain may be quite different. For example, in Australia, GPs primarily manage plantar heel pain with advice and non-steroidal anti-inflammatory medications,[7] while podiatrists use a wide range of interventions (such as education, stretching, taping and extracorporeal shockwave therapy) in addition to foot orthoses.[8]

In closing, the STAP trial makes a worthwhile contribution to the evidence base for the effectiveness of interventions in managing plantar heel pain, although some caution is required when contextualising the findings.

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