SHANGRING CIRCUMCISION IN BOYS AND MEN WITH TOPICAL VS. INJECTABLE ANESTHESIA: RESULTS FROM A RANDOMIZED CONTROLLED TRIAL


BACKGROUND

- The ShangRing, a disposable device for voluntary medical male circumcision (VMC), has been prequalified by the World Health Organization for use in men and boys 13 years old and above.
- Data from China and Africa suggest that the innovative "no-flip" technique further simplifies ShangRing circumcision, as there is no need to re-expose the foreskin or to make small slits on the edge of the foreskin (both required with the original "flip" technique).

- The use of topical anesthetic cream instead of an injectable local anesthetic could further simplify ShangRing VMMC, because use of injectable anesthetic requires more efforts, as it was the most painful part of the procedure, poses risks due to hypodermic needles, and may lead some men and boys to avoid circumcision due to fear of injections. Topical anesthetic has been successfully used with other circumcision devices.

OBJECTIVES

PRIMARY OBJECTIVE

- Compare pain experienced during ShangRing circumcision with topical vs. injectable anesthetics.

SECONDARY OBJECTIVES

- Compare the safety of topical vs. injectable anesthetics
- Compare the duration of postprocedural analgesic effects between topical vs. injectable anesthetics
- Compare participant satisfaction with topical vs. injectable anesthetics

SHANGRING PROCEDURES

APPLICATION OF TOPICAL ANESTHETIC CREAM

- Apply anesthetic cream around the glans, on... (If foreskin cannot be easily retracted, apply inside the foreskin with no needle.)

NO-FLIP CIRCUMCISION

- Place the outer ring around, then close it, clamping the foreskin.
- MEASURE THE PENIS WITH SPECIAL MEASURING TAPES.
- INSERT THE INNER RING, USING A DORSAL SLIT WHERE NECESSARY.
- APPLY A SHANGRING BANDAGE TO COVER THE S EXCISE AND APPLY WARM COMPRESSION.

SURGICAL OUTCOMES: NO-FLIP TECHNIQUE

Rings were removed on Day 7. At each follow-up, participants were evaluated for:

- Occurrence of adverse events
- Status of wound healing

ADVANCED EVENTS

<table>
<thead>
<tr>
<th>Event</th>
<th>Topical</th>
<th>Injectable</th>
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</thead>
<tbody>
<tr>
<td>Moderate</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Somewhat dissatisfied</td>
<td>0 (0.0%)</td>
<td>2 (1.8%)</td>
</tr>
<tr>
<td>Very dissatisfied</td>
<td>1 (0.4%)</td>
<td>2 (1.7%)</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>208 (98.1%)</td>
<td>104 (94.5%)</td>
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</tbody>
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CONCLUSIONS

- Topical anesthetics are safe, effective, and acceptable.
- There were no safety concerns or unexpected adverse effects associated with the use of topical anesthetic cream in those cases where topical cream did not induce sufficient anesthetic.
- Use of injectable anesthetic is more effective in relation to the application technique.
- Use of topical anesthetic may simplify the procedure and decrease the risk of needle-stick injuries, as well as lead to increased demand among those who fear injections.

SHANGRING IN BOYS AND MEN WITH TOPICAL ANESTHESIA VS. INJECTABLE ANESTHESIA

OBJECTIVES

- Compare pain experienced during ShangRing circumcision with topical vs. injectable anesthetics.

INTRODUCTION

- Men and boys seeking VMMC were enrolled at the Homabay County Hospital and Vipingo Health Center in Kenya.
- 344 boys and men
- 172 10–15-year-olds
- 172 older than 15
- Circumcision with no-flip technique

METHODS

- Follow-up on adverse events: 0, 1, 3, and 42 days.
- The no-flip technique was safe, effective, and well-accepted by participants.
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- Phimosis and adhesions did not limit eligibility for ShangRing VMMC.
- Because the ShangRing can be used by nearly all clients, including 10–15-year-olds, it is a good choice for sustained integrated VMMC services.

ACKNOWLEDGMENTS

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EngenderHealth, "Well Cornell Medical College," "Bon Santé Consulting, "Ministry of Health, Kenya National AIDS & STIs Control Programme, "Vipingo Health Centre Questions or Comments? Please contact: Mark A Barone mark@engenderhealth.org To see a video of the no-flip ShangRing technique visit: http://bit.ly/ShangRingVideo