July 2016

Care of the Intact (Not Circumcised) Penis in the Young Child

A publication of Doctors Opposing Circumcision
www.doctorsopposingcircumcision.org
Seattle, Washington

The only thing you need to care for an intact boy is a ruler to smack the hand of anyone who tries to retract him.

– Allen L. Neese, M.D.

Introduction

Today, more and more boys in the United States and Canada are growing up with their natural genitals intact (not circumcised).[1,2] Unfortunately, American physicians – the product of a circumcising culture for at least several generations – may often be lacking in personal or clinical familiarity with the intact penis, and few have had any substantive education about the natural penis in their training.[3] Though with all good intentions, this lack of knowledge can lead to unnecessary care practices and erroneous advice that are more likely to actually cause foreskin problems than to prevent them.

This page provides the background information health professionals must have to be able to provide safe care to intact boys and accurate care advice to their parents.

Contrary to the common cultural myth, care of the intact penis in the young child is neither complicated nor difficult. The intact penis needs no special care or internal cleansing. The most important principles of intact penile care can be summarized very briefly: ***never forcibly retract the foreskin, avoid soap, and in general, leave it alone.***

The simplicity of care for the intact boy could not be otherwise, or none of us would be here. The human body is largely self-regulating and self-defending, a gift – or rather, a necessity – of evolution. Our primate ancestors did not waste valuable foraging time to go down to the river to scrub the genitals of their offspring each day. Any strain of hominid requiring such high maintenance could not long survive.

There are no controlled studies regarding the optimal approach to care of the intact penis, of the type that assigns groups of boys to different care protocols and then compares outcomes.[4] Most journal publications on the topic are opinion pieces, typically based on mistaken notions about the normal age of retractability or on historically entrenched preconceptions of the foreskin as inherently problematic.[5]

Safe and sensible care recommendations for the intact penis, therefore, must stem from an accurate understanding of its anatomy, development, and protective functions; knowledge of the science of skin health and skin care; and common sense. It is also helpful to have a perspective on the history of mistaken beliefs about foreskin care that still maintain a hold in our culture. As it turns out, the task of the health professional is not so much to teach parents how to care for the foreskin, but to undo 150-plus years of misinformation and paranoia about the natural penis.

What physicians need to know about care of the foreskin

Retractability – The most important rule for care of the intact penis is to ***never forcibly retract the foreskin.*** Forcible retraction means having to overcome resistance to retract the foreskin. There is *never* a medical indication for forceful retraction[6] – not for examination, not for catheterization, not to check for nor to 'help' with retractability. To do so can lead to serious harm (see below).

To understand correct care of the foreskin (prepuce), it is necessary to understand the normal development of the intact penis.

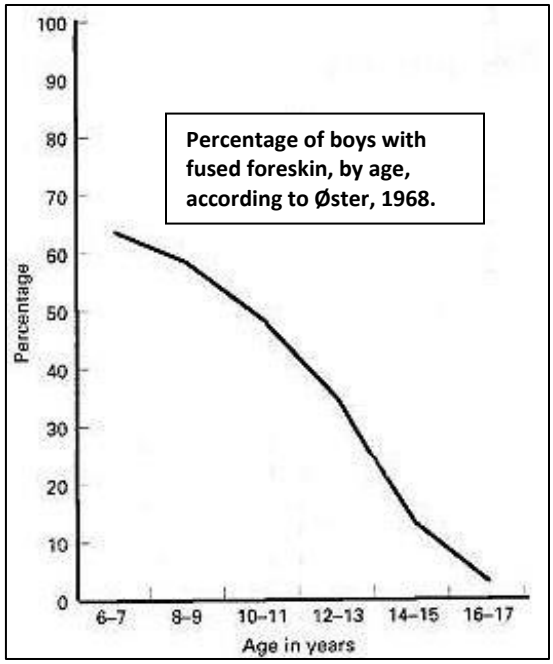
As the prepuce develops in utero, the inner foreskin and the glans share a common cell layer, termed the balano-preputial lamina, which firmly attaches the inner foreskin to the glans.[7] Fusion of the inner prepuce to the glans is the normal state at birth and during the early years of life.[8] Additionally, the outlet of the foreskin is naturally non-elastic in childhood.[9] The tight, fused foreskin protects the infant's glans and urinary opening during the diaper years. It is inappropriate to characterize the balano-preputial attachment as 'adhesions,'[10] or to diagnose this normal state of non-retractability as 'phimosis,'[11] both of which terms incorrectly imply pathology (thus putting the child at risk for unnecessary interventions).

