

GLOBAL HEALTH CONCERNS

FEMALE GENITAL MUTILATION GENITO-URINARY PERSPECTIVES

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ABSTRACT

Female genital mutilation or circumcision remains an important health issue of the 21st century. Genitourinary complications are an integral and important component of the long-term health sequelae experienced by women who have undergone genital mutilation. The urologist is often consulted in the evaluation and management of urinary complications in victims of female genital mutilation and must understand their pathophysiology, diagnosis and determine the appropriateness of treatment. In addition, new information is emerging suggesting that male partners of circumcised women may also experience sexual and urologic complications. Strategies encouraging effective collaboration and communication between gynecologists and urologists in patient counselling and management are offered.

INTRODUCTION

Female genital mutilation (FGM), also called genital cutting or circumcision, is still performed in many developing countries even though the operation is mutilating, illegal in many countries, and sometimes results in death. The World Health Organization classified FGM into four types, based on the extent of genital excision^{1,2}. Type I, the mildest form, includes the excision of the prepuce and partial or total clitoridectomy. Type II is the most common form, which involves the removal of the clitoris, accompanied by partial or total excision of the labia minora. Type III (infibulation) involves the most extensive alteration of the genitalia, including the removal of the clitoris, labia minora and majora, and reapproximation of the raw surfaces, while Type IV includes any other form of genital mutilation.

Women who have had a genital mutilation procedure have specific needs for their health care which present challenges to both their general medical practitioners and other specialists that may be involved in their care, in-

cluding obstetricians-gynaecologists, and urologists. Female genital mutilation is a problem that is often unfamiliar to most urologists, and there is a paucity of current evidence-based scientific articles exploring its implications for clinical practice in this specialty. Genito-urinary complications associated with FGM are extensive and stem from interference with the drainage of urine and menstrual blood and may include any of the following: hemato-colpos, dysmenorrhoea, dyspareunia, chronic reproductive tract infections, infertility, slow urinary stream, dribbling of urine, chronic urinary tract infections, stones in the bladder and urethra, kidney damage, excessive scar tissue, urinary incontinence, vesico-vaginal fistulae, keloid formation on the vulva and perineum, progressively enlarging scars, and dermoid cysts¹⁻⁵.

Women who have experienced FGM are also at risk for obstetric complications, which are not the focus of this paper. Much of the genito-urinary complications develop as a result of difficult or obstructed labor, and repeated de- and re-infibulations, and routine

posterior episiotomy. As public advocacy and awareness of the health consequences of FGM receive greater public attention, urologists will play a significant role in the health care teams involved in providing care to victims of FGM in their practice. In addition, new information is emerging suggesting that male partners of circumcised women may also experience urologic complications⁴. Issues that are addressed in this article include: (1) raising awareness of genito-urinary complication of FGM among urologists, (2) discussion on clinical presentation and evaluation, (3) how to collaborate with gynecologists in the management of genital and urinary complications associated with FGM.

Acute Genito-Urinary Complications

The clinical manifestation of urinary complications of FGM may be acute, sub-acute or chronic. Acute urinary retention is an immediate complication following the procedure. Symptomatology includes pain and burning sensation of urine on the raw wound, fear of passing urine on the raw genitalia, damage to the urethra and its surrounding tissue. Partial occlusion of the external meatus by the skin flap after infibulation, and scar tissue around the urinary outlet may also contract and restrict the urinary outlet. Intervention with catheter drainage of the bladder or removal of stitches may be necessary before urine can be passed normally.

As the procedure is commonly performed without anaesthesia or with local anaesthesia only, the resistance and struggles of the girl child often leads to uncontrollable haemorrhage, and trauma to the urethra, paraurethral and vaginal tissues. The cutting instruments are usually non-surgical, blunt, and the practitioner frequently inexperienced and elderly with failing vision. These factors further predispose to injury to the urethra, the vagina, the perineum or the rectum, which can lead to the formation of vesico-vaginal and recto-vaginal fistulae. The first sexual intercourse is often traumatic and penetration by the penis occurs after gradual and painful dilation of the small vaginal opening left after mutilation. In some cases, cutting is necessary before vaginal penetration could be achieved. Some women are seriously damaged during vaginal intercourse, resulting in complications such as vaginal and urethral lacerations requiring emergent care⁶.

