

CORRESPONDENCE**Re “Analysis of the Elective Treatment Process for Critical Limb Ischaemia with Tissue Loss: Diabetic Patients Require Rapid Revascularisation”**

We read with interest this article by Noronen et al.¹ in *EJVES* in our weekly journal club. We wish to make some comments on this paper.

This is a retrospective analysis in 2017 of data collected 6 years ago for a single centre using a single vascular consultant’s database. The aim was to recognise reasons for “delay” in the elective treatment of critical ischaemia, by following patients through their treatments over 2 years. The results showed comparative “delay” in treatments regardless of their treatments however, but does not answer the primary outcome “to analyse the treatment process from referral to revascularisation, to discover possible delays and reasons behind them, and to distinguish patients benefitting the most from early revascularisation.” Instead it compared the information of their diabetic patients versus other patients without critical ischaemia. The paper would have been more attractive if it had evaluated the reasons for “delay” in patient treatment, or for that matter, if it had clarified and quantified the delay or in which part of the pathway the delay was; for example, onset of ulcer to primary care or primary care to vascular services, or in the vascular surgery department itself. Sub-group comparisons or analysis were not set out in the aim of the study.

While the results are shown in colourful diagrams, they are difficult to comprehend because of their complexity. Figure 4 would have benefitted greatly from a “number at risk table” below the graph. This would also have shown the attrition clearly in a retrospective data analysis.

The discussion section does admit the difficulties often encountered in a retrospective study. The concluding paragraph went too far from the objective in stating that open revascularisation was better than the endovascular method, which was not the objective of the study.

Overall, the study, though well intended, does not have strong grounds to change any practice and has pitfalls in its sections.

REFERENCE

- 1 Noronen K, Saarinen E, Albäck A, Venermo M. Analysis of the elective treatment process for critical limb ischaemia with tissue loss: diabetic patients require rapid revascularisation. *Eur J Vasc Endovasc Surg* 2017;**53**(2):206–13.

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Response to “Re. Analysis of the Elective Treatment Process for Critical Limb Ischaemia with Tissue Loss: Diabetic Patients Require Rapid Revascularisation”

We thank the authors of this letter for taking an interest in our study. Nevertheless, we wish to clarify few of the addressed issues.

The aim of our study was to analyse the whole treatment process, but the main focus was on wound healing, and the number of emergency procedures and major amputations and deaths during follow-up, outcomes that represent possible consequences of delay.

We presented the structure of delay from referral to revascularisation in Fig. 3. The Introduction described our aim of 1 week from referral to first visit, and 2 weeks from decision to revascularisation, both target times we slightly missed with a median of 9 and 18 days respectively. Imaging studies took another 2 weeks. Finding causes behind these delays was indeed our initial objective, yet no causes are listed in the publication, simply because none were found. No single step was excessively long, rather every step should be slightly shortened. We also emphasized the importance of pre-hospital delay, even if underlying causes could not be obtained retrospectively. The delay in our treatment was caused solely by the lack of available elective time slots, for the first vacant time was scheduled at each step. Therefore, rather than looking for reasons, we feel that establishing the existence of delay is an important finding. We also encourage other institutions to take a closer look at their own treatment pathways, perhaps not to change anyone’s practice, but to recognise and minimise the “invisible delays.”

And finally, even if it wasn’t our primary focus, we could not disregard the superior limb salvage and wound healing after open surgery, both findings we wanted to raise in this “endovascular era”.

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