As the intact penis develops, two processes occur naturally, over a variable period of time, by which the foreskin eventually becomes retractile: the separation of the inner foreskin from the glans,[12] and the loosening of the foreskin's opening.[9]

The assertion that most intact boys are (or should be) retractable by age 3 or age 5 is commonly found in the medical literature. This information is incorrect and has, unfortunately, been the basis for a great deal of erroneous advice and unnecessary treatment to this day. It comes from a study published nearly 70 years ago by British pediatrician Douglas Gairdner.[10] At that time, it was believed, incorrectly, that the foreskin should be retractable within days after birth.[5,12] Because a non-retractable foreskin was then also thought to be a source of a multitude of problems,[5] young English boys were commonly subjected to dilating procedures and forced retraction by physicians, and parents were advised to forcibly retract the foreskin.[5]
In the late 1940s, Gairdner examined 300 intact English boys from birth to 5 years of age, and found that only 50% were fully retractable by age 1, but that by age 3, 90% were fully retractable, and 92% by age 5. Gairdner's study showed that it was normal for babies not to be retractable, and made the case for eliminating unnecessary interventions and circumcisions in young children based on the previous misunderstandings. However, because the study was done on a population likely to have been subjected to premature forced retraction, the ages found for

retractability were almost certainly abnormally early. Nevertheless – and despite the fact that Gairdner's results have never been duplicated – these numbers entered into the medical literature as the definitive information on the normal age of retractability. Thus a new (and again falsely early) 'deadline' for retractability was set at 3-5 years, with the implication that those not retractable by such an age were in need of medical attention, a notion that persists even into the 21st century.[13]

Since 1968, multiple studies (from countries where retraction by parents or medical professionals is not performed, and tracking development over a longer period of time) have found a much later age distribution of retractability.[14-20] (See figure.) These studies have found the average age at full retractability to be about age 10, that is, half of all boys fully retractable by 10, half not yet so. They also show that the vast majority of intact boys become fully retractable by the end of adolescence, without any need for outside intervention (no need for parents to "push it back a little every day" to "help" it become retractable), and with no negative hygienic consequences.[14] One study suggests that the processes leading to retractability may continue into early adulthood.[20] Many modern medical texts and journal articles have yet to adequately acknowledge these findings, however, and still cite Gairdner's 3 to 5 year data (or even earlier) as the expected norm.[e.g. 21,22]



Smegma – As the prepuce separates from the glans, shed epithelial cells may accumulate underneath it as a whitish, pasty or dry, generally odorless and benign material called smegma (Greek for 'soap'). Smegma has emollient characteristics that protect the mucous membrane surfaces of the glans and inner foreskin, may help maintain the progress of foreskin separation, and contains immunologically active substances.[23]

Smegma may be released in small amounts from the foreskin outlet, where it may be easily wiped away. Shed cells may occasionally wash out with urination, giving the urine a milky appearance. As long as these episodes are transitory, in the absence of other symptoms, this is not a sign of infection. Sometimes these shed cells may accumulate in a lump under the foreskin, known as a 'smegma pearl,' which may give the foreskin a temporarily lopsided appearance. Smegma pearls will discharge over a variable period of time (weeks to years), on their own, as foreskin separation continues.

Ballooning and spraying – Ballooning of the foreskin with voiding may occur in some boys when separation has progressed to some degree underneath the foreskin, but the outlet is still tight. It is not pathologic and requires no treatment.[21,24,25] It is a sign that development is proceeding but is not yet complete, and disappears as the foreskin opening becomes looser.

Likewise, spraying with urination may also occur at times during foreskin development.[26] Parents should simply be reassured that, while a bit messy at times, these are normal, harmless, and temporary conditions.

The foreskin as self-protecting and self-cleaning – Just like the vagina, the foreskin is well designed to stay clean and healthy with very little outside intervention.

