

A specialist opinion by 'E-Nail'

An example for podiatrists to follow?

E-nail is an electronic way of exchanging ideas and advice concerning nail disease for people in Europe and around the world.

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CASE PRESENTATION

An 11-year-old girl was seen by her podiatrist in consultation together with her orthopaedic surgeon following previous surgery for hallux valgus on her right foot.

Her parents were concerned about the further progression of the hallux valgus deformity, and complaints of rubbing between the first and second toes, a tendency to trip and fall 'over her own feet' and her sore medial arches. They also requested an opinion regarding the recent appearance of longitudinal ridging affecting their daughter's toenails and whether this was related to any other problems.

The child had had a normal gestation and delivery and was in good health. Her medical history included a diagnosis of mild learning difficulties, amputation of a right supernumerary hallux and two procedures for right hallux valgus with excellent recoveries.

On examination a general hypermobility, marked in some joints, excessive foot pronation and nail changes prompted the surgeon to refer the girl for podiatric biomechanical and skin assessment. The intention was to stabilise the feet and accommodate the condition to reduce symptoms¹ prior to further surgical intervention.

Marked femoral anteversion, external tibial torsion, squinting patellae

(greater on the right), genu recurvatum, low axis subtalar joints, forefoot abducted on the rearfoot and bilateral hallux valgus were observed. However despite general hypermobility with a 5/9 point hypermobility score,² hallux limitus, ankle equinus and tight, short Achilles tendons were noted. Compensations for these deformities included excessive foot pronation, and rapid early heel lift with a tendency to toe walking.

Although the hallux valgus surgery scar remained prominent and calluses had developed on the medial aspect of the right second toe and longitudinal arches, the skin appeared normal. All toenails demonstrated slight splitting with longitudinal white ridges that were not present on the fingernails. The girl's joint hypermobility, also suffered by her mother, appeared to have partially contributed to her complaints.

There is some evidence to suggest that a link exists between Benign Joint Hypermobility Syndrome (BJHS) and connective tissue disorders.³ It has also been established that hypermobility, highly prevalent in the population at large in various degrees,³ does not have to be generalised to cause symptoms and may be restricted to a few or even a single joint.⁴

The case had some of the hallmarks of a heritable connective tissue disorder and appeared to share features with the Marfan's and Ehlers-Danlos Syndromes⁵ – although its features were

milder and lesser in degree when compared with these.

A broad spectrum of nail pathology is a feature of connective tissue disorders,⁶ and dolichonychia, a condition in which the nail plate is longer than it is broad, has been associated with Marfan and Ehlers-Danlos.⁷ A possible link was questioned in this case but a search of the literature revealed no general or specific associations for BJHS. As ridging was restricted to the girl's toenails an aetiology of microtrauma due to excessive pronation during gait (that was also causing chafing of the foot arches) seemed reasonable.

However, further referral was sought to address the parents' concerns. This was achieved through the use of a unique system known as 'e-nail'. E-nail is an electronic way of exchanging ideas and advice concerning nail disease for people in Europe and around the world. It is for use by clinicians caring for those with nail disease.

Details of the case were e-mailed to the system administrator and provided rapid access to several international nail specialists around the globe. Within 48 hours a consensus of nil association between longitudinal ridging and any connective tissue disorder or hypermobility, in particular, was obtained. The parents were thus comprehensively and rapidly reassured on this matter.

Orthotic and supportive footwear therapy commenced with considerable



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reduction in foot pronation, chafing and tripping. Indications of resolution of toenail pathology that might be predicted from the resulting reduction in micro trauma awaits further follow up.

DISCUSSION

When making clinical decisions, practitioners often rely on expert-based systems such as textbooks, peer-reviewed journal articles and probably, most frequently, consultation with colleagues. In an age when time is at a premium, the goal is to find the most useful information in the shortest time. 'Useful' in this case being defined as relevant, correct and easy to obtain.⁸

Within healthcare, the rise of the Internet and all that it can bring has not gone unnoticed. The potential uses of this medium for various health disciplines (including podiatry) have been explored.⁹⁻¹¹

Furthermore, the Government's modernisation plan for the NHS¹² states that technologies such as the Internet will be integrated into the NHS. The current four-year strategy promises an electronic booking system for appointments, electronic medical records, video and tele-consultations for patients, and electronically transmitted laboratory test results as well as the recently launched National Electronic Library for health,¹³ which includes a podiatry portal.

The case presented here highlights some of the benefits of this medium in patient care. Firstly, the speed of the whole process. Had the patient needed to be referred on for a dermatological opinion regarding her nail condition, this would have probably taken a matter of weeks. As it was, within 48 hours of sending out the case history, the practitioner received replies.

These represented the opinions of nail specialists from across four continents, many years of knowledge derived through clinical experience, something which would be difficult perhaps to obtain through other methods. The other benefit of this system is evident when one examines the cost. As a specialist interest group, no

charges or costs were incurred for this information.

The advantages of such a system are easy to see particularly when geographically isolated practitioners are confronted with a difficult or unusual question. The only potential caveat to this is that responses expressed are only opinions, as such. In the current climate of practice based on evidence, the recipient of clinical opinion should be aware of the limitations of such information.

Perhaps it's time to consider a system similar to e-nail amongst the various specialist groups within the profession to assist practitioners in giving their patients the best quality care

This issue has been debated^{8,14,15} and indeed members of the e-nail group point out that the responsibility for the patient's care ultimately remains with the practitioner. However, put into perspective, experts provide sources of information which come with guidance, support and other psychological benefits which textbooks and computer databases cannot provide.¹⁵

Within podiatry, the concept maybe an interesting one to explore. Currently, a number of web-based discussion groups exist, most notably the podiatry mailbase (www.jiscmail.ac.uk/podiatry) acting as a forum for academic discussion.

Perhaps it is time to consider a system similar to e-nail amongst the various specialist groups within the profession to assist practitioners in giving their patients the best quality care. This would seem appropriate at a time when a large number of UK podiatrists have easy access to the Internet at home and at work.¹⁶

**The European Nail Society
website for further information
is: www.euronails.org**

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