Infection is a common complication of FGM caused by unsterile instruments. It can also occur within a few days of the operation as the genital area becomes soaked in urine and contaminated by faeces. The degree of infection varies widely from a superficial wound infection to gangrene, generalized septicaemia, and death. Urinary problems such as pain at micturition, dribbling urine incontinence and poor urinary flow insidiously set in.

A possible additional problem resulting from all types of female genital mutilation is that increased potential for trauma to the acutely traumatized or chronically narrowed introitus can increase the exchange of body fluids and the risk of HIV transmission during intercourse⁷. HIV transmission in FGM victims is also facilitated by concomitant sexually transmitted infections, genital conditions associated with bleeding (i.e., trauma from narrowed introitus, sex during menses) as well as noncircumcision. Urologists need to be aware of these factors when dealing with male partners of circumcised women in whom HIV may be sexually transmitted through these factors.

Role for Urologists in Management

The immediate care of child victims of FGM is often undertaken by general practitioners or gynaecologists who are unfamiliar with the delicate genito-urinary anatomy of pre-pubertal patients. Control of bleeding, aggressive antibiotic therapy, and meticulous wound care to the traumatized areas are the mainstay of management. Serious long-term sequelae such as fistula formation could be avoided by early involvement of urologists working with gynaecologists in the management of acute complications of genital mutilation. Certain outcomes of the pregnancies of the adult victims of FGM depend in large part on the adequacy of healthcare of the girl child. Therefore, early involvement of urologists in the surgical repair of genito-urinary lacerations would potentially reduce the risk of obstructed labor arising from scarring of the birth canal.

Chronic Genito-Urinary Complications

Recurrent urinary tract infection is quite common in girls and women who have had FGM, particularly with infibulation. The presence of the skin flap after infibulation prevents proper hygiene and increases the chance of

local irritation and urinary stasis leading to bacterial infection. Chronic retention of urine and vaginal secretions can lead to cystitis, vaginitis, and cervicitis, which may develop into chronic pelvic inflammatory disease, recurrent cystitis, pyelonephritis, kidney damage, and death.

Genito-urinary and rectal fistulae may develop as a result of obstructed labor and necrosis of the vaginal wall from compression by the fetal head. Calculus formation may also develop from stricture formation and excessive scarring and increased stasis of urine leading to urinary stone formation. The urethra and bladder neck may be damaged when genital mutilation is performed with large or blunt instruments. In some cases, damage to the vaginal walls may lead to total introital occlusion and permanent urinary incontinence^{8,9}.

Treatment of Major Urinary Complications of FGM

Calculi and Obstruction

Ureteral obstruction represents the most serious complication and not infrequently results in loss of a kidney. The highest frequency of urinary tract involvement occurs in the bladder (stones and fistulae) followed by the lower ureter, the upper ureter (pelvic scarring), and the kidney. The management of urinary tract complications of FGM is generally within the purview of urologists. In contrast to their colleagues in developed countries, urologists in resource-poor settings often lack up-to-date equipments for extracorporeal shock wave lithotripsy and outpatient ureteroscopy, which have been proven to be effective options for managing urinary calculi. Investing in sophisticated equipments required for these procedures would be highly desirable and cost-effective for developing countries.

Urinary Tract Fistulae

Vesico-vaginal fistulae occurring in women who have undergone FGM are mostly secondary to labour dystocia arising from complications such as excessive scarring and narrowing of the birth canal. As is the case with urinary fistulae in developing countries, late and inappropriate interventions contribute to their importance as a social and public health problem. Vesico-vaginal fistula continues to be a

distressing problem that can also result from unskilled operators performing genital cutting or releasing scar tissue (deinfibulation) during vaginal delivery. Several surgical techniques for correction of vesico-vaginal fistulae that have been the mainstay of treatment include the flap surgical repair, which is the gold standard. Unfortunately, gynaecologists have been traditionally involved in performing fistula repairs with limited involvement of urologists who are only involved when the primary repair fails. The highest success rates are associated with primary fistula repairs. Thus, the involvement of urologists in the surgical management of urinary fistulae would enhance the success rates of the procedures. Technical innovations have led to several new techniques including transurethral repair of vesicovaginal fistulae. Other modifications include the use of a suprapubic tract, along with an arthroscope for visualization of the fistula. New-generation laparoscopic minimal access technology has markedly improved the ease of transurethral suturing and vesico-vaginal fistula repair in selected patients. These innovative techniques are almost exclusively within the purview of urologists.