In the young child, the fusion of the foreskin to the glans and the tight preputial opening prevent entry of bacteria and foreign material. At this age, the typically longer foreskin overhang past the glans also keeps the urinary opening at a distance from outside contaminants. Even after the foreskin has separated, the muscle tone of the peripenic muscle (an extension of the dartos muscle) keeps the foreskin snugly applied to the glans, continuing to protect the penis throughout life. The circular whorl of the peripenic muscle at the preputial outlet acts as a sphincter, relaxing to allow the passage of urine, and then closing back up like a purse string after voiding.[9,27] The foreskin outlet and the sub-preputial space are self-cleaning, being flushed outward with sterile urine multiple times a day. In addition, when undisturbed, the environment beneath the foreskin has its own immunological defense properties, like any other mucous membrane.[23]

The harms of forcible foreskin retraction – Doctors Opposing Circumcision gets multiple calls weekly from distraught families of intact boys who have been forcibly retracted by a health professional, either during a clinical examination or for catheterization. Because we hear only from a small subset of families in the U.S., we estimate that 100,000 or more intact boys may be subjected to this unnecessary and harmful trauma annually**.**

It must be re-emphasized that **there is *never* a medical indication for forceful retraction of the foreskin,** and that **it is incorrect for health professionals to apply *any* force at all, or to encourage parents to do so**.[6] Contrary to 100 years of conventional wisdom, Rudolf and Hoffman's *Pediatrics* textbook unequivocally states that "it is incorrect to teach mothers to retract the foreskin."[6]

The harms of forcible foreskin retraction are many, and come from disruption of the normally tight and fused prepuce, which will always work best in its undisturbed state to do its job of protecting the end of the penis.

- Forcing the foreskin open when it would normally be closed introduces the risk of infection.
- Tearing the foreskin away from the glans leaves raw areas on both surfaces.
- Forcible stretching of the inelastic foreskin outlet (the normal state in childhood) may cause micro-tearing.
- Tearing produces pain and bleeding.
- Healing of these tears may lead to scarring of the foreskin outlet, as well as re-adhesion of the raw surfaces of the foreskin to the glans by scar tissue.
- The scar tissue that may be produced is permanently inelastic, and can contribute to a pathological state of non-retractability (phimosis), which may not resolve as it naturally would with normal development.

- Forcing a tight foreskin opening behind the coronal ridge can lead to entrapment of the foreskin proximal to the glans, called paraphimosis. This causes swelling of the tissues, pain, and loss of circulation to the glans, and is considered a medical emergency – in this case, iatrogenically caused.

Avoiding soap – Cleanliness is associated, in the minds of many, with "soap and water." Indeed, many medical sources advise washing underneath the foreskin with soap, without qualification.[4,21] But soap and mucous membranes – which includes the glans and inner foreskin of the intact penis – do not go well together.

Soap on regular skin is known to cause drying, alterations in enzyme activity in the upper epidermis, and decreased skin acidity, with resulting disturbance of microfloral balance[28,29]. These changes in turn lead to impairment of the barrier function of the skin, accompanied by irritation, itching, inflammation, and increased risk of infection.[29] Mucous membranes, which are thinner than regular skin and typically do not secrete protective sebum, are even more sensitive to these effects. Therefore, the use of soap in care of the intact penis must be questioned.

Healthy skin and genital mucous membranes have an acidic pH[29] but, with the use of soap (which is highly alkaline), their pH becomes more neutral.[28] The growth of normal skin flora is optimal in an acidic environment, but more neutral pH levels favor pathogenic bacteria and *Candida* (yeast).[28,29] Odor may be associated with this shift to pathogenic microorganisms.

In the case of genital hygiene, the belief that penile problems and odor in intact men are caused by 'poor hygiene' may lead to ever more intensive cleaning efforts, leading to a vicious cycle. Persistent infection and odor may then be blamed on the foreskin itself, rather than the true culprit, the overuse of soap (and lead to an unnecessary recommendation for circumcision).

Several studies illustrate the association of over-washing, soap, and penile pathology.

Birley, et al. studied 43 men presenting with recurrent or persistent balanitis.[30] Irritant dermatitis was diagnosed in 72% of the cases, and these men reported significantly more frequent daily washing with soap than the remaining patients. Ninety percent of these irritant dermatitis cases successfully responded to a therapeutic regimen solely of restriction of soap use, plus emollient creams.

Beaver, et al. studied cleaning practices of the penile sheath (prepuce) in 19 horses.[31] Each horse had significantly *more bacterial growth after cleaning* than before. Washing with plain water produced the lowest level of bacterial increase, while washing with baby shampoo or a horse sheath cleaning product containing tea tree oil produced respectively higher bacterial growth. With each repeated washing, progressively higher bacterial growth was noted.

