

Use of The Combo Sealer Method Without a Needle as an Innovation in Modern Circumcision

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Abstract

In the modern era, circumcision methods have undergone many innovations. However, the conventional methods that are still widely used often cause fear in children and slow down the recovery process, thereby disrupting daily activities. One innovative solution is the needle-free combo sealer method, which is minimally painful and accelerates healing. Unfortunately, this method is not yet widely known by the public, particularly in the city of Jambi and the surrounding areas of the Jami'atul Berkah Foundation. On the other hand, economic constraints remain the primary barrier for orphans and the underprivileged in accessing modern circumcision services. This community service initiative aims to assist them through health education and the implementation of circumcision procedures using the combo sealer method. Activities include counseling, informed consent, medication administration, procedures performed by professional medical staff, and outcome evaluation. This method has been proven to produce neater results, minimal bleeding, no stitches or bandages, and allows children to resume activities sooner.

Keywords: Aesthetic, Circumcision, Combo Sealer, Inflation

A. INTRODUCTION

Circumcision is a minor surgical procedure performed as a modification of a part of the body by making an incision in the prepuce (Hohlfeld et al., 2022). The tradition of performing circumcision in western countries is carried out on babies after birth with more emphasis on reproductive health aspects, while in Indonesia it is often carried out in childhood when they reach childhood age, where they can express their opinions and determine their readiness for circumcision (Ogbonna et al., 2021). Meanwhile, etiologically, circumcision comes from the Arabic word khatana which means to cut. What is cut is the skin (guluf) that covers the tip of the genitals with the aim of cleaning it from impurities (Gozukucuk et al., 2021; Abdulwahab-Ahmed et al., 2020; Musa et al., 2020).

Meanwhile, according to Imam Haramain, circumcision is defined as cutting the qulfah, which is the skin that covers the head of the penis so that there is no more skin protruding (El-Gohary et al., 2020). The culture of circumcision is a customary practice that has existed since ancient times, even since the time of Prophet Ibrahim AS (Ekeke et al., 2021). As stated in the hadith of Al Bukhari which means "Telling us Qutaibah bin Sa'id, Mughirah bin 'Abdirahman al-Quraisiyy reported from Abi Zannad from Abu Hurairah ra, that the Messenger of Allah SAW said: "Ibrahim performed

circumcision at the age of 80 with an axe" (Morris & Krieger, 2022). Circumcision according to *the World Health Organization* (WHO), has health benefits including preventing AIDS to cancer (WHO, 2020). In addition, circumcision can also make the penis cleaner, reduce the risk of urinary tract infections, syphilis, prevent sexually transmitted diseases such as HPV (Human Papilloma Virus), penile cancer, prevent cervical cancer transmitted by men, prevent the accumulation of dirt or smegma and urine residue in the tip of the penis because it is covered by excess penis skin or foreskin, and prevent phimosis (skin or foreskin that shrinks) where in 2008 data from The Indonesian Pediatrician Association recorded around 10% of children with phimosis (Bakari et al., 2023; WHO, 2021). In this modern era, circumcision methods have also developed greatly (Sung et al., 2020). Previously, circumcision was carried out conventionally, which made children afraid, coupled with a long healing process, which hampered children's activities (Fahmy et al., 2020). The combo sealer method without a syringe is a modern circumcision innovation that is right for overcoming this problem (Rahul, 2020). This method is not widely known by the public, especially in Jambi City, Jami'atul Berkah Foundation (WHO, 2021). This combo sealer method is a combination of modern circumcision (Bello et al., 2021). The tools used are glue and thermocauter (El-Gohary et al., 2020).

Thermocauter is a tool designed with battery or electric power and equipped with a cutting tool with the help of a hot flow equipped with stainless wire (Komba et al., 2021). Circumcision with the help of a thermocauter can be used as an effective, safe and useful technique with a low complication rate and fast healing (Bello et al., 2020; WHO, 2022). The use of circumcision glue itself, namely the foreskin that has been cut is given a special surgical glue that is commonly used in the medical world to unite skin that is injured due to surgery or accidents (Chao et al., 2020). By applying glue, the wound will unite in a short time, no longer need needles and sewing thread (Rahman et al., 2020; Ahmed et al., 2020). Inflammation due to thread which is a foreign object to the body can be reduced (Aliyu et al., 2021; WHO, 2021).

The effectiveness of the needle-free combo sealer method is its presence to improve the old method in Indonesia (Imran et al., 2020). The advantages of this method are shorter, namely the processing time is 7 to 10 minutes with neater and more aesthetic results, very minimal bleeding, recovery time does not take long, no stitches or gauze bandages and no tools attached so that activities can be carried out

after circumcision (Mahmoud et al., 2020; Klein et al., 2022). Many people in Jambi City do not know about this needle-free combo sealer method (Budiarto, 2023). The form of effort that the team will make is to introduce the combo sealer method to the community as a modern circumcision innovation, educate parents about the efficiency of the concept of using thermocauter, facilitate circumcision activities assisted by several members of the Indonesian Circumcision Doctors Association (ASDOKI) and post-circumcision care to continuous supervision until the patient recovers (Suryadi et al., 2024; WHO, 2023; Habib et al., 2021). Given the importance of the efforts made, through the Student Service Program to the Community (P2M2) of the University of Jambi, it will program and empower the Jambi City Community.

