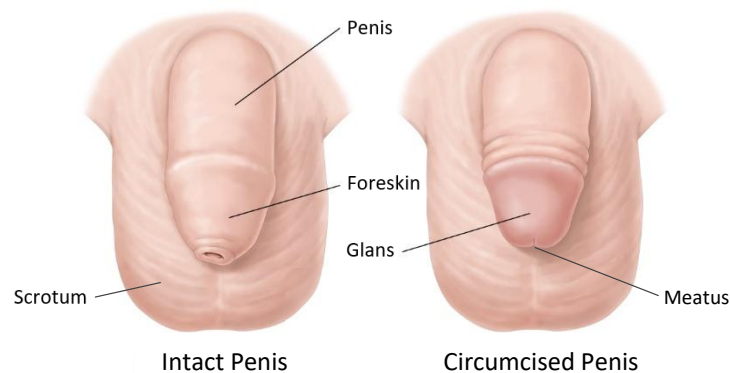


## Introduction

This handout is designed to clarify common questions about newborn circumcision and promote informed discussions among healthcare providers and patients. Circumcision is an elective surgery that is not required to live a healthy life. Less than 0.5% of males will ever need this operation for medical reasons as conditions are both uncommon and treatable with less invasive options.<sup>1</sup> Some parents may also need to consider their religious beliefs. According to global estimations, 67% of males are not circumcised.<sup>2</sup> Of the 33% who are circumcised, 70% were for religious reasons.<sup>2</sup> The circumcision rate in America varies by region and is declining.<sup>3</sup>

## Form & Function of the Foreskin

Every male is born with natural skin, called the foreskin, that covers the glans of the penis. This structure is anatomically analogous to the clitoral hood in females. Those with the foreskin present are termed intact, and those with it surgically removed are termed circumcised. The adult foreskin is composed of about 6 square inches of double-layered tissue that has a variety of specialized functions.<sup>4,5</sup> It protects the glans and urethra from routine abrasion, contaminants, and dryness. Its dense network of neurons makes it the most sensitive, erogenous part of the penis.<sup>6</sup> The foreskin also smoothly glides during intercourse, which minimizes friction and pain. Circumcision will permanently remove these natural protective and sexual functions.



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## Proper Genital Hygiene

The intact penis is easy for parents or, as the child develops, himself to keep clean. Parents should wipe the groin during diaper changes and rinse with warm, soapy water at bath time. There is no space under the foreskin to clean early in life as it is attached to the glans. The foreskin will naturally separate from the glans, usually by 5-years of age, and become retractable.<sup>7</sup> Once this is possible, the child should incorporate cleaning beneath the foreskin into their regular bathing routine. He should retract, rinse, and return the foreskin to the forward position. In circumcised children, parents need to take additional precautions beyond routine hygiene. They should regularly apply petroleum jelly to the penis as the wound heals, look for signs of infection or adhesions, and watch for reddening or narrowing of the meatus as the child develops.

## Circumcision Procedure

The child will first be placed on a restraining device to help stabilize his body. Analgesia may then be administered via local injection or topical cream to reduce but not eliminate the procedural pain. The specific surgical technique depends on the provider. Each method separates the fused foreskin from the glans before the skin is removed. Lastly, protective gauze and ointment will be applied to minimize the risk of infection. After the procedure, the glans will appear red, and the child may act agitated or tired. Circumcision takes about 15 minutes to perform and 7 days for the wound to heal.



natus.