There is no evidence that soap is necessary for optimal penile hygiene and much dermatological evidence to suggest that it may be harmful. Doctors Opposing Circumcision recommends that no soap be used on the mucous membrane surfaces of the inner foreskin and glans, and only mild soap, if any, on the outer surface of the penis. In the case of genital irritation, care should be

taken to avoid not only soap but also other similarly irritating substances, such as bubble bath and chlorinated pool water. This care advice applies to all children, regardless of their sex.

Foreskin care as the child grows up – The first person to ever retract the foreskin should be the boy himself, not a parent or a doctor, as only the boy will know when he is comfortable doing this, and how much pressure is too much. Even if the young child is naturally retractable, the snug fit and self-cleaning design of the intact penis means that there is no need for parents to clean the sub-preputial space for their children. In general, parents need only clean the outside of the penis from base to tip, similar to washing off a finger.

Canadian pediatric urologist Peter Anderson has stated, "There's no evidence there's any need to clean under the foreskin before puberty."[32] Very likely, sitting in clean bathwater is all the cleaning needed before puberty. With a very messy stool, it is common sense to wipe off the penis, put the baby in warm water, and swab the genitals with a washcloth. As the boy develops cognitive and fine motor skills, he can be taught to wash his penis, just as he will learn to clean the rest of his body. Occasional, simple, non-pressured explanations are all that are needed. He should be told that one day his foreskin will be able to slide back, and that when that happens – and when he is comfortable with it – he can occasionally *retract* it in the bath or shower, *rinse* underneath, and then always *replace* the foreskin back over the glans (to avoid paraphimosis). With the hormonal changes of puberty, more regular rinsing under the foreskin may be advisable.

Examination of the intact penis – While there may be circumstances in which the penis of a young child needs to be examined, indications for invasive examination would be extremely rare. Care should be taken at all times to avoid forcible retraction, or otherwise causing pain or damage to the delicate tissue. If possible, have the child retract himself.

Whether due to misunderstanding of normal foreskin appearance and development, or to false beliefs about the 'risks' of having an intact penis, it is not uncommon for clinicians to try to retract the foreskin of a healthy infant or toddler, even in the absence of a penile problem or any symptoms of disease. Despite the fact that the American Academy of Pediatrics warns against forcible foreskin retraction,[4,33] some physicians appear to believe this only applies to parents, not to them. Sadly, Doctors Opposing Circumcision has documentation that forced retraction happens at medical visits, including well-child visits, all the time, all over North America. This is a painful, permanent injury to the child without diagnostic or therapeutic value, one that has legal implications as well. No child, of any sex, should ever leave a medical examination with torn, bleeding genital tissue.

Following are some of the reasons a health professional might believe they need to push back on a child's foreskin during an examination, with brief indications of why this is not appropriate.

- Some doctors think the foreskin should be retractable by a certain age, and believe they need to check on the progress of separation to assure 'normalcy.' But there is no set age by which the foreskin should be retractable, and with time it will become retractable naturally on its own without any outside help.[14]

- Some doctors believe the foreskin must be retractable for optimal penile hygiene, and feel they should help the process to prevent problems. But the foreskin of the young child is well-designed to keep itself clean, and its protective features will work best when left undisturbed.

- Some doctors think they need to check inside the foreskin for signs of infection. But infections will show symptoms on the outside of the foreskin within hours of any problem developing underneath.

- Some doctors think they need to check for hypospadias. But if the condition is present and significant, it will show in the conformation of the foreskin. In any case, if it is not significant enough to show on the outside, it is not significant enough to do anything about.

- Some doctors think they need to check to see if the urinary opening lines up with the foreskin. But, again, if the foreskin looks normal externally and the boy is voiding without problems (ballooning or spraying are not a problem), this is not an issue.