B. METHODS

The implementation method is counseling and implementation in the form of implementing the combo sealer method without a syringe as a modern circumcision innovation. The target of this activity is parents and children at the Jami'atul Berkah Foundation Bagan Pete with a total of 50 parents and 50 children for counseling and 10 parents and 10 children for mass circumcision. The form of activity carried out is in the form of providing education through health counseling regarding the use of the combo sealer method without a syringe as a modern circumcision innovation, conducting informed consent before circumcision, taking medication, and then carrying out circumcision by a professional doctor and assistant. The counseling activity lasts for approximately 120 minutes and the mass circumcision activity lasts approximately 360 minutes. After the mass circumcision is completed, the satisfaction index of the parents or guardians of each child is seen as well as the speed of healing and the neatness and aesthetics of the circumcision results.

C. RESULTS

The community service activity was divided into 2 sessions, the first session was held in the hall of the Jami'atul Berkah Foundation Bagan Pete. The number of participants who attended was 50 parents and 50 children. The activities in this community service were education on the use of the combo sealer method without needles as a modern circumcision innovation.

Table 1. Respondent Characteristics

Respondent Data	Frequency
Children's Age	
8 Years	25
10 years	20
11 years old	5
Total	50
Age of Parents	
30 years	15
38 Years	10
40 Years	15
45 Years	10
Total	50
Gender of Parents	
Man	30
Woman	20
Total	50
Gender of Children	
Man	50
Total	50

The second session was held in the Skill lab room of the Faculty of Medicine and Health Sciences, University of Jambi. The number of participants who attended was 10 parents and 10 children. The activities in this service were conducting informed consent, taking medicine before performing circumcision, and finally performing modern circumcision performed by professional doctors and assistants.

Table 2. Respondent Characteristics

Respondent Data	Frequency
Children's Age	
8 Years	5
10 years	3
11 years old	2
Total	10
Age of Parents	
40 Years	6
45 Years	4
Total	10
Gender of Parents	
Man	6
Woman	4
Total	10
Gender of Children	
Man	10
Total	10

After the circumcision is carried out, an evaluation is carried out by observing and explaining the results of the circumcision.



Photo 1. Socialization of the Combo Sealer Method



Photo.2 Mass Circumcision Activities

The length of the healing process depends on the condition of the child's penis, whether the penis is still closed or phimosis and also already open. If the penis is still closed, the healing process will take a long time because of the large amount of wound fluid, but if it is already open, the healing process will be faster, it can be 7-14 days. The healing process for the penis after circumcision is at least 5-7 days and at most 25-28 days, an average of 15-20 days depending on whether the child wants the wound treated or not, whether it is tight or not, and whether or not he wants to take the medicine. The drugs used for the healing process after circumcision are analgesics, anti-inflammatory drugs, anti-fibrinolytic drugs, and antibiotics. In addition to oral drugs, there are also spray drugs used, namely betadine and NaCl fluid. The evaluation results showed that parents were satisfied with the neat and aesthetic circumcision results, minimal bleeding, no stitches or gauze wrapped and no tools attached so that the child could be active after being circumcised.

Table 3. Healing Process

Respondent Data	Frequency	Healing Process		
		Day 1-7	Day 8-15	Day 16-25
Age				
8 Years	5	The occurrence of an inflammatory process and discharge of wound fluid	The wound fluid begins to dry up	The wound fluid begins to turn black and peel off by itself.
10 years	3	The occurrence of an inflammatory process and discharge of wound fluid	The wound fluid begins to dry up	The wound fluid begins to turn black and peel off by itself.
11 years old	2	The occurrence of an inflammatory process and discharge of wound fluid	The wound fluid begins to dry up	The wound fluid begins to turn black and peel off by itself.

D. CONCLUSION

The implementation of modern circumcision innovation using the combo sealer method without injection needles at the Jami'atul Berkah Foundation in Bagan Pete showed positive results. Participants who attended the socialization were able to understand the benefits and advantages of this method. Parents expressed satisfaction with the results of the procedure, especially because the circumcision results looked neat and aesthetic, minimal bleeding, no stitches or gauze, and no tools attached to the wound area. Children were also able to return to their activities in a short time after the procedure, supported by a fast wound healing process. This indicates that the combo sealer method is able to be an effective alternative in the implementation of modern circumcision that is child-friendly and practical for families.

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