Reviewer's report

Title: Incidence and determinants of diabetes-related lower limb amputations in Ghana, 2010-2015- a retrospective cohort study

Version: 1 Date: 18 Sep 2018

Reviewer: Michael Edmonds

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General Comment

Ideally, lower limb amputations should be divided into major and minor and analysed separately

Other points

Line 94

"Peripheral artery disease (PAD) was diagnosed based on symptoms such as intermittent claudication allied to ankle-brachial index measurements (less than 0.9), doppler ultrasonography and magnetic resonance imaging angiography"

Are the results of these investigations available?

Line 109

"Variables included in the model were: age (years) at presentation, gender, type of diabetes, lipid status, renal function, and symptoms of peripheral neuropathy."

No vascular parameters were included. Please comment.

Line 118

"We excluded 127 of them because they presented to the clinic with foot disorders"

This is not clear.

Line 142

"Causes of amputations

The main causes of amputation included PVD i.e. 63% of LLA, PSN; 24% and 13% were due to a combination of the two. "
What is the evidence for these statements? Were any of these amputated feet infected?

Line 153

"Predictors of lower limb amputations

Independent factors associated with LLA in our diabetes cohort are shown in Table 3"

Were vascular factors investigated?

Line 165

"We identified gangrene/PVD as the leading cause of diabetes-related LLA in the cohort."

Gangrene and PVD are not directly interchangeable. Gangrene may occur in a neuropathic non-ischaemic foot secondary to infection.

Fig 2

This is not clear. The colours are difficult to distinguish.

Is the gangrene wet gangrene (indicating predominantly infection) or dry gangrene (indicating ischaemia)?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

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Lecture for Bayer on diabetic foot

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