The case against circumcision

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In 2004, 57% of boys born in the United States received a medically-unnecessary, non-therapeutic circumcision at great cost before leaving the maternity hospital [1], although there are no medical indications for this amputative operation [2,3]. Alleged advantages rest on claimed, but unproved, prophylactic prevention of disease later in life. Complications and risks, however, are clear and immediate. Such circumcisions are *not* good medical practice and are injurious to the infant [4]. Because the US is the greatest offender, this paper will focus on circumcision as practiced in the US and will explore the multitude of reasons why circumcision should not be performed and why false claims of benefits are made.

Medical society position statements

Too much weight is placed on medical society position statements regarding child circumcision. Medical societies are political organizations whose purpose is to advance the interests of their physician-members. If societies were honest about the risks associated with circumcision and the certain loss of physiological function, the physician-members would lose income and be exposed to risk of lawsuits for the certain injury caused by amputation of normal functional tissue. The ethical problems associated with non-therapeutic circumcision of children are ignored or minimized. Current statements remove the burden of care from the doctor and shift the duty and legal responsibility to the parents.

Psycho-social problems also exist [5]. Circumcised doctors who perform circumcision may be unable to objectively consider the current evidence [5]. Emotional factors include avoidance of emotional discomfort from questioning one's own circumcision and protection of self-esteem by those who have performed hundreds or thousands of circumcisions [5]. Socio-political factors include a division of opinion and a desire to avoid an appearance of religious intolerance [5]. Circumcision policy statements frequently exclude discussions of sexual, psychological, human rights, ethical, and legal issues [5]. Alleged prophylactic benefits of circumcision are exaggerated and risks are minimized.

Circumcision policy statements from medical societies, therefore, are poor sources of information about child circumcision and misleading to parents. The reality is much worse than the rosy picture presented by the policy statements.

The foreskin

The foreskin is a specialized organ [6], with protective, sensory, mechanical, and sexual functions, which are destroyed by its amputation.

Protective functions

The foreskin protects the meatus of infant boys from ammoniacal diapers and prevents meatitis, meatal ulceration, and meatal stenosis [7]. Moreover, the foreskin has immunological functions that prevent infection. The most important pathogen in urinary tract infection (UTI) is *Escherichia coli*, present in feces. The muscle fibers in the foreskin form a whorl at the orifice that serves as a preputial sphincter, keeping feces away from the meatus [8] and helping to prevent UTI in infants. The subpreputial moisture contains lysozyme, which destroys pathogens [8]. For example, circumcised adult males have a higher incidence of non-specific urethritis [9] and circumcised boys

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have more *Staphylococcus aureus* in the urethra [10].

Sensory functions

The foreskin is a *specific erogenous zone* [11], which is the most highly innervated part of the penis [12]. A *ridged band*, which originates from the frenulum and encircles the opening of the foreskin, contains nerve endings arranged in rete ridges near the mucocutaneous boundary [12]. The foreskin contains the tissue on the penis most sensitive to fine-touch [13]. Circumcision degrades sensory input to the central and autonomic nervous systems and results in an increase in intra-vaginal ejaculatory latency time [14].

Mechanical functions

The foreskin is not attached to the underlying structure and is free to glide back and forth over the glans penis during intercourse [6,15]. The penis glides in the foreskin during intercourse, reducing friction, vaginal dryness and abrasion and makes intercourse more comfortable for both partners [6,15]. The force required to penetrate increases 10-fold when the foreskin is absent [16].

Sexual functions

The nerve-endings in the foreskin are stimulated by motion and stretching. Stretching of the foreskin and frenulum provides erogenous sensation and ejaculation [17]. This stretching is easily controlled by the individual. In one study, circumcision *increased* the difficulty of masturbation for 63% of the men and *decreased* pleasure for 48% [18].

The nerves of the glans penis are concentrated in the corona [19]. The foreskin glides back and forth over the glans penis during intercourse [6,15]. The foreskin, therefore, tends to protect the corona of the glans penis from direct stimulation. In the circumcised male, however, the anatomical alteration removes this protection of the corona nerves from direct stimulation. The nerves of the glandis corona may become hyper-stimulated during intercourse and trigger ejaculation before it is desired and to the dissatisfaction of both partners [18,19]. This hyper-stimulation cannot be controlled by the individual. Some circumcised men will suffer from premature ejaculation due to the loss of protection provided by the foreskin, despite the overall loss of penile sensitivity [20].

