Non-therapeutic circumcision in boys, an ethical dilemma?

Introduction

Male circumcision is the most commonly performed surgical procedure in the world (1). It is estimated to be practiced worldwide in 13 million boys per year (2). The procedure might be done for three reasons: 1. for underlying medical reasons (therapeutic circumcision), 2. for so called prophylactic reasons and 3. for religious reasons. The last two are summarized as non-therapeutic circumcision. There has been a rather intense debate over the past 20 years regarding the practice of Non-Therapeutic Neonatal Circumcision (NTNC). In the USA NTNC is performed in almost 50% of all newborn boys. For religious reasons, it is done in almost all boys from Jewish and Islamic parents. In Europe, non-therapeutic circumcision is practiced infrequently for preventive reasons. In Great Britain 3.8% of boys were circumcised in 2000 (3). Non-therapeutic male circumcision involves the removal of a healthy, highly innervated part of the body. There must therefore be an appealing reason to perform this practice. In this paper we summarize the evidence in favor of and against this practice.

Medical aspects of Non-Therapeutic Neonatal Circumcision

Advantages of NTNC

In studies advocating the practice of NTNC the following arguments in favor are mentioned: reduced incidence of Urinary Tract Infection (UTI), lower risk of penile cancer, lower incidence of phimosis and balanitis (4). Recently, some studies have found that NTNC can reduce the incidence of sexual transmitted diseases, including HIV (5,6).

Studies showing a lower incidence of UTI, balanitis and phimosis are weak and not convincing (3). A recent study from Iran evaluated the incidence of a-symptomatic bactiuria in 2000 circumcised and 3000 non-circumcised boys at the age of 1.5, 3, 9 and 15 month (7). The rate of an a-symptomatic positive culture obtained by supra-pubic puncture was zero in circumcised, compared to 0.15% in non-circumcised boys. In all boys was the positive culture a-symptomatic, no data are give regarding the age at which the culture was positive, neither if groups were comparable. This study therefore confirms meta-analysis that concluded that neonatal circumcision has hardly any, if any, effect on the incidence of UTI in boys (8,9). A recent Cochrane report also concluded that there are no randomized controlled trials on the use of NTNC for the prevention of UTI in boys (10). Balanitis is a non-serious disease that can be treated with simple medication and hygienic methods. The relation between circumcision and penile cancer also is unclear (11). Recently, it was found that male circumcision can prevent the transmission of sexual transmitted disease (5,6). Other studies did not confirm these results (12). More studies are needed to ascertain that neonatal circumcision can prevent diseases like HIV, however even if this effect can be proven, it is highly debatable if this is an argument in favor of NTNC, as will be discussed later.

Risks of NTNC

Both short and long term side effects have been described in relation to NTNC and include infection (1-3%), excessive bleeding (1-9%), meatitis (1-20%), meatal stenosis (3-5%), balanitis (up to 6%) and and persistent skin bridges (2%). Most of these complications are minor, serious adverse events are reported in 0-2% of the procedures (2,13). The risk of serious adverse events is dependent on the circumstances around the procedure, if it is practiced by an experienced physician under proper hygienic circumstances the risks are relatively low. Pain and discomfort of the infant are also factors related to NTNC, proper anesthesia is clearly indicated in all circumstances (14). Neonatal circumcision without proper pain relief may affect neonatal behavior, interfere with maternal-infant
interaction and increase response to subsequent pain (14,15). Anesthesia might also evoke risks, in Sweden one infant died after NTNC due to inappropriate dose of analgetics (2). This evoked a new regulation of NTNC in Sweden, non-therapeutic circumcision is only allowed in the first two month of life, can only be performed by a physician or specially trained “moheel” while all infants must receive proper anesthesia given by a physician or trained nurse.

There is a lot of debate whether NTNC will lead to psychological problems in later life. It has been argued that NTNC might lead to less optimal sexual experience and feelings of a mutilated body (16). If circumcised boys feel an outcast in an environment where circumcision is hardly practiced, is suggested but not yet clear. No definite conclusions regarding potential psychological problems after circumcision are possible.

When considering all medical evidence, there is consensus that, even when positive effects of neonatal circumcision might be present, they are very small and given the risks for early and longtime complications, there is no support for routine non-therapeutic circumcision. (2, 17-19)

Ethical evaluation

A number of important ethical principles are relevant to NTNC (16). First, the oath of Hippocrates “do not harm”. Second the principle of “bodily integrity”. Both these principles are important in the balance between advantages and disadvantages of this procedure.

