EDITORIAL

To Circumcise or Not to Circumcise: The medical debate over a religious and cultural tradition

The recent Annual Meeting of the American Urological Association in Orlando, Florida, dedicated a significant amount of time to the ageless topic of the foreskin. While circumcision has been practiced since biblical times, the need to debate the medical justification for this procedure is a much more recent pastime. When the significance of this topic was elevated to the plenary session of the meeting, the issue took on a much more serious, but at the same time entertaining, perspective. Just how passionate proponents and opponents of circumcision can get was demonstrated during a debate moderated by Byron Joyner, where Paul Austin argued for the medical benefits of neonatal and adult circumcision, while Robert Van Howe warned against the adverse consequences of circumcision.

Austin pointed out the 4- to 10-fold increase in urinary tract infections in uncircumcised boys during the first year of life, a 22-fold lifetime increase in penile cancer, the risk of sexually transmitted diseases (STDs), and phimosis. The most recent and perhaps most compelling data were the results from large-scale randomized trials in South Africa, Uganda, and Kenya, which demonstrated a much greater risk of human immunodeficiency virus (HIV) infection in uncircumcised men, a risk that was reduced in men who underwent adult circumcision.

Van Howe countered that by removing the foreskin one deprives the patient of the most sensitive part of the penile anatomy, a part that may have an important contribution to pleasure from sexual activity. He quoted from his own work (Sorrels ML et al. *British Journal of Urology, International* 2007;99:864-869). Furthermore, circumcision results in significant pain and discomfort for the infant, and maybe associated with numerous complications ranging from cosmetic problems, adhesions, and skin bridges, to a partially or fully amputated phallus. Circumcision fails to prevent STDs, HIV, or penile cancer, and the rate of complications following adult circumcision in the African studies was as high as 20%. In European countries where infants are not routinely circumcised, penile cancer rates are still among the lowest in the world.

At a subsequent session, the issue of adult circumcision to prevent HIV infection was further discussed. At the specialty meeting of the Pan African Urological Surgeons' Association (PAUSA), John Krieger gave an elegant summary of a study he co-authored — a randomized controlled trial of the protective effect of circumcision for HIV in Kisumu, Kenya (Bailey RC et al. *Lancet* 2007;369:643-656). The study demonstrated a 60% protective effect of adult circumcision against acquisition of HIV infection, at the expense of only a 1.5% complication rate. However, despite the differences attributed to circumcision, HIV conversion rates were high in both populations.

Much more disturbing was the presentation at the History of Urology Forum by Shah and Susan on the topic of Female Circumcision: From Africa to the Rest of the World (Abstract 907). The paper highlighted the highly prevalent practice of female genital mutilation in both developing countries, where it is practiced openly, and in developed nations, where it is part of an illegal, hidden subculture of abuse. This is a practice that can only be condemned, but the most effective ways to battle the ingrained, cultural root causes remain controversial.

In conclusion, it is apparent that the religious and cultural practice of neonatal circumcision has evolved into a medical debate over risks versus benefits. While the arguments in favor of circumcision for the prevention of urinary tract infections, STDs, and penile cancer rage on, there is now new data that circumcision may also help to reduce HIV infections. One must seriously consider, however, that the Level 1 evidence supporting the practice of circumcision for the reduction of HIV infection comes from an area where HIV is highly endemic among men and women who engage in high-risk sexual behaviors. Can this rationale for circumcision be truly applied to infants born in Western countries and other low-risk societies? One must also resist the temptation to allow ourselves to develop a false sense of security by thinking that it is circumcision, rather than safe sexual practices, that is the priority for the prevention of acquired immunodeficiency syndrome.

Gabriel P. Haas, MD, FACS
Syracuse, New York, USA
Editor-in-Chief

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