There may be critics of the desirability of the establishment of innovative surgical technology advocated in this article in resource-poor settings. But, according to WHO, an appropriate technology is one that is scientifically sound, adapted to local needs, acceptable to those who use it or for whom it is used, and that can be maintained and utilized with resources that the community can afford. Successful surgical management of urinary complications in victims of genital mutilation¹² exemplifies the enormous contribution of different technologies to the reduction of both maternal and perinatal mortality and morbidity.

Male Complications

Male complications resulting from FGM, such as difficulty in vaginal penetration, wound infection on the penis, and psychological problems are being encountered in male partners of circumcised women⁴. Unfortunately, a large proportion of men are unaware of their partners being circumcised. Further, most men are unaware of the long-term physical and psychological complications experienced by women subjected to genital mutilation. A significant number of male partners of circumcised women will experience sexual dysfunction aris-

ing from difficult sexual encounters or from lack of arousal or pain experienced by their wives. Many frequently present with many unremitting non-specific urologic complaints. It is therefore imperative that urologists initiate discussions regarding sexual activity and potential risks to the patient such as trauma to the penis, and erectile dysfunction, and be educated on strategies for counselling patients. Female genital mutilation can no longer be considered to be only an issue for women. The acknowledged male complications and concerted efforts at changing their attitudes may open new possibilities for the elimination of the practice of FGM.

Evidence-Based Practice

Research evidence on the short and long-term medical effects of FGM, including those associated with the urinary tract have up till now been largely limited to hospital or clinic-based studies. The secrecy surrounding FGM, and the protection of those who carry it out, make collecting data about complications resulting from mutilation difficult. Therefore, our knowledge of the range of medical complications that can result from FGM is based on observational studies. The WHO conveyed a Working Group chaired by the first author in 2000 to oversee a multicentre research study into the obstetric complications of FGM in 8 countries⁸. It is anticipated that such research initiative would provide evidence regarding the complications of FGM.

Psychological, Human Rights and Advocacy Issues

The phenomenal changes in advocacy for women's health in the context of human rights, coupled with advances in sexual and reproductive health, and improved supportive therapies have led to healthier life for many victims of genital mutilation and renewed hope for prevention in potential victims. These changes have, in turn, had an effect on the experience of women who have suffered genital mutilation. It is essential that attitudes toward the practice of FGM be considered along with the obligation to provide care in a nurturing, non-judgmental way. Providers should respect a woman's difficulties discussing intimate matters and allow time for a trusting professional relationship to develop. Health care professionals have an important role in the prevention of FGM.

Despite the lack of hard scientific evidence, personal accounts of victims of mutilation reveal feelings of anxiety, terror, humiliation and betrayal, all of which would be likely to have long-term negative effects⁹. Late effects and changes in psychological and social well-being have become an important aspect of follow-up care. Health promoting activities, supportive care, and future research are integral to the continuing care and rehabilitation of women surviving FGM. Issues pertaining to FGM are also relevant for developed countries as a violation of the rights of the girl child¹⁰. The performance of the procedure has been legally banned in several developed countries¹¹ and professional licensing authorities have stipulated severe disciplinary measures, such as suspension from medical registers, for offenders. Professional organizations in urologic health care should be aware of this current health issue, actively engage in the formulation of public policy that will have an impact on health care, and educate their members on how to advocate effectively for the improvement of health services and health status.

Conclusions

Providing urologic care to women who have been traumatized during childhood by genital mutilation may be especially challenging because of the extent, severity, and unusual character of their urogenital problems. Appreciation of these clinical manifestations improves the urologic care provided to traumatized women by elucidating recalcitrant urologic complaints, thereby clarifying clinical decisions; promoting a better understanding of the sequelae of genito-urinary trauma in women; and by alleviating the discomfort naturally felt by urologists and their staff when caring for these difficult, multiproblem patients.

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