- Some doctors think they need to check for meatal stenosis (narrowing of the urinary opening from scarring). But this condition is only rarely seen in intact boys, while it is a common complication of circumcision.[34]

- Some doctors think they need to check for 'phimosis.' But it is physiologically normal to be non-retractable in childhood, and into adolescence for some. In the absence of pathological tissue changes, like scarring or induration of the outlet, or severe impairment of urination, a diagnosis of phimosis in children is inappropriate.[11]

Several approaches may be taken to examination of the intact penis. Given that most foreskin problems will be easily visible from the outside, much information can be gleaned by simple visual inspection of the penis, without any manipulation of the foreskin at all. If a closer inspection of the foreskin seems indicated, if possible, let the boy himself move his foreskin around and retract it for the clinical exam. Otherwise, examination should be done with extreme gentleness and caution, wearing gloves, and without applying *any* proximal tension to the foreskin outlet or to the attachment of the inner foreskin to the glans. If the foreskin is loose, moving it around gently will not cause harm, ***but if it does not move, no force should be applied.***

To repeat the crucial point: forcible retraction is *never* indicated for examination purposes, and should be assiduously avoided.

Recalling the sphincter-like action of the preputial outlet, it is likely in any case to be counterproductive to attempt to examine a young child's penis by pushing back on the foreskin towards the body, as this may cause the sphincter to tighten and make the opening smaller.[27] Catzel describes an alternative technique, in which the foreskin is lifted upward away from the body with index fingers and thumbs for easier visualization of the outlet.[35] Note also that the state of contraction or relaxation of the peripenic muscle (e.g. due to the effects of exam room

temperature) can affect the apparent tightness or looseness of the preputial opening found during a clinical examination.[27]

Physicians should be aware that, in the age of the Internet, parents have become sensitized to the very real risk of forcible foreskin injuries at the hands of health professionals. This may make some parents extremely wary of *any* examination of their intact son's penis. Good communication is key to establishing trust with parents of intact boys. Before beginning the exam, a clear and reassuring discussion – explaining, for example, foreskin development, what you want to do and why, and reassuring the parents that you know not to forcibly retract – should be part of the consent process for examination of the genitals. If the boy cannot himself assist with examination of his penis, some parents may prefer to be the one to hold the penis, while the practitioner does a hands-off visual inspection.

Catheterization of the intact penis – There are times when bladder catheterization may be indicated (although non-invasive alternatives should be considered first, due to the inherent risks of the procedure, such as tissue trauma or introduction of infection). Fortunately, forced retraction or complete exposure of the glans are not necessary for catheterizing a boy or for cleaning the area in preparation for the catheter.

The foreskin can safely be gently manipulated to allow cleaning and exposure of the meatus, but this should ***never*** be done beyond the level of natural separation. Using a gentle touch and stopping at the earliest sign of resistance will avoid harm. For a boy who has a loose foreskin, retraction helps assure a sterile area for the catheterization, and the most accurate results. Otherwise, if the foreskin is tight or adherent, only the outer surfaces need be cleaned.

To perform the catheterization, if the foreskin is at all loose, it may be gently slid around to visualize the urinary opening (meatus). If the foreskin outlet is tight, catheterization can be done without visualizing the meatus. The penis is steadied with one hand and the catheter advanced through the foreskin outlet with the other. In most boys, the meatus is at or near the tip of the glans, right behind the foreskin outlet, thus with very small adjustments, the meatus can easily be found by feel. The catheter can be guided with gentle fingertip pressure on the underside of the penis from the outside, to compress the space between the foreskin and the glans and direct the catheter into the meatus.

While bagged urine collections carry a substantial risk of false positive urine cultures, specimens obtained via catheterization of an intact boy with a non-retractable foreskin carry a lower risk of false positives than bagged specimens. To lower the risk of a false positive result further, the first portion of urine obtained from the catheter should be discarded, as it may contain normal preputial flora, and the actual specimen sent from the portion of urine obtained after this. In cases in which the most accurate diagnosis is critical, suprapubic aspiration is the preferred method for obtaining a urine specimen for culture.

For more information on catheterizing an intact male infant, see this video from Switzerland, a country that does not practice circumcision of boys. Note that, in this video, only the outside of the penis is treated with antiseptic cleansing, and the catheter is inserted through the foreskin opening and into the urethra without any retraction whatsoever.

History of misconceptions about foreskin care

Before germs were discovered in the late 1800s, one disease theory of Victorian-era doctors speculated that excessive stimulation (then called 'irritation' or 'neurosis') of one part of the body could cause pathology in a distant part. The well-known hypersensitivity of the genitals was considered a prime instigator of 'reflex neurosis,' thus ushering in an era of masturbation hysteria. An entire tangled complex of beliefs arose – mixed medical and moral – about the dangerous nature of the genitals.

