Does oral medication reduce pain during removal of PrePex circumcision device?

L Lebina¹, N Taruberekera², M Milovanovic¹, M Mhazo³, M Manentsa¹, N Martinson¹

1. Perinatal and HIV Research Unit, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa
2. Population Services International, Johannesburg, South Africa
3. Society for Family Health, Johannesburg, South Africa

BACKGROUND

Device based circumcision for scale-up of voluntary medical male circumcision has enthused innovative research. One such device that has been extensively studied in select countries throughout Africa is the PrePex circumcision device. PrePex circumcision is marketed as a less painful procedure and therefore does not require anaesthesia.¹ However, studies have shown that during removal of PrePex, patients experience pain but this pain rapidly abates after the device is removed². There is no available data on how to reduce pain during PrePex removal therefore; the objective of this study was to assess whether pain medication (oral or combination of oral and topical) provided and applied prior to removal would reduce the level of pain experienced by participants.

METHODS

A prospective cohort study, in which adult (18-45 year old) men underwent circumcision using the PrePex device. Data were collected during the removal of the PrePex device from 5 circumcision clinics, across four provinces in South Africa. Outcome measures include pain during the removal procedure, whether or not medication was administered and types of pain medication provided.

RESULTS

A total of 973 participants (628 no_medication and 345 medication) were analysed. The findings show that having pain medication such as Emla combination (Emla combined with either paracetamol, codeine and/or ibuprofen), ibuprofen combination (ibuprofen with and without paracetamol) and paracetamol–codeine combination (paracetamol with and without codeine) (Figure 1) significantly decreases severe pain (p<0) but there is no difference between moderate and none/mild pain.

Thirty six percent of paracetamol-codeine (105/295) recipients and 37% of Emla_combination (108/214) recipients had a significantly higher pain rating compared to ibuprofen combination (25%; 30/119) (p=0.03; p=0.02, respectively). There was no significant difference between paracetamol-codeine combination and ibuprofen combination for moderate or severe pain. Emla combination significantly decreases moderate and severe pain compared to paracetamol-codeine combination (p=0.0003; p<0.00) and ibuprofen combination (p=0.00016; p<0.00).

DISCUSSION AND CONCLUSIONS

Pain medication prior to PrePex removal increases the number of participants having none-mild pain, however it does not make the procedure pain free. Although this was a non randomised study, possibly confounded by site, the Emla combination increased the proportion of people with none/mild pain and decreases those with severe pain better than the other medications. Our data suggests that a combination of Emla with oral pain medication is recommended to be given one-two hours before PrePex removal.

References