The circumcision status of the male partner also affects female sexuality. A survey of women who had experienced intercourse with both circumcised and genitally intact partners, found they had a strong preference for, and were more likely to experience orgasm with, the non-circumcised partner [21]. An Australian study found that women with circumcised partners were more likely to experience vaginal dryness, a symptom of female arousal disorder [22].

Behavioral effects

Male circumcision is (1) a traumatic operation [23] and (2) the loss of a functional body part [10]. Persons who have lost body parts must grieve their loss of function [24]. Failure to grieve the loss of the foreskin function results in a cohort of men who are in denial about their loss. Traumatized persons tend to re-enact and repeat their trauma [25]. The compulsion to repeat the trauma and the emotional need to deny the loss results in a large cohort of circumcised men who seek to perpetuate the practice of non-therapeutic circumcision. Such men become the 'adamant fathers' who insist on circumcising their sons despite medical evidence that the operation is injurious. Circumcised doctors tend to be biased in favor of circumcision. A baby is more likely to be circumcised if the father and/or attending physician is circumcised [26].

Effect on medical literature

The medical literature on circumcision is voluminous and contentious. Circumcised doctors create papers that overstate benefits and minimize harms and risks [27]. When these doctors publish such claims, other doctors come forward to refute them [28]. One medical doctor who reviewed a pro-circumcision book published by an apparently circumcised professor of molecular medical science – a discipline far removed from urology – found numerous errors of fact [29]. The result is an unending debate driven by the emotional

compulsion of circumcised men. When analyzing medical literature about circumcision, one should ask:

1. Does the author come from a circumcising culture?
2. Is the author circumcised?
3. Does the author have a circumcised son?
4. Does the author profit from doing circumcisions?
5. What is the author's true motive in writing this document?

Complications, risks, and disadvantages

In addition to the inherent injuries described above, male circumcision is a surgical operation with the usual risks of surgical mishaps, infection, and hemorrhage, as well as possible death [7,30]. Death from complications of circumcision is well documented by official coroner's reports [31,32].

Life-threatening infection with virulent community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA) is an emerging risk for newborn circumcised boys. CA-MRSA has acquired new genes that emit tissue-destroying toxins. Outbreaks of CA-MRSA occur in newborn' nurseries on a regular basis. If a boy is colonized with CA-MRSA and then circumcised, infection through the open circumcision wound is a real and dangerous possibility. CA-MRSA causes soft tissue infections, necrotizing pneumonia, empyema, osteomyelitis, perinephric abscess, necrotizing fasciitis, toxic shock, and death [33,34]. Medical society statements regarding infant circumcision have yet to acknowledge the risks of CA-MRSA infection.

HIV

A complete discussion of the relationship of male circumcision and human immunodeficiency virus (HIV) infection is beyond the scope of this paper. The authors of a Cochrane Review (who found insufficient evidence to recommend male circumcision to prevent female-to-male HIV transmission), being aware of randomized controlled trials (RCTs) that were underway, said:

> *Circumcision practices are largely culturally determined and as a result there are strong beliefs and opinions surrounding its practice. It is important to acknowledge that researchers' personal biases and the dominant circumcision practices of their respective countries may influence their interpretation of findings* [35].

Three RCTs have now been published with enormous ballyhoo. One was led by a French team and two have been led by North American researchers. All lead authors previously had published in favor of male circumcision to prevent HIV infection, so researcher bias is overwhelmingly evident.

All three RCTs were terminated early. Studies terminated early tend to overstate the effects of intervention [36]. These RCTs consider only *heterosexual* female-to-male transmission of HIV in high risk areas of sub-Saharan Africa, where large segments of the population are HIV positive. In the US, the disease vectors primarily are homosexuality and illicit drug use [36], so these RCTs are not applicable to the US. Also the incidence of HIV infection is much lower than in Africa, so circumcision would not be an effective intervention in the US or other developed nations.

The claim that male circumcision prevents HIV infection is based on the hypothesis that Langerhans cells in the foreskin are vulnerable to HIV infection [36]. Newly published research finds that Langerhans cells produce a substance called Langerin that blocks the uptake of HIV [36]. The hypothesis, therefore, now has been overturned and the validity of the findings of the RCTs is placed in doubt [36]. A meta-analysis of the studies is needed to verify their accuracy [36].

Even if circumcision were found to be effective at preventing sexual transmission of HIV, infant circumcision would be of no value for at least 15 years [37]. More than 30 HIV vaccines are now under development [38]. Some have advanced to stage IIB trials and are likely to become available between 2015 to 2020 [38]. A child born in 2007 has an excellent chance of being vaccinated against HIV before he reaches sexual maturity, so infant or child circumcision cannot be recommended to prevent HIV infection. Neonatal circumcision to prevent HIV infection is not indicated for the US [39].