Medical historian Robert Darby notes the following in his scholarly text on the subject:

> By the 1850s, English doctors were forgetting what their eighteenth-century predecessors had known. Under the influence of the masturbation phobia, they regarded any manipulation of the genitals as harmful or wicked… they also came to believe that the infant foreskin had to be drawn back regularly so that it could be cleaned underneath, as a precaution against irritation, handling, and the arousal of premature desire. They thus came to view the natural condition of the infant penis (tightly covered in a nonretractable and often adhesive sheath) as a pathological deformity requiring surgical correction. The term c*ongenital phimosis* came to be applied to any boy, no matter how young, whose foreskin could not easily be drawn back from the glans, and the condition was soon identified as the source of many diseases from cancer to epilepsy.[5]

As Darby further explains:

> …doctors believed that if the foreskin had not freed itself within a few days [of birth] it would never do so, and surgical intervention of some sort was thus essential. … [M]illions of boys were subjected to prolonged agony as grim-faced doctors, bustling nurses, and distraught mothers poked, stretched, and lacerated the most sensitive part of the boys' bodies. … [T]heir gruesome ministrations must have often destroyed the elasticity of the foreskin and prevented its sphincter from operating as the valve it was meant to be, as well as causing a deformed appearance, scarring, and often the very adhesions (arising as the torn surfaces healed) they were supposed to cure. Many came to the conclusion that amputation was a kinder option.[5]

It is perhaps possible to forgive our professional forefathers for such errant nonsense, as they were at least trying to explain the maladies of their day with little scientific understanding of the true causes of disease. Unfortunately, such 19th-century myths are still very much alive in recent decades – albeit more nuanced – as seen in the examples below.

Circumcision advocate Gerald Weiss, in his 1985 information pamphlet for parents, highlights the confusion and inconvenience supposedly involved with caring for an intact penis, and even hints at the risks to men – delicately unspecified – from having to handle their own penises:

> Ease of cleanliness can make life smoother for the mother and the circumcised child rather than the confusion of "leave it alone," "clean under it," "pull it back sometimes," or "irrigate occasionally." … In the adult it may be

> necessary to clean the area several times a day which leads to excessive penile attention and manipulation.[36]

(In fact, the advice to "leave it alone" suffices.)

The World Health Organization is responsible for development of the International Classification of Diseases (ICD) coding system, used for tracking healthcare statistics.[37] The term "Phimosis, congenital" was enshrined as a disease condition as ICD-9 code 605, in use since the late 1970s, although the age of the sufferer is not stated. ICD-10, in use in the USA since November 2015, has redefined the code as ICD-10 N47.0, "Adherent prepuce, newborn," despite the fact that this is a normal, non-pathological condition for all male newborns.

The series of position statements on neonatal circumcision, released over the past several decades by the American Academy of Pediatrics, consistently frame hygiene of the intact penis as something requiring special and burdensome attention, effort, and vigilance, with the implication of potentially adverse outcomes if "optimal penile hygiene" is not attained.

The 1975 statement refers to the importance of impressing upon parents "the necessity for lifelong penile hygiene [in the intact male]"[38] (as if "lifelong penile hygiene" were not also necessary for circumcised males). It also mentions consideration of "the emotional reaction of the prospective parents to penile cleansing …"[38], legitimizing expected parental prudery about care of the genitals. The 1989 statement asserts that "it is particularly important that uncircumcised boys be taught careful penile cleansing."[39] The 1999 statement's brief section on hygiene closes with the assertion that "various studies suggest that genital hygiene needs to be emphasized as a preventive health topic throughout a[n intact] patient's lifetime."[40, citing Kalcev and Krueger & Osborn, but see literature review below.]

Startlingly, the AAP's 2012 circumcision statement asserts in its hygiene section, "Most adhesions [*sic*] present at birth *spontaneously resolve by age 2 to 4 months* [*sic*, no citation given, emphasis added] ..."[4] This is an astonishing misstatement of fundamental anatomy that cannot be explained away as a typographical error, since even 'years' would also be wrong. In using its position as the premier pediatric professional organization in the U.S. to promulgate this falsehood to practitioners nationwide, the AAP risks visiting unnecessary intervention and harm upon millions of intact boys.[41]

Literature review – perpetuation of misconceptions about foreskin care

Although there are no controlled studies of the optimal approach to care of the intact penis, several research studies have been done, each of which suffer from problematic methodologies or assumptions (based on pre-existing incorrect beliefs about the necessity of foreskin retraction for hygiene, or on Gairdner's faulty data). These studies in turn have unfortunately been cited to further promote incorrect hygiene practices or negative beliefs about the onerous nature of foreskin care.

