

general population are needed to drive the presentation of patients in clinics. Additionally, training of primary care physicians in taking an appropriate medical history and measuring the ABI should increase the identification of patients, while increased awareness of the associated atherothrombotic risks should encourage more clinically appropriate management of risk.

Physicians in secondary care also have a responsibility to ensure that if a patient presents following an atherothrombotic event at one vascular site, they are assessed and treated to prevent further events in all vascular beds. Thus, for example, if a patient presents following an ischaemic stroke, the patient should also be assessed for the presence of CAD and PAD, with or without expressed symptoms, with referrals to other specialists as appropriate. Recommendations for follow-up care also need to stress the increased risk of all types of atherothrombotic event and the consequent importance of attaining treatment targets.

The REACH Registry provides high quality data with high follow-up rates in a large, contemporary, international cohort in a community setting (1, 2). However, it does need to be acknowledged that there are weaknesses to the registry approach including the potential for recruitment bias. Although physicians were instructed to recruit consecutive patients, adherence to this requirement was not checked (as it would be in a RCT). In addition, REACH is not a population-based registry, therefore, patients are not necessarily representative of the population as a whole, although efforts were made to ensure inclusion of representative patients from every participating country. Furthermore, it seems likely that physicians choosing to participate in research initiatives, such as REACH, are more apt to provide better care. Of course this could suggest that the level of undertreatment of atherothrombosis is actually underestimated by the REACH registry.

In conclusion, data from REACH indicate that the profile of PAD needs to be raised so that it is

recognised and investigated. Furthermore, assessment and management of atherothrombotic risk needs to be both comprehensive and clinically appropriate to ensure that the mortality and morbidity associated with atherothrombotic disease is minimised. REACH has provided the information to enable us to improve our practice and better serve our patients. Only time will tell if the lessons are learnt.

Disclosures

G. Kassianos has served on advisory boards and received travel expenses, payment for speaking at meetings and support in attending national and international scientific meetings from pharmaceutical companies, including Sanofi-Aventis and Bristol-Myers Squibb, the sponsors of the REACH Registry.

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doi: 10.1111/j.1742-1241.2007.01581.x

EDITORIAL

International Journal of
 Clinical Practice

If the shoe fits...footwear and patients with diabetes

Well-fitting footwear performs several important functions – it offers physical protection and acts as

an environmental barrier for the foot, it provides biomechanical support and it enables pressure redis-

tribution across the foot thus reducing the formation of callus. Ill-fitting footwear has the potential to cause serious problems, including increased risk of falls, biomechanical problems and lesions including callus, blisters and ulcers resulting from friction. Wearing suitable footwear is particularly important for patients with diabetes and especially significant where the patient presents with the signs and symptoms of neuropathy.

This issue includes a study by Harrison et al. (1) that examines whether patients with diabetes are wearing shoes of the correct size. The study presents an important finding – that only one-third of patients with diabetes were wearing appropriate footwear. This finding is worrying considering the potential severity of the problems associated with ill-fitting footwear, and healthcare professionals will want to reflect upon its implications for their patients, themselves and the health service.

The study suggests several reasons why patients select inappropriate footwear, such as lack of footwear education or the poor availability of broader fitting shoes. The authors note that there is also a lack of standardisation of shoe sizes between shoe manufacturers, patients may have different sized feet and many patients do not have their feet regularly measured before purchasing footwear. Patients with neuropathy often mistakenly select shoes that are too small, as the sensation caused by tight fitting footwear is perceived as an appropriate fit.

Healthcare professionals therefore have a responsibility to assess footwear and provide advice about appropriate shoes. Clinicians may want to consider the quantity and quality of footwear education that has been provided in the past and possible reasons why the outcomes of this education appear to be disappointing.

The consequences of ill-fitting footwear have serious implications for the health service. Ulceration has numerous socioeconomic repercussions including impaired quality of life, increased amputation risk and is also associated with elevated mortality rate (2). Previous studies have reported that approximately 20% of ulceration in patients with diabetes is a result of ill-fitting footwear (3,4). Within the UK over 1 billion pounds per year is spent on wound management by the NHS (5).

The study draws attention to two basic issues – first, what is the true extent of the problem and second, how may it be resolved? It has long been suspected that many patients do not wear shoes of the correct size. A previous study found that 37% of patients with diabetes in an outpatient clinic and 24% of general medical outpatients wore incor-

rect footwear (6). This raises concerns about other high-risk patient categories, such as patients with rheumatoid arthritis, peripheral vascular disease and other types of neuropathy. Such patients are also susceptible to the same myriad of problems as those with diabetes and their attendant socio-economic implications. Ideally a series of similar studies would be required in a variety of geographical locations and clinical settings to investigate the scale of the issue.

Resolution of the problem poses a challenge to healthcare professionals. The authors of the present study postulate that patients attending specialist clinics would be receiving footwear education and hence would wear better fitting shoes. It would be interesting to test this assumption.

When purchasing footwear, patients will be influenced by fashion and financial resources. Regrettably, these factors may sometimes displace consideration of the form and function of the shoe. It would be very beneficial if manufacturers could establish an industry standard for the sizing of footwear with a wider variety of fittings. Retailers might also help by providing a more efficacious fitting service, based on a greater understanding of the needs of customers with foot health problems. There may, therefore, be value in greater liaison between healthcare professionals and the footwear industry. If the number of patients wearing ill-fitting shoes is as great as the present study suggests, there should be a sizeable market for suitable footwear, and considerable economic benefits for the manufacturers who choose to supply that market. Improvements in the fitting of footwear have the potential to reduce the need for provision of clinical care, which would result in savings for the NHS.

The current study alerts healthcare professionals to the fact that many patients with diabetes may be wearing ill-fitting footwear. The authors have therefore performed a very valuable service, while highlighting a pressing need for further research into this problematic area.

Disclosures

The author has declared that they have no interests which might be perceived as posing a conflict or bias.

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Only one-third of patients with diabetes were wearing appropriate footwear

Suitable footwear is especially significant where the patient with diabetes presents with the signs and symptoms of neuropathy

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