

## Circumcision: Controversies and Prospects

Circumcision is a commonly performed procedure in surgery. This procedure is as old as humanity, and so dates back to the medieval times.<sup>[1]</sup> The procedure has continued to date, with several issues and ideas conflicting the practice.

Attitudes toward routine circumcision have varied over the years. The lack of consensus with regard to the actual function of the prepuce, coupled with debates on the benefits of circumcision, have been controversial among the religious and cultural groups.<sup>[2]</sup> The issues posing questions are; who should be circumcised? questions regarding the definition, methods of the procedure, risk and complications, whether circumcision is at all necessary, and finally who should perform the circumcision. The issue of neonatal circumcision and consent for the procedure have also remained controversial. The aim of this editorial is to discuss the various controversies on circumcision and proffer the way forward.

Male circumcision is defined as the surgical removal of the prepuce. The amount of preputial skin to be removed has generated much argument among experts in this field. Even as most surgeons believe in taking off the entire prepuce, some would prefer to leave some part of the prepuce behind. Even with those who leave part of prepuce, the issue here is how much prepuce should be left? The guiding principle should be, to have a cosmetically looking glans penis at the end of the procedure. It is important to note that the appropriate measurements and marks made on the prepuce and penile skin before removal will go a long way in achieving good cosmesis.

The indication for circumcision is another area of conflicting ideas. The most common reason for circumcision is largely attributed to culture and religion.<sup>[3]</sup> Culture and religion do not advance any scientific basis for the procedure. It does not explain why the prepuce, which was meant to protect the glans, deserves removal. This, therefore, leaves the question of whether circumcision is necessary in the first place.<sup>[4]</sup>

The medical indications for circumcision have been largely attributed to infection of the prepuce (prostitis), glans (balanitis) or both (balanoprophitis), obstruction of the urethra (Phimosis, paraphimosis), and malignancy of the glans penis.<sup>[5,6]</sup> The issue of circumcision and urinary tract infection and other infections has generated some discussion in literature. Some authors have advocated the fact that circumcision reduces the risk of acquiring urinary tract infection and HIV infection.<sup>[7-11]</sup> Some other authors have not found a basis for the above-mentioned assertion, based on scientific studies.<sup>[4]</sup> There has really been no consensus on the above-mentioned issue. It is therefore difficult to advocate the above-mentioned issue as a reason for circumcision.

There are several methods of performing circumcision. There are free-hand surgical methods and a method involving the use of appliances. The free-hand methods are: The dorsal slit and the guillotine. These methods are fraught with complications especially if done by the untrained. The appliances were introduced to limit some of the complications that were common with the free-hand methods. The appliances are: The plastibel, the morgan clamp, and the gomco clamp. Despite the safety of these appliances, complications still occur. Complications occur more often when the right size of the appliance is not used, or in the hands of the untrained. It is pertinent to note that complications can occur with any method. Therefore, to reduce complications, it is important to train, master a particular method, and be proficient in it. The advantage of the free-hand methods over the appliance methods is that complications can be noted intraoperatively and can therefore be tackled immediately. With the appliances, the complications are noted, more often than not, days after the procedure.

The prepuce protects the glans penis in the male. Immunologically the prepuce has been known to secrete substances with anti-HIV components and is a barrier to HIV-1 transmission.<sup>[12-14]</sup> The prepuce neurologically is responsible for sexual stimulation and enhances this in both males and females.<sup>[15,16]</sup> If these functions are important, why then should the prepuce be removed? The other issue is that, if the prepuce secretes substances that prevent HIV-1 transmission, then what reduces the risk of HIV infection in those circumcised? This question brings to the limelight, whether circumcision is necessary or not? The cultural and religious reasons do not have a scientific basis

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for circumcision. Therefore, it may be pertinent to state that circumcision must be done when there are medical indications.

Neonatal circumcision has been an area of conflicting ideas. The controversy here is whether circumcision is necessary during this period. Some surgeons think that complications from this procedure are more during the neonatal period. They also think that at this period consent is given by the parents, and neonates should be allowed to grow till adolescence when they can give consent by themselves.<sup>[17]</sup> Some researchers are of the opinion that circumcision is not necessary, as the prepuce has useful functions.<sup>[2,18]</sup> Where circumcision is discouraged, the reasons should be made clear. On the other hand where circumcision is performed as a routine, caution should be employed to avoid complications.

The issue of who should perform circumcision has remained controversial. In every society there are traditional barbers, untrained personnel, and surgeons who are dedicated to the practice of circumcision. Over the years it has been noted that most complications come from the traditional and the untrained circumciser. Therefore, traditional circumcision and circumcision by the untrained should be discouraged. This may not apply in our environment and other settings where circumcision is mostly done by traditional or untrained individuals. In minimizing complications in these settings, the untrained and traditional barbers need to be enlightened on the complications, train them on how to conduct the procedure safely. They also need to be enlightened on what sort of circumcisions to refer, where and how to refer a patient if a circumcision goes wrong. They need to know where and how to seek help when in trouble during circumcision.

Female circumcision or female genital mutilation is a spectrum. It is mentioned only to be condemned emphatically. This is still practised in some localities and has been strongly discouraged due lack of any benefits and its associated complications.<sup>[19]</sup>

In conclusion, circumcision remains controversial in various aspects. This is because the role of the prepuce has remained controversial. Circumcision must be performed when there are medical indications, among other reasons. It must be performed by experts in the field. However, where experts are few or not available, non-experts must be enlightened and trained to perform the procedure

safely. This will curb or minimize complications. This is the advocacy here and the way forward.

**C. S. Lukong**

*Department of Surgery, Pediatric Surgery Unit,  
Usmanu Danfodiyo University and Usmanu Danfodiyo  
University Teaching Hospital, Sokoto, Nigeria.  
E-mail: lukongchris@yahoo.com*

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