Despite the hyperbolic claims of the circumcision advocates, the high rate of prostitution, *not* lack of circumcision, is the cause of the African epidemic. When RCTs are adjusted for the sex-worker population, circumcision ceases to be a significant source of proctection [40].

Costs

The financial burden of carrying out millions of male neonatal non-therapeutic circumcisions is frequently overlooked. When an infant boy is circumcised, both mother and baby remain in hospital about 6 hours longer, driving up costs [41].

There are several components to the total cost:

1. Surgeon fee
2. Facility fee
3. Longer stay in hospital for both mother and baby [41]
4. Treatment of complications
5. Re-circumcision to repair botched circumcision
6. Other costs to society

The most recent study reports the direct costs of a neonatal circumcision to be $828.42 in 1999 dollars, [4] which, when adjusted to 2007 is equivalent to $1,027.75 [42]. Of the 4,112,052 births in the US in 2004 [43], about 0.512 or 2,177,707 were boys. If 57% of those boys were circumcised [1], there were 1,207,093 circumcisions. The total direct cost of neonatal circumcision in the US, therefore, is about $1,240,589,692.00. There are other costs but there are insufficient data with which to quantify those costs.

Male neonatal circumcision diverts $1.2 billion dollars of medical resources from medically-necessary, therapeutic services.

Law

Courts have decided three cases, two in England [44] and one in the USA [45], in which the best interests of the child were adjudicated in regard to non-therapeutic circumcision. In all three cases, the court found non-therapeutic circumcision *not* to be in the best interests of the child. Parents and medical doctors must act in the best interests of the child [46].

Non-therapeutic male neonatal circumcision fits the legal definition of child abuse and is a violation of existing laws against child abuse [47], but such laws are only rarely applied to non-therapeutic male neonatal circumcision.

Female circumcision is unlawful, but the law does not grant equal protection to boys [45,46]. Parents may not have authority to consent to non-therapeutic amputation of healthy functional tissue [46]. These and other fundamental questions of the lawfulness of non-therapeutic child circumcision have not been addressed by the courts. Questions about the power of parents to consent to non-therapeutic amputation of healthy functional body parts [9–11], about the male child's right to equal protection of the law, and other issues remain unresolved [46,47]. The case against non-therapeutic circumcision of male children being lawful is strong. When the issue finally does come to the bar, there is an excellent chance that surrogate consent for non-therapeutic circumcision will be found to exceed parental power and that the amputation will be found to be an unlawful violation of the child's legal rights to bodily integrity and special protection [44,46,47].

Human rights and medical ethics

Children possess two kinds of human rights: general human rights enjoyed by all and special human rights accorded to children due to their weakness, immaturity, and need for special protections [48]. General human rights include the right to security of the person and the right to freedom from cruel and degrading treatment [48]. Children enjoy a right to special protection due to their status as a child, such as 'rights to protection from all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse' [48]. In addition, children have a right to protection from 'traditional procedures prejudicial to the health of children' [48]. Circumcision is a traditional procedure that started before the dawn of recorded history [7,30]. As reported above, male circumcision is harmful to the health of children.

Circumcision ethics has been discussed at length elsewhere [49]. The circumcision of

children fails seven ethical tests including: (1) lawfulness, (2) respect for human rights, (3) violation of all four cardinal principles of medical ethics, (4) provision of futile or ineffective treatment, (5) misuse of medical resources, (6) abuse of surrogate consent, and (7) patient exploitation [49].

Conclusion

The case in favor of male circumcision is based on specious literature largely created to satisfy the emotional compulsions of wounded circumcised men [27,35]. Similarly, the position statements of medical societies (frequently written by circumcised men) are biased in favor of circumcision [5]. Claimed health benefits are illusory and do not offset the proven risks, complications, and disadvantages that exceed any claimed benefits [4]. On close analysis, there is *no* case for non-therapeutic or prophylactic circumcision.

Male circumcision is harmful because it excises healthy tissue [12] and permanently impairs beneficial physiological functions [6,8]. Male circumcision also causes psychological problems that tend to perpetuate the cycle of abuse [24,27]. Male circumcision is a costly diversion of medical resources away from beneficial services [4]. Male circumcision violates legal rights, human rights, and ethical standards [44,46–49]. Finally, we must remember that males are the more vulnerable and sensitive of the two genders [50] and, therefore, deserve the greater degree of protection from traumatic, invasive, injurious, and unnecessary surgery. For all of these reasons the non-therapeutic circumcision of boys should *not* be performed and the genital integrity of all children should be respected and protected.

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