I had intended to call this editorial Infected after the album and single by “The The”. However, this is not the focus of the articles highlighted this quarter. My initial experiences of managing diabetes foot ulceration, a very long time ago, probably taught me some bad habits in terms of antibiotic use. My use of antibiotic treatments occasionally conflicts with our infection control and antibiotic stewardship policies – I am still a big fan of co-amoxiclav but recently use a lot more doxycycline, and I continue to have doubts about flucloxacillin alone in the very chronic and, typically, previously treated and re-infected ulcers, which get through to us in a tertiary referral clinic. However, I have never used antibiotics for uninfected ulcers or to heal ulceration. The article by Abbas et al (summarised alongside) clearly sets out the rationale that supports this. The clinical diagnosis of infection promoted by the Infectious Diseases Society of America (IDSA) has done a lot to make antibiotic use more targeted and has even reduced the duration of medication for most patients. However, difficulties remain.

Not least of the difficulties is diagnosing osteomyelitis. The article by Khodaee et al (summarised on the next page) reviews the literature and concludes that a magnetic resonance imaging (MRI) scan should be performed on everyone who is suspected of having osteomyelitis. Certainly my infectious diseases and orthopaedic colleagues are big fans. However, I still take the view that, if there are bits of bone crumbling in a wound, then an MRI scan, which is typically over sensitive, is probably superfluous. If there are no bone fragments, then a plain radiograph, which typically has <2% of the radiological exposure of a chest X-ray, can be used repeatedly at a lower cost and with easier access in most outpatient clinics than an MRI scan.

With growing antibiotic resistance and the need for extended treatments in people with diabetes and osteomyelitis, I am grateful to my outpatient parenteral antimicrobial therapy (OPAT) colleagues for providing the treatment these patients need. Malone et al (summarised on the next page) demonstrate that OPAT can significantly reduce hospitalisation and make significant savings in treatment costs. However, it is important, particularly if the OPAT facility is not in the same place as their foot clinic, that these patients remain under multidisciplinary team foot clinic care for ongoing review of their off-loading and debridement and to determine when treatment can end on clinical grounds.

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Foot care: Written information versus interactive educator-led sessions

1 By consecutively allocating people with T2D to different education styles for foot health, the authors compared the effectiveness of written education (Group A) with an interactive educator-led session (Group B).

2 The written education was an information booklet that patients could read in their own time. The educator-led session was a single, 90-minute, group session given by a diabetes educator.

3 In total, 154 adults (mean age 68±10 years; 59.7% male) were recruited, and they completed a set of clinical and psychological tests at baseline and 3 months later.

4 There was a greater change in Foot Score from baseline to 3 months in Group A (change −1.8 [95% confidence interval (CI), −2.4 to −1.2]) versus Group B (change −0.1 [95% CI, −0.7 to 0.4]; P=0.001).

5 There was no change in the Nottingham Assessment of Functional Foot Care survey score in either group, and results from the attitudes survey suggested that Group B felt they better understood how to prevent foot complications compared to Group A after education.

6 The interactive educator sessions appeared to increase the confidence of individuals in undertaking preventative measures, and the written information was more effective at improving overall foot health. This suggests that effective foot care education should include a combination of both styles.


Diabetes Metab Res Rev

Clinical outcomes following OPAT

1 Outpatient parenteral antimicrobial therapy (OPAT) involves delivering intravenous antibiotics in the community setting. The authors aimed to evaluate the cost savings achieved from the use of OPAT and analyse which patient characteristics would predict who would find it most effective.

2 Over the 5-year study period, 59 people were identified as receiving OPAT. The success rate for healing diabetic foot infections was 88%, but secondary infections after the primary infection had healed were fairly common.

3 The authors estimated that OPAT could provide a cost saving of $16 672 per individual as hospital admission can be avoided.

4 No statistically significant factor was identified (e.g. age, history of ulceration) as leading to failure of OPAT, and as there are high re-infection rates for this population it is imperative that they are closely monitored.


J Diabetes Complications

Predictors of wound healing after minor amputation

1 Among 50 people with T2D who received a forefoot or toe amputation, physiological tests were carried out before and 6 weeks after the procedure to identify any significant clinical differences between people who had healing amputation sites and people who had non-healing sites.

2 Tests included pedal pulses, pre-operative arterial spectral waveforms at the ankle, absolute toe pressures, toe–brachial pressure index (TBPI) and ankle–brachial pressure index (ABPI).

3 There were a significantly higher mean TBPI and toe pressure readings in the healing group compared to the non-healing group, and there were significant differences in ankle spectral waveforms between the two groups (P=0.028). ABPI showed no significant difference and, thus, the authors conclude it should not be relied on as an indicator of wound healing.


Diabetes Digest Volume 14 Number 3 2015

Lower limb complications

"There is no compelling evidence that treating clinically uninfected wounds with antibiotics either accelerates healing or prevents the development of active infection. It is also counter-productive as non-targeted antibiotic use can lead to antibiotic resistance."