## THE PAPER THAT CHANGED MY LIFE

## **Change we need!**

**Tony Berendt** 

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esponding to the invitation to contribute to this section is reminiscent of finding oneself navigating rapids in a major river system, and trying to work out how one came to be there in the first place. Was the article recommending this particular river, or the one that recommended white-water rafting in general, of more importance? So, choosing a key paper from the twists and turns of an unconventional career poses difficulties!

I suspect the papers that changed my life were mostly published before I was even born; accounts, such as those by Mencer Martin from King's College Hospital in 1954, describing lesions of the feet in people with diabetes and drawing attention to the importance of neuropathy in their pathogenesis. As so elegantly reviewed recently by Henry Connor (2008), there was already a still much older history of describing the infectious complications and the outcomes of diabetic foot ulceration, extending far back into the pre-antibiotic era.

Mencer Martin's work was followed by that of others, all of whom emphasised the importance of neuropathy in diabetic foot disease: authors such as John Classen in 1964 (I was now at primary school and unaware even of the existence of diabetes); Catterall in 1973 (en route to GCE "O"-levels and familiar with the function of insulin, but not of the consequences of its chronic deficiency); Andrew Boulton and John Ward in 1983 (now just starting my house jobs and a few years away from working for 6 months for John Ward, but still in a state of remarkable ignorance about the diabetic foot); and Roger Pecoraro in 1990. By this stage, I had recently identified novel molecular pathways for the adhesion of malaria-infected red blood cells to vascular endothelium (Berendt et al, 1989), and a career occupied with bone and joint infection, and the vicissitudes of the diabetic foot, still remained undreamed of. By contrast, Pecoraro had just dissected the different pathways to amputation and the crucial role that infection often played as its immediate precedent.

When I met Ben Lipsky at a bone and joint infection conference in Philadelphia in 1996, I was, at last, aware of something of the importance of diabetic foot infection, and of the contribution that infectious diseases specialists could potentially make to multidisciplinary efforts to prevent lower-extremity loss in people with diabetes. Ben and his colleagues' 1990 review (Lipsky et al, 1990), read in 1994 soon after my move into bone and joint infection, had been a point of contact between the work I was engaged in at the Bone Infection Unit in Oxford (predominantly dealing with prosthetic joint infection and chronic long bone and spine osteomyelitis) and the diabetic foot world. In that it formed a basis for our first conversation at that meeting, that paper probably changed my life more than most others. Shared interest in a common clinical problem, with perspectives that were both different and complementary, made for a productive collaboration that continues today, and has seen me able to support the development of clinical practice guidelines on diabetic foot infection for the Infectious Diseases Society of America (Lipsky et al, 2004) and the International Working Group on the Diabetic Foot (Berendt et al, 2008).

Being changed by experience does not, of course, end. After some years in clinical management, energised by the inspirational writings of Jim Collins (2001), I encountered the Institute for Health Improvement and the work it is still driving on patient safety (Reinertsen et al, 2008). More than any other recent reading, this emphasises that "change we need" is not simply an American political slogan, but an accurate description of the imperative to develop improved patient pathways and systems, as much as to make advances in basic knowledge, if we are to deliver optimal outcomes with minimal risk. It took me the bulk of my career even to realise how important diabetic foot infection was; if we are to make a real impact on outcomes for affected individuals, future progress on firming up the evidence base and on implementing good practice will have to be very much quicker! I'm looking forward to the next paper that changes my life; based on the past I will not have long to wait, and will have to keep alert even to notice it among the swirling rapids of change. It looks like remaining an exciting rafting trip.

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Tony Berendt is Consultant Physician, Bone Infection Unit, Nuffield Orthopaedic Centre NHS Trust.

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