The principle of not doing harm indicates that any intervention or treatment should only be done when this will benefit the person involved. This is especially relevant when the person (in this case the infant) can not consent itself to the procedure and the procedure has life-long implications for the child. In case of NTNC are the advantages until puberty non-convincing. None of the claimed advantages have been proven and all mentioned diseases at young age can be treated with less invasive therapies. Even when some benefit might be related to NTNC, the number to treat does not justify this procedure, at least more than 110 infants need to be circumcised for one small effect in one infant (8). The potential advantages regarding the decreased risk for sexual transmitted diseases also can not be used as argument for NTNC. The risk for sexual transmitted disease starts at an age an adolescent can take an informed decision himself regarding circumcision and there are effective and less invasive methods to prevent these diseases.

A second important aspect in evaluating NTNC is bodily integrity. Circumcision is the removal of a healthy part of the body. There must be a very valid argument to perform this procedure and the person concerned should give full consent. As stated above, there are no medically valid arguments to perform NTNC. Secondly, the infant can not consent to the procedure. The question is if parents can make this decision for their child. Clearly, parents make decisions when the health status of the infant is at stake. Then, they are supposed to make those decisions that are in the best interest of the child. Parents can also make decisions as to preventive measures, like vaccinations. In vaccinations, the benefits clearly override the potential side effects, while side effects are not persistent. In case of NTNC, parents will take a decision for their child that has lifelong consequences. Moreover, as indicated before, benefits might only be present at an age the infant is mature enough to make his own decision. Given all these arguments, it can be concluded that parents consenting to NTNC are not making a decision that is in the best interest of the child.

Circumcision for religious reasons

In the Jewish religion, circumcision is regarded a commandment embedded in the Thora. It has a very important meaning and symbolizes to be part of the Jewish society. Jewish boys are mostly circumcised at the age of eight days, done either by a physician or a “Moheel” and without analgesia. Circumcision is seen in the Islamic religion as a religious commandment, although it is not written in the Koran. It is usually performed between the age of 7 and 10 years.
Opinion of Medical and Paediatric societies

A number of National Medical and Paediatric societies published their opinion regarding neonatal circumcision. The American Academy of Pediatrics concluded in 1999: “Existing scientific evidence demonstrates potential medical benefits of newborn male circumcision; however these data are insufficient to recommend routine neonatal circumcision. In case of circumcision, in which there are potential benefits and risks, yet the procedure is not essential to the child’s well-being, parents should determine what is the best interest of the child. To make an informed choice, parents of all male infants should be given accurate and unbiased information and be provided the opportunity to discuss this decision.” (17). In an update in 2012 the AAP wrote “Evaluation of current evidence indicates that the health benefits of newborn male circumcision outweigh the risks and that the procedure’s benefits justify access to this procedure for families who choose it” (18). It is unclear however what the new evidence includes, as indicated above. The British Medical Association, the Dutch Medical Association, the Canadian Academy of Pediatrics and the Australian Academy of Pediatric Surgeons (2, 19-21) all indicated that there are no valid medical arguments to justify non-therapeutic neonatal circumcision.

Based on the evidence discussed we conclude that:

- There is no compelling evidence that neonatal circumcision is indicated for preventive or hygienic reasons. Given the lack of benefits and the risk for short and long term complications, there are insufficient arguments to justify non-therapeutic neonatal circumcision. If circumcision might prove to prevent sexual transmitted diseases, than this procedure can be done at an age the boy himself can make a well informed decision.

- Neonatal Non-Therapeutic Circumcision violates the rule that children should only undergo treatments when they are medically indicated or, when it is convincingly proven that the intervention benefits the infant. Secondly, it violates the autonomy and bodily integrity of the child.

- Given the lack of evidence for any benefit of neonatal circumcision until adolescence, an age at which the boy can make an informed decision himself, it is at least questionable if parents who consent to neonatal circumcision, are acting in the best interest of the child.

- We urge all pediatricians all parents who might consider NTNC, to fully inform them about the lack of evidence for advantages and at the same time the risks of this procedure on the short as well as long term.

- We have full respect for religious, symbolic and cultural aspects of neonatal circumcision. It calls for a dialogue between representatives of religious and other organizations and the Paediatric organisations regarding circumcision in newborns and young children.

- When parents decide, on religious reasons, to let their child undergo NTNC, the procedure must be performed under sterile conditions by a proper trained physician, while giving adequate anesthesia.

References


