

## *Introduction*

To help you make a decision about circumcision, it is useful to understand the current evidence on the benefits and risks of circumcision. From a medical point of view, circumcision is not absolutely necessary. The American Academy of Pediatrics neither encourages nor discourages circumcision, but rather states that the risks and benefits should be explained to parents.

There are some medical benefits of circumcision. It may help prevent cancer of the penis, which is a very rare type of cancer, and avoids the unusual need to perform a circumcision later in life. It may also help prevent infection of the penis by making it easier to clean. Circumcised infants are less likely to develop urinary tract infections in the first year of life although these infections are uncommon.

Some parents may prefer circumcision for cultural, cosmetic, or religious reasons. They may choose circumcision so that their child will look more like his father or other circumcised children. However, there is no evidence that appearing different affects later psychological or emotional development.

On the other hand, there are risks associated with circumcision. Circumcision is painful and can occasionally cause complications: bleeding that is difficult to control, infection, and irritation of the opening at the tip of the penis. Very rarely, surgical error may result in injury to the penis.

Deciding whether or not to circumcise your child can be a difficult decision so it is important for you to be fully informed and comfortable with your choice. It is useful to think about the alternatives before the birth of your child and make a decision in case you have a boy. Please consult your own pediatrician if you have any further questions. A pediatrician will also be available in the nursery to answer any final questions you may have.

The rest of this brochure discusses in greater detail the pros and cons of circumcision.

***T**here are many important decisions expectant parents need to make. If your new baby is a boy, one choice you will need to make is whether or not to have him circumcised. Circumcision is the surgical removal of the foreskin at the tip of the penis. The circumcision is usually performed shortly after birth. If he is healthy, your baby may be able to go home within one day of his birth. Because of all the other stresses and concerns around the time of delivery, that may be a difficult time for you to consider all the pros and cons of circumcision. Please read this pamphlet if you wish more information about circumcision.*

## Background

Circumcision was probably first practiced in Egypt about 2300 BC. In ancient cultures it was used as an initiation rite and may have symbolized fertility. Later in history it became an important practice of the Jewish and Muslim faiths. In America, circumcision became more common during World War II. Fighting in tropical climates and lack of adequate hygiene may have been factors causing increased infections of the penis in uncircumcised soldiers.

Since that time, circumcision rates have been declining in America. Today, anywhere from 45-75% of American newborn males are circumcised. The rates vary by area of the country, being highest in the Midwest and lowest in the West. However, throughout the world only 10-20% of all males are circumcised. Currently, only 2% of children in England are circumcised and it is now rarely performed in Central and South America, Europe, and Asia.

## Social Concerns

Many parents are concerned about the social embarrassment their child might feel if his penis appears different from his father's or his peers'. There are no medical studies of this issue, but these concerns are probably greatly overestimated. The genitals of a child before puberty do not look much like an adult male's, circumcised or not. Also, children seem to show little concern about whether other children are circumcised or not. Adult males are usually unaware of their friends' circumcision status. Therefore, emotional problems due to the presence or lack of circumcision are extremely unlikely.

There is no evidence of sexual problems occurring either with or without circumcision. Some people have claimed that circumcision reduces the likelihood of premature ejaculation (reaching orgasm with minimal stimulation). Others maintain that circumcision reduces the sensitivity and pleasure of intercourse. Neither claim has been proven.

## Possible Benefits of Circumcision

- 1) Avoiding difficulty retracting the foreskin.** A common concern of parents is that they cannot pull back their child's foreskin, the small flap of skin that covers the head of the penis. In newborns this is normal. At birth the foreskin protects the penis and is attached to the glans (the red tip of the penis). The foreskin should not be forced back by the parent.



*circumcised penis*

*uncircumcised penis*

The opening in a young child's foreskin need only be large enough to allow urination. Gradually, over the years, the foreskin naturally detaches from the head of the penis making retraction easy. By 3 years of age, 90% of foreskins can be retracted and 99% can be by 17 years of age. When the foreskin can be easily pulled back, then this should be done regularly during bathing to allow cleaning. Children can be taught to do this. This need not be any more embarrassing than cleaning any other part of the body. If there is some question whether the foreskin is ready to retract, ask your pediatrician during your regular well-child visits. Circumcision does remove concern about the uncommon event of not being able to retract the foreskin later in life. Circumcision also prevents the rare occurrence of the foreskin remaining caught in the retracted position.