This procedure can be viewed for educational purposes at: <https://youtu.be/W2PKdDOjooA>

## Potential Risks

- **Pain:** Circumcision cuts through the dense network of nerve endings within the foreskin. Most physicians use local analgesia, but moderate to intense pain will still be experienced during the operation.<sup>8,9</sup> Post-operative pain normally resides within 3 days.
- **Bleeding & Infection:** Some localized bleeding is expected and usually quickly resolves. Occasionally, stitches will be required. Sterile techniques minimize the risk of infection. Most circumcision related infections are mild and treatable. Penile necrosis, amputation, severe bleeding, and death have been reported but are uncommon.<sup>10</sup>
- **Meatal Stenosis:** Meatal stenosis is the narrowing of the meatus due to exposure of the unprotected meatus to abrasion and contaminants. About 7.3% of circumcised males are affected which can cause poor urine aim, UTI's, and require corrective surgery.<sup>11</sup>
- **Sensitivity & Function:** Circumcision removes the most sensitive part of the penis and its natural gliding function during intercourse.<sup>6</sup> Though this usually does not affect the ability to have a fulfilling sex life, it can lead to difficulty achieving orgasm, pain due to friction, and cause drying of the glans.<sup>12,13</sup>
- **Asymmetry:** During healing, the remaining skin may adhere to the glans and form an adhesion or skin bridge.<sup>14</sup> Excess or uneven foreskin removal can cause the penis to burry within the body or cause tight, painful erections once the child develops through puberty.<sup>14,15</sup> Circumcision will result in a permanent scar line.
- **Psychological Trauma:** Adverse childhood experiences can cause both short and long-term cognitive effects with development, emotions, and the ability to handle stress.<sup>16</sup> Reported psychological complications from circumcision include anxiety, depression, PTSD, and body dysmorphia, along with feelings of having been violated.<sup>17-19</sup>

## Potential Benefits

- **Urinary Tract Infections:** Circumcision reduces the risk of UTI's in males by approximately 0.9%.<sup>19</sup> Therefore, 111 circumcisions would need to be performed to prevent one UTI in an intact individual. UTI's are readily treatable with antibiotics and are about 8 times less common in intact males than in females.<sup>20</sup>
- **Sexually Transmitted Diseases:** There are conflicting studies that circumcision may offer additional protection from STD's. The most effective STD preventative measures, which become relevant upon reaching sexual maturity, for both intact and circumcised males include condoms, vaccination, monogamous relationships, and screening.<sup>21</sup>
- **Penile Cancer:** Penile cancer is very rare. An estimated 300,000 circumcisions need to be performed to prevent one case.<sup>22</sup> Healthy lifestyle choices including safe sex, proper genital hygiene, and not smoking are the most important preventative factors.<sup>23</sup>
- **Pathologic Phimosis:** Pathologic phimosis, reported in approximately 0.6% of intact boys, is the inability to retract the foreskin due to scarring.<sup>24</sup> Not forcibly retracting the foreskin of a child and proper genital hygiene helps prevent this condition.<sup>25</sup> Topical steroid creams resolve 87% of pathological phimosis cases.<sup>26</sup>

## Recommendations from Medical Organizations

The American Academy of Pediatrics states that the health benefits are not great enough to recommend the routine circumcision of newborn males, but that the potential benefits are sufficient to justify access to the procedure.<sup>27</sup> International medical organizations, including the Canadian Pediatric Society, British Medical Association, Royal Dutch Medical Association, German Association of Pediatricians, and the Royal Australasian College of Physicians, do not recommend the non-therapeutic circumcision of minors.<sup>28</sup> The British Medical Association further explains that parental preferences alone, such as desire to look like the father, is not sufficient justification for circumcising a child unable to express their own views.<sup>29</sup>

## Ethical Considerations

The removal of a child's natural, healthy foreskin without therapeutic indication challenges the ethical norms of healthcare.<sup>30,31</sup> Parents have a responsibility to consider the well-being and best interests of their son along with demonstrate a thorough understanding of the risks and benefits of medical decisions.<sup>32</sup> Circumcision is not required to live a healthy life. More effective and less invasive preventative measures and treatments are available for each condition that circumcision addresses. Parents may choose to leave their son intact until he can make the decision for himself. This option maintains his bodily integrity, nurtures the development of his autonomy, and provides him the capacity to personally consent.

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