To the Editor: We read with interest the study by Marais et al.¹ In their paper, the authors state that the reason for their study was to address the research gap in the efficacy of transversus abdominis plane [TAP] blocks in resource poor settings, because the standard of post-operative analgesia care for abdominal hysterectomy is high, as this involves neuroaxial blocks and high care beds. In their study, they used patient controlled analgesia [PCA] as the standard.

In our view, PCA is still a high barrier as this is still largely unavailable in our practice in Sub Saharan Africa. However, the TAP block itself is easy to learn and to teach. It can be performed by the anaesthetist pre or post operatively and by the surgeon intraoperatively under direct vision. In addition, ultrasound machines are becoming more available and competence in their use for regional anaesthesia and vascular access is increasingly being regarded as an essential basic level skill for anaesthetists.

In our hospital most postoperative patients are still on regular or as needed [prn] intramuscular opioid with additional oral or per rectal non-steroidal anti-inflammatory analgesia. We conducted a study to investigate the effectiveness of a TAP block in this setting. Our results [in press] showed that a TAP block performed at the end of surgery resulted in better pain scores and comfort scores compared to standard care for up to two hours post operatively.

This suggests that the TAP block is efficacious in the immediate postoperative period but its effectiveness is not sustained. Performance of an ultrasound guided TAP block procedure is simple enough for repeat TAP blocks to be considered in the postoperative period.

Intravenous or perineural dexamethasone has been considered in the literature as an agent that could prolong duration of anaesthetic block.^{2,3} We added dexamethasone to bupivacaine to extend the TAP block. Intramuscular opioid [prn: Latin:pro re nata English: as needed] is still widely practiced in the Sub Saharan region. The per capita expenditure on health is at US\$100 or less for 28 countries out of 56 in Africa and 43 countries spend less than US\$200.4 Patient controlled analgesia (PCA) pumps are

unlikely to be part of postoperative analgesia protocol anytime soon. Prolonging the duration of TAP block with repeat blocks coupled with aggressive paracetamol and non-steroidal antiinflammatory drugs (NSAIDs) might open up some possibilities of improving acute postoperative pain relief in resource limited settings.

Nomaghawe Moyo

Department of Anaesthesia and Critical Care Medicine College of Health Sciences University of Zimbabwe nomaq79@gmail.com

Farai Madzimbamuto

Senior Lecturer Department of Anaesthesia and Critical Care Medicine College of Health Sciences University of Zimbabwe faraitose@hotmail.com

Samson Shumbairerwa

Head of Department Department of Anaesthesia and Critical Care Medicine College of Health Sciences University of Zimbabwe sshumbairerwa@medsch.uz.ac.zw

References

- 1 Marais A, Porrill O, James MF, Dyer R. The use of ultrasoundguided transversus abdominis plane blocks for total abdominal hysterectomy: a double-blind, controlled trial South Afr J Anaesth Analg 2014;20(2):117-121
- 2 Choi S1, Rodseth R, McCartney CJ. Effects of dexamethasone as a local anaesthetic adjuvant for brachial plexus block: a systematic review and meta-analysis of randomized trials. Br J Anaesth. 2014;112:427-39. doi: 10.1093/bja/aet417.
- Ammar AS, Mahmoud KM. Effect of adding dexamethasone to bupivacaine on transversus abdominis plane block for abdominal hysterectomy: A prospective randomized controlled trial Saudi J Anaesth. 2012;6: 229-233. doi: 10.4103/1658-354X.101213 PMCID: PMC3498660
- 4 WHO Department of Health Statistics and Informatics. World Health Statistics 2013. Geneva: WHO. 2013 http://www.who.int/gho/ publications/world_health_statistics/2013/en/