



Abstract

Background:

Observational studies suggest that voluntary medical male circumcision (VMMC) may lower HIV risk among men who have sex with men (MSM). A randomized controlled trial (RCT) is needed to confirm this.

Objective:

To assess the efficacy of VMMC in preventing incident HIV infection among MSM.

Design:

An RCT with up to 12 months of follow-up. (Chinese Clinical Trial Registry: ChiCTR2000039436)

Setting:

8 cities in China.

Participants:

Uncircumcised, HIV-seronegative men aged 18 to 49 years who self-reported predominantly practicing insertive anal intercourse and had 2 or more male sex partners in the past 6 months.

Intervention:

VMMC.

Measurements:

Rapid testing for HIV was done at baseline and at 3, 6, 9, and 12 months. Behavioral questionnaires and other tests for sexually transmitted infections were done at baseline, 6 months, and 12 months. The primary outcome was HIV seroconversion using an intention-to-treat analysis.

Results:

The study enrolled 124 men in the intervention group and 123 in the control group, who contributed 120.7 and 123.1 person-years of observation, respectively. There were 0 seroconversions in the intervention group (0 infections [95% CI, 0.0 to 3.1 infections] per 100 person-years) and 5 seroconversions in the control group (4.1 infections [CI, 1.3 to 9.5 infections] per 100 person-years). The HIV hazard ratio was 0.09 (CI, 0.00 to 0.81; $P=0.029$), and the HIV incidence was lower in the intervention group (log-rank $P=0.025$). The incidence rates of syphilis, herpes simplex virus type 2, and penile human papillomavirus were not statistically significantly different between the 2 groups. There was no evidence of HIV risk compensation.

Limitation:

Few HIV seroconversions and limited follow-up period.

Conclusion:

Among MSM who predominantly practice insertive anal intercourse, VMMC is efficacious in preventing incident HIV infection; MSM should be included in VMMC guidelines.

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References

1. | **UNAIDS.** UNAIDS Data 2020. Accessed at www.unaids.org/sites/default/files/media_asset/2020_aids-data-book_en.pdf on 28 March 2024.
[Google Scholar](#)
2. | **UNAIDS.** UNAIDS Data 2019. Accessed at www.unaids.org/sites/default/files/media_asset/2019-UNAIDS-data_en.pdf on 28 March 2024.
[Google Scholar](#)
3. | **UNAIDS.** UNAIDS Global AIDS Update 2022. Accessed at [www.aidsdatahub.org/sites/default/fil](http://www.aidsdatahub.org/sites/default/files/2022-11/UNAIDS%20Global%20AIDS%20Update%202022.pdf)

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