

# Healing and Resumption of Sex after Male Circumcision

The World Health Organization (WHO) recommends that men abstain from sex for at least 42 days after they are circumcised to allow for complete healing. Resuming sex before the circumcision wound has healed could temporarily increase the risk of HIV, because an open wound or any inflammation could facilitate transmission or acquisition of the virus.

But the exact time to complete healing after adult male circumcision, and the factors that influence the rate of healing, are not fully understood. Through 2012, no published study had determined how long it takes for male circumcision wounds to heal completely, though several had shown that many men resume sex before the recommended 42 days of abstinence after circumcision.

With support from the Male Circumcision Consortium (MCC), Elijah Odoyo-June and colleagues from the University of Illinois at Chicago and the Nyanza Reproductive Health Society (NRHS) conducted a study at the UNIM Research and Training Centre in Kisumu, Kenya, to gain a better understanding of wound healing and resumption of sexual activity after the procedure.

## Study Design

The study was conducted from March 2011 to February 2012 among men who sought voluntary medical male circumcision (VMMC) services at the UNIM clinic in Kisumu. A total of 215 HIV-negative men and 108 HIV-positive men were circumcised using the forceps-guided method; their circumcision wounds were examined to assess healing at weekly intervals for seven weeks and again at 12 weeks.

Participants were interviewed during each clinic visit. Each man was asked, among other questions,



PHOTO: ELIZABETH T. ROBINSON

- Men should abstain from sex for six weeks after male circumcision and use condoms when they resume sex.
- The risk of HIV transmission due to early resumption of sex after male circumcision appears to be low.
- Couples' counseling should be emphasized to help reduce early resumption of sex.

if he had engaged in sex since circumcision and, if so, whether he had used a condom the first time he had sexual intercourse after the surgery.

At each weekly visit, the researchers washed the penises of HIV-positive participants and collected the fluid to assess shedding of the virus. They also collected blood samples to determine plasma viral load and CD4 cell count.



The Male Circumcision Consortium worked with the Government of Kenya and other partners — including the US President's Emergency Plan for AIDS Relief (PEPFAR), which supports service delivery — to prevent HIV and save lives by expanding access to safe and voluntary male circumcision services. FHI 360 and the University of Illinois at Chicago, working with the Nyanza Reproductive Health Society, are partners in the consortium, which is funded by a grant to FHI 360 from the Bill & Melinda Gates Foundation.

## Results

### **Ninety-four percent of all circumcision wounds healed by six weeks.**

Almost 65 percent were healed at week four, and 83 percent were healed at week five. HIV-positive and HIV-negative men did not differ in the time it took them to heal.

**Study participants tended to believe that wound healing took longer than clinicians found it did.** The men's personal perceptions of their own healing agreed with their clinicians' assessments only 65 percent of the time.

**Early post-operative infection and tight sutures** were associated with delayed healing.

**There was no difference based on CD4 count in the proportion of HIV-positive men healed at 42 days.** But men with CD4 counts below 350 cells/ $\mu$ L did have a significantly longer mean time to healing of 37.1 days, compared to 31 days for men with higher CD4 counts.

**Only 7 percent of participants reported having unprotected sex before certified wound healing.** Overall, almost 38 percent of men reported having sex before 42 days, but more than 81 percent of those men either reported using a condom or were already healed. There was no difference between HIV-positive and HIV-negative men in time to resumption of sex.

**Men who were married or had had two or more sex partners in the past year were more likely to resume sex before healing.** Among single men, being older than 24 years and regular consumption of alcohol were associated with sex before healing.

**Circumcision of HIV-positive men was associated with a temporary upsurge in penile viral shedding,** which declined to pre-circumcision levels within six weeks after surgery. In more than 96 percent of the men, no viral shedding was detected after certification of wound healing. There were no significant changes in plasma HIV viral load following circumcision.

### References

Odoyo-June E, Rogers JH, Jaoko W, Bailey RC. Factors associated with resumption of sex before complete wound healing in circumcised HIV-positive and HIV-negative men in Kisumu, Kenya. *Journal of Acquired Immune Deficiency Syndromes* 2013, 62(4):465-70. doi:10.1097/QAI.0b013e3182800710.

Rogers JH, Odoyo-June E, Jaoko W, Bailey RC. Time to complete wound healing in HIV-positive and HIV-negative men following medical male circumcision in Kisumu, Kenya: a prospective cohort study. *PLoS One* 2013;8(4):e61725. doi:10.1371/journal.pone.0061725.

Odoyo-June E, Rogers JH, Jaoko W, Bailey RC. Changes in plasma viral load and penile viral shedding after circumcision among HIV-positive men in Kisumu, Kenya. *Journal of Acquired Immune Deficiency Syndromes* 2013;64(5):511-17. doi:10.1097/QAI.0b013e3182a7ef05.

## RECOMMENDATIONS

- The WHO recommendation of sexual abstinence for 42 days after male circumcision should be maintained and applied regardless of a man's HIV status.
- All men should abstain from sexual intercourse for at least 42 days after circumcision, regardless of their personal perceptions of healing status.
- Circumcision wounds should be inspected during the seventh-day follow-up visit. Men with early infection or evidence of tight sutures may be at risk of delayed healing and should be counseled to abstain from sex for longer than 42 days or until healing is certified by a clinician.
- Consistent condom use after male circumcision — and particularly during the three months after the procedure — should be aggressively promoted.
- Efforts should be intensified to promote female partners' support for sexual abstinence during healing and then condom use by circumcised men.

AUGUST 2014