

Male circumcision is a cost-effective intervention against HIV spread in Africa

Circumcised men are at reduced risk of acquiring HIV infection, but it is unclear whether this intervention is cost-effective compared with other HIV prevention strategies. Kahn and colleagues, therefore, created a cost-effectiveness model that assumed a stable HIV prevalence of 25.6% among adults. They incorporated data from the randomized, controlled, Orange Farm study performed in Gauteng Province, South Africa, in which adult male circumcision reduced the acquisition rate of new HIV infections by 60%.

The authors estimated that if 1,000 uninfected men underwent circumcision, 308 HIV infections would be averted over the following 20 years. The estimated cost of 1,000 circumcisions was US\$55,724 (including procedural and publicity costs, and costs of treating adverse events). The cost of preventing one HIV infection was \$181. If the lifetime medical costs of HIV treatment (conservatively estimated as \$8,000 per patient) were taken into account, the estimated net cost saving achieved by each circumcision was \$2,411.

The authors conclude that the moderate implementation costs, good protective effect, and savings in lifetime HIV care costs associated with male circumcision could contribute substantially to the restriction of HIV spread in sub-Saharan Africa—particularly in countries with low circumcision rates and high HIV prevalence. Even with less optimistic estimates than those used in this model for the cost and effectiveness of the intervention, and for HIV incidence, the net savings remain comparable to those achieved with other HIV prevention strategies. Counseling is, however, critical to avoid compensatory increases in risky behavior.

Original article Kahn JG *et al.* (2006) Cost-effectiveness of male circumcision for HIV prevention in a South African setting. *PLoS Med* 3: 2349–2358

Bladder cancer risk is doubled in men with a history of gonorrhea

Whether infections and inflammation cause bladder carcinogenesis in developed countries is unclear, although two retrospective

case-control studies suggested that men with a history of gonorrhea are at an increased risk of developing bladder cancer. Those findings could have been affected by recall or selection bias, since the risk assessment was done after bladder cancer was diagnosed. Michaud and colleagues, therefore, investigated this potential association in a subgroup of participants in the Health Professionals' Follow-Up Study—a longitudinal, prospective, US-wide cohort study on the relationships between nutritional factors and the incidence of serious illnesses in men.

Among 37,012 men (predominantly white, aged 40–75 years) who responded to a 1992 questionnaire that asked whether they had ever had a diagnosis of gonorrhea, Michaud and colleagues identified 286 men with incident bladder cancer. A history of gonorrhea was associated with an almost twofold elevated risk of bladder cancer (relative risk 1.92, adjusted for age, smoking history etc.). The association was stronger in invasive disease (relative risk 2.42) than in less-advanced disease, and there was no association with superficial disease, which makes detection bias an unlikely explanation for these results. The association between gonorrhea and bladder cancer was (nonsignificantly) strengthened by ever smoking.

The authors suggest that in individuals with a history of gonorrhea, inflammation that caused urinary symptoms, or increased urinary stasis from incomplete bladder emptying, could be involved in bladder carcinogenesis.

Original article Michaud DS *et al.* (2007) Gonorrhoea and male bladder cancer in a prospective study. *Br J Cancer* 96: 169–171

Finasteride reduces serum PSA to a similar extent at 1 mg and 5 mg daily doses

Finasteride, a type 2 5 α -reductase inhibitor, is used to treat benign prostatic hyperplasia (BPH) at 5 mg daily, and male-pattern alopecia at 1 mg daily. The 5 mg regimen reduces serum PSA levels, and guidelines currently recommend that PSA values of men who undergo prostate-cancer screening while taking 5 mg finasteride daily should be doubled—although this adjustment is only accurate in men who have taken 5 mg finasteride daily for 1–3 years, and a PSA increase of 0.3 ng/ml from nadir has been proposed as an alternative.