**2) Avoiding infection of the foreskin.** Since the foreskin cannot be retracted initially in an uncircumcised penis, parents are concerned that infection may develop. This occurs uncommonly and is usually readily treated with antibiotics. If the infections are severe or recurrent, circumcision sometimes is necessary. Infection is primarily a problem of tropical or desert environments, not of temperate climates as in the United States. Certainly removal of the foreskin by circumcision prevents its infection later in life. The evidence as to whether circumcision can help reduce the incidence of sexually transmitted diseases (VD) is conflicting and inconclusive. Circumcision does not avoid the necessity for proper cleaning of the penis as an adult. The only additional step for the uncircumcised is to retract the foreskin during cleaning.

**3) Reducing cancer.** Some researchers have proposed that circumcision may help prevent cancer of the penis and prostate gland in men and perhaps the cervix in women.

Cancer of the penis is exceedingly rare in the United States with fewer than 1 case per 100,000 men developing it each year. It almost never occurs in circumcised males and is very rare in uncircumcised men who have reasonable habits of cleaning the penis. Various studies have shown that cancer increases in groups with poor hygiene. Therefore, normal good hygiene is a reasonable alternative to routine circumcision for reducing the risk of this cancer. However, if a male reaches adulthood and is unable to retract the foreskin, then circumcision is advisable to facilitate hygiene and help prevent cancer.

Earlier studies of different cultures seemed to suggest that circumcision reduced the incidence of cancer of the prostate in men and cervical cancer in women. One newer finding that has been confirmed is that some tumor-causing viruses may be found more frequently on the penises of uncircumcised men. However most of the studies showing differences in cancer rates compared cultural groups with many other differences that confused the results. Therefore the earlier findings have generally been refuted. Most of the differences in the development of these cancers are probably better explained by differences in social class, numbers of sexual partners, genetic factors, and hygiene rather than whether the male has been circumcised.

**4) Reducing urinary tract infections.** Recent research has found that uncircumcised infants (less than one year old) have ten times as many urinary tract infections as circumcised infants. These preliminary findings raise some concerns but there were flaws in the methods used in the research and more studies are needed. Also, infections of the urinary tract are uncommon in boys of any age. When they occur, they are usually easily treated. It is unknown whether these infections in infants will lead to any further problems later in life so the true significance of these infections needs to be clarified.

### *Possible Risks of Circumcision*

Complications can occur with any medical treatment or surgical procedure no matter how carefully done. Described below are some of the risks associated with circumcision.

**1) Pain.** Nearly everyone agrees that circumcision is painful. It is difficult to quantify pain in a newborn, but measurements of body chemicals associated with a stress response support the clinical impression that it is painful. Most physicians feel that using anesthesia to block the pain of circumcision is either ineffective or adds an unacceptable danger to the procedure. There are no known long term psychological effects due to stress of the circumcision itself.

**2) Infection.** Even though every effort is made to prevent infection, occasional infections of the penis do occur after circumcision. Usually these infections are readily treated with antibiotics. However, the infant diaper area is constantly contaminated by germs and infants have a greater susceptibility to certain infections than do older children. Therefore, more aggressive treatment such as hospitalization and intravenous antibiotics may be needed if it appears the infection has spread.

**3) Removal of too much or too little foreskin.** In the vast majority of circumcisions, just the right amount of foreskin is removed. However, in some instances, too little skin is removed and a repeat circumcision may be required later in life. On the opposite side, occasionally too much skin is removed leading to the possibility of scarring of the penis.

This could result in curving of the penis during an erection. The specific type of procedure used may well decrease the chance of one of these complications but increase the other.

- 4) **Bleeding.** Usually there is very little bleeding following circumcision and it can easily be controlled with special chemicals applied to the skin. Rarely the bleeding is severe enough to require stitches, transfusions, or extended stays in the hospital. Severe bleeding is very uncommon and usually only occurs because of an unknown clotting disorder which is inherited or caused by certain illnesses in the newborn. Therefore, if there is any history of bleeding problems in your family, be sure to let your physician know.
- 5) **Other surgical injuries.** More serious injuries such as lacerations of the penis, burning from the instruments sometimes used in the surgery, and other major complications rarely occur during the procedure. Also, there are medical conditions where circumcision should not be done. One example is a malformation of the penis where the foreskin may be needed for future surgical correction. Such a condition may not be obvious or may be missed during the initial newborn exam. This could result in the circumcision being performed inappropriately.
- 6) **Irritation of the glans.** The foreskin normally protects the tip of the penis from irritation by urine, stool, and clothing. With the foreskin removed, the opening at the tip of the penis may become irritated, inflamed, or possibly narrowed. While the inflammation may cause some discomfort, the narrowing (stenosis) of the opening has not been shown to cause future problems.

## *Conclusion*

The timing of the parents' decision on whether or not to have their child circumcised is less important than their becoming informed about the alternatives and being comfortable with their choice. This decision is only one of the many that parents will be asked to make on their child's behalf during his lifetime. We hope that the information provided will help you make a more informed decision.

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