

## **Reviewer's report**

**Title:** Hallux valgus and hallux rigidus: a comparison of impact on health-related quality of life in patients presenting to foot surgeons in Australia

**Version:** 1 **Date:** 14 July 2008

**Reviewer:** tim T. E kilmartin

### **Reviewer's report:**

Thankyou for asking me to review this re-submitted article.

Major compulsory revisions:

Introduction

Para 2 sentence 1. Need reference for the claim that Hallux valgus is generally thought to be a genetic deformity. The part in brackets is repititious and could be enhanced by using more technical terminology.

Degeneration and instability do not occur in all cases of hallux valgus; this needs to be referenced and clarified.

Clinical diagnosis page 5. there is still lack of clarity over wether xrays were used. This could be reduced by changing the word parameter to evaluation at the end of sentence 1.

The finding that general foot health scores were similar in both hallux valgus and hallux rigidus is extremely interesting given the variation in other parameters. This is a finding worthy of much more discussion. I suspect that patients find the question misleading perceiving that it relates to foot hygiene. At least a paragraph of discussion building on the sentence on page 8 would be of value to future studies using the FHSQ. It also needs to be raised in limiatations of the study section.

Limitiations of study

Sentence beginning thirdly.... Reword this needs clarification.

Presently the lack of power study to validate sample size is a flaw in the study. Both conditions discussed in this study are affectations of just one toe joint. Without a power study there is a risk that a statistically significant difference was falsely estimated because the numbers were too small to avoid a type I statistical error especially as the sample size in the two groups is so different. The statement in responses that 'clearly there is sufficient statistical power' is not justified.

The need for a power study is further underlined by the selective nature of the

study population. Without a power calculation the conclusion of this study must be interpreted cautiously.

If a power study is not performed, the implications should be considered under 'limitations of the study'.

Incidence sentence 3.

para 2 must again stress that the patients were attending podiatric surgeons.

Minor essential revisions

1. Abstract. reword last sentence paragraph 1 it is too vague for an abstract

Discretionary revisions.

Page 6 para 1. It seems odd to select asthma as the second most important example of a co morbidity. Were there no more frequently occurring conditions?

Page 7 discussion. Para 1. Would the authors also consider including hallux rigidus valgus as a classification. This happens in end stage hallux rigidus and is a consequence of medial propulsion from the hallux in the absence of dorsiflexion of the MTP joint.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.