Reviewer's report

Title: Characteristics of Diabetic Foot Ulcers in Western Sydney, Australia

Version: 1 Date: 20 March 2014

Reviewer: Vanessa Nube

Reviewer's report:

MAJOR COMPULSORY

1. While the aim of the study is given to include determining the prevalence of foot ulcers, the study population is defined in the paper as follows: “The study population was defined as the total number of patients with Type 1 Diabetes Mellitus (Type 1 DM) and Type 2 Diabetes Mellitus (Type 2 DM) with foot ulcers attending our outpatient Foot Wound Clinic at Westmead Hospital between January to December 2011.” Prevalence is not determined. The aim needs to be reconsidered.

2. In the statement “Over half (58.5%) of all ulcers were infected and the most prevalent was Grade 3 (26.7%)” does the author mean infection grade 3 according to the PEDIS classification? It may be useful to describe what is meant by 3 classification systems and that they are referring to the PEDIS grade for cellulitis >2cm etc.

3. What was the method used to diagnose the osteomyelitis? There is some discussion about the probe to bone test and investigations but this this is used to diagnose only some of the cases. For instance, is the author indicating that the probe to bone test is diagnostic for osteomyelitis?

4. Switching between the treatment base classification system for diabetic foot and the ulcer grading system is confusing. The information on outcomes would be better presented in table form with both grading systems explained and all categories included. I note that the UT foot is given in a table.

5. At what time point was the data was captured given than patient’s status changes over time. For example, at first appointment/baseline.

6. Can the author explain why on Table 3, only 1(0.5%) foot was classified as infected using the UT Foot category while it is also stated that 25.6% of wound were infected (in the foot ulcer section using the UT Wound classification) and that 58.5% were stated to be infected in the risk factors and co-morbidities section? The prevalence of osteomyelitis is also given as 25.6%. The representation of the data makes it difficult to actually understand the characteristics of the cohort. Consider representing the outcome data using the UT Foot and UT Wound classification systems in the table and include ALL the categories. The author is currently “selecting” which ones to report. I refer to the statement “Predominant UT wound types consisted of category 1A (33.3%), 1B
(13.8%) and 3B (11.8%). Other UT wound types were OC, 1C, 1D, 2A-2D, and 3A-3D.”

7. The discussion on Pressure Offloading does not fit with the aims.

8. The outcomes given are the number of deaths and the number of amputations (being minor). It is unclear why more detailed outcomes are described for a few of the patients. The reporting of amputation also needs to have a time to follow-up to be meaningful.

MINOR and DISCRETIONARY

1. Traumatic events are given as the cause of most of the wounds. Can the author give more information on what is categorised as a traumatic event? For example, is chronic repetitive pressure a traumatic event for the purpose of this paper?

2. The standard clinical outcomes of % healed and time to healing and the time to follow up are not reported. The following two links contain published data on clinical outcomes of comparative services in Australia. The author might consider presenting outcomes such as these which include % healed and time to healing. http://jdfc.org/spotlight/healing-times-of-diabetic-foot-ulcers-investigating-the-influence-of-infection-and-peripheral-arterial-disease/ and http://ads-adea2013.p.asnevents.com.au/event/abstract/7226

3. Suggest the author check they havnt misquoted Singh (3). True prevalence has been difficult to define and the Singh suggests the lifetime incidence “may” be as high as 25% but this is based on 2 references, one for specific populations.

4. Comparison to a point prevalence survey of wounds in an inpatient cohort may not be the most appropriate benchmark of ulcer prevalence to use for this study. Has the author considered using ANDIAB data that is based on patients with diabetes attending clinics

5. The authors should consider providing some information about this scale and interpreting the result that is described as being “slightly below the median index score”.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare I have no competing interests