Kalcev (1964) studied hygiene habits in intact British schoolboys, based on concerns about "the carcinogenic effect of the smegma"[42] (since proven to be false[43]). He categorized boys as "practicising personal hygiene" if "at any time in the child's life retraction of the foreskin had been practised." Kalcev noted that in the period leading up to this time, many mothers practiced routine retraction of their babies' foreskins. He made no observations about hygiene outcomes. This study imprinted in the medical literature a fixation on retractability as a necessity for penile hygiene.

Osborn, et al. (1981) conducted a survey of physicians on care of the intact penis, and a separate survey of mothers of intact infants.[44] Of the 15 mothers surveyed, eight had been given no care advice, and seven had been told to retract the foreskin daily while bathing the baby (which would have been very painful, if not impossible, in these young children). None had been told when the foreskin should retract easily. Of the 90 physicians surveyed, 67% believed (incorrectly) that the foreskin should be retractable by 1 year of age, and only 22% could "correctly" identify the age of retractability (although these were actually still incorrect, as Osborn et al. referenced Gairdner's faulty data). Seven of the 15 infants were forcibly retracted by their physicians before the age of 6 months. The authors reported that, due to the distress of these forced retractions and the anxiety over having to care for their child's penis with no (or inaccurate) instructions, 40% of the mothers said that they would have their next son circumcised. While the "difficulty" reported with foreskin care was clearly due to the physician's inadequate understanding of the foreskin, leading to improper advice and intervention, Osborn et al.'s study has been cited as evidence of the "difficulty" of taking care of an uncircumcised penis.[45,46]

Krueger and Osborn (1986) conducted a study to ascertain whether "good hygiene" made a difference in the incidence of adverse penile outcomes.[47] "Good hygiene" was defined by the practice of retracting to wash, and the authors assumed that most boys should be retractable by age 4 (again Gairdner's faulty data). Surveying 47 intact males, age 2 weeks to 52 years, they found a correlation between retraction for washing and a decreased incidence of foreskin "problems." The "problems" observed for included "adhesions," "phimosis," and the presence of smegma – all potentially normal findings depending on the age of the patient. Although the authors excluded boys under 4 years old from their final analysis, they did not clearly report their findings by age, nor did they adjust for age (i.e. for accurate developmental expectations). While they concluded that retraction with washing *prevents* phimosis and adhesions, it is more likely that normal physiological attachment of the foreskin was the *reason* that patients did not retract for cleaning. This study – based on misinterpretation of normal penile findings – reinforced in the medical literature the belief in the need for retracting at a young age to prevent "problems," and the belief that penile care in intact boys requires extraordinary attention.

Conclusion

For over a century, the foreskin has been the object of altogether too much worry and meddlesome attention. In truth, care of the intact penis can safely be thought of as 'benign neglect.' The intact penis requires no special care, and no more surveillance than any other part of a child's body.

Care instructions to parents of young children should include an explanation of the normal developmental process and its extremely variable timetable. Parents should know to avoid soap on the genitals, and to never try to forcibly retract the foreskin or allow anyone else to do so. The simple mnemonics of "I'm intact, don't retract," "Only clean what is seen," "Retract, Rinse, Replace" (the 3 Rs of foreskin care), and the description to "Clean the penis as you would a finger" are helpful reminders.

For more information on explaining care of the intact penis to parents, and other advice on raising intact boys, see Doctors Opposing Circumcision's FAQs for Parents. See also our intact care article for parents, with links to other resources.

Even if modern physicians might laugh at the idea of 'reflex neurosis,' the myths of the 1860s remain well entrenched in the medical mindset, and, after six or seven generations of such fear-mongering, among the lay public as well. Health care providers have the professional obligation to continue their education so as to be able to provide optimal patient care.[48] In the context of intact penile care, their task is then to use their knowledge and professional standing to:

- normalize and show respect for the natural penis,
- reassure parents,
- stamp out old myths,
- report errors of anatomy or advice when seen in print,
- confront colleagues who forcibly retract intact boys or who advise circumcision without a valid medical reason, and
- protect their child patients from harmful and outdated practices.

A new generation of intact boys requires – and deserves – a new generation of "foreskin-friendly" physicians.

Selected recommended reading

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