Published in final edited form as:

J Acquir Immune Defic Syndr. 2013 October 1; 64(2): . doi:10.1097/QAI.0b013e3182a6db6c.

Reply to comments by Lee et al. regarding our article “Shang Ring versus forceps guided adult male circumcision: a randomized controlled effectiveness study in southwestern Uganda”

Samuel Kanyago,

Good Shepherd Hospital, Siteki, Swaziland

David M. Riding, and

North West Deanery, Manchester, UK

Mark J. Siedner

Massachusetts General Hospital Center for Global Health, Harvard Medical School, Boston, USA

Dear Editor

We thank Dr. Lee *et al.* for their interest in our study and insightful comments. We agree that our study was subject to ascertainment bias from higher retention rates in the Shang Ring versus surgical group (0% vs 25% loss-to-follow-up – likely because Shang Ring participants had to return for device removal). We allocated favorable outcomes to the participants lost to follow up in the surgical AMC group to conservatively bias estimates for safety and efficacy of the novel Shang Ring device towards the null. Had we assumed that all 16 participants in the surgical group who were lost experienced a minor complication, the relative risk of minor complications would have remained non-significantly greater in the Shang Ring group (RR 1.33, 95% CI 0.96 – 1.88).

Lee *et al.* also took note of high rates of complications and short healing times in our study compared to prior studies. The differences in these rates are at least partially explained by differences in study definitions. For example, we included any day 14 need for clinical observation (e.g. suture discomfort or unhealed wound) as a minor complication, whereas no such definition was made in the study they cite¹. Moreover, we defined healing as circumferential approximation of the skin, while others defined healing as complete re-epithelialization^{2,3}. As the authors stated, we did have a significant difference between groups in healing at day 14 by chi squared testing, but not for overall time to healing by log rank testing (Figure 1).

Finally, we recognize that many prior studies of the Shang Ring device were performed with well-resourced randomized controlled trial infrastructures. In contrast, our study was conducted by a single, locally trained surgeon without external funding. Scale-up of circumcision techniques across a range of public health settings will confront supply chain issues and variations in procedural expertise. We agree with Dr. Lee *et al.* that, while both our study and prior ones have documented high patient satisfaction, relatively short procedure times and few major complications with Shang Ring-guided AMC¹⁻⁴, our findings reinforce the need to invest in both human and logistical resources to minimize complication rates.

References

1. Kigozi G, Musoke R, Watya S, et al. The Acceptability and Safety of the Shang Ring for Adult Male Circumcision in Rakai, Uganda. *J Acquir Immune Defic Syndr.* Apr 22.2013
2. Barone MA, Awori QD, Li PS, et al. Randomized trial of the Shang Ring for adult male circumcision with removal at one to three weeks: delayed removal leads to detachment. *J Acquir Immune Defic Syndr.* Jul 1; 2012 60(3):e82–89. [PubMed: 22343180]
3. Barone MA, Ndede F, Li PS, et al. The Shang Ring device for adult male circumcision: a proof of concept study in Kenya. *J Acquir Immune Defic Syndr.* May 1; 2011 57(1):e7–12. [PubMed: 21346586]
4. Li HN, Xu J, Qu LM. Shang Ring circumcision versus conventional surgical procedures: comparison of clinical effectiveness. *Zhonghua Nan Ke Xue.* Apr; 2010 16(4):325–327. [PubMed: 20626160]

FIGURE 1.

Days to healing by circumcision method in a randomized controlled trial of adult male circumcision techniques in Mbarara, Uganda. The P-value represents results of log-ranked testing, comparing time to healing between the Shang Ring and Forceps study groups.