MANAGEMENT OF FORESKIN CONDITIONS

Statement from the British Association of Paediatric Urologists on behalf of the British Association of Paediatric Surgeons and The Association of Paediatric Anaesthetists.

This statement refers to management of foreskin conditions and circumcision in male children

Female circumcision is prohibited by law
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Statement from The Royal College of Paediatricians and Child Health:
This document addresses an important clinical area for which there are no existing guidelines or practise statements. Whilst this statement is not evidence based or a consensus, it provides information of relevance to paediatricians
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EXECUTIVE SUMMARY

Strategic context

The management of foreskin conditions varies amongst medical practitioners from observation to circumcision. Therapeutic circumcision is performed in the U.K for specific indications. There is as yet no policy for non therapeutic or religious/cultural circumcision in the U.K. although a position statement was issued by the British Association of Paediatric Surgeons (BAPS) in 2001.

Background

1. The Natural history of the foreskin
Almost all boys have a non retractile foreskin at birth. The inner foreskin is attached to the glans. Foreskin adhesions break down and form smegma pearls, white cysts under the foreskin, which are then extruded. The foreskin does not retract before the age of 2 years after which it ‘pouts like a flower’- physiological phimosis. The process of retractility is spontaneous and does not require manipulation. The majority of boys will have a retractile foreskin by 10 years of age and 95% by 16-17 years of age.

2. Common foreskin conditions and diseases associated with presence of a foreskin
   A. Common foreskin conditions
      Definitions
      a. Balanoposthitis: inflammation of the glans and foreskin.
      b. Balanitis: inflammation of the glans that often spreads along the shaft and may occur in the circumcised population.
      c. Posthitis: inflammation restricted to the foreskin itself.
      d. Balanitis Xerotica Obliterans (BXO): a lesion akin to lichen sclerosus et atrophicus, is the cause of true scarring of the foreskin- pathological phimosis - the shutter type foreskin with no pouting of the inner foreskin on gentle retraction. It is rare before the age of 5 years and presents with discomfort on voiding and white firm scarring of the foreskin tip. The aetiology is unknown but may be of viral origin. This condition may also affect the glans and urethra.
      e. Paraphimosis: results when the narrow tip of the foreskin is retracted behind the glans at the coronal sulcus causing oedema of the glans and foreskin and inability to manipulate the foreskin back over the glans.
      f. Hooded foreskin: is an abnormal dorsal hemiforeskin (the penis is anatomically described in the erect position) which is deficient ventrally and is usually associated with hypospadias.

   B. Diseases associated with presence of a foreskin
      There is no current evidence to support an increased risk of penile cancer, human immunodeficiency virus infection or cervical cancer in uncircumcised males. Circumcision to prevent urinary tract infection (UTI) is unproven except in boys with abnormal renal tracts.

3. Treatment of conditions of the foreskin:
   a. Inflammatory conditions: Balanoposthitis, Balanitis, Posthitis:
      Simple bathing, topical steroids and antibiotics.
   b. Non retractile healthy foreskin (physiological phimosis):
      No intervention, topical steroids, preputioplasty- infrequently.
   c. BXO:
      Circumcision. There are no randomised trials that can ascertain the efficacy of other techniques and their long term outcome.
   d. Paraphimosis:
      Reduction with or without anaesthetic.
e. Hooded foreskin:
   Without hypospadias: no treatment, modified circumcision, foreskin reconstruction.
   With hypospadias: no treatment, circumcision or foreskin reconstruction with hypospadias
   repair.

4. Circumcision
   Background
   Male circumcision is the most common surgical procedure in the world. It may be performed for
   clinical reasons or to comply with religious/cultural practice- the ‘non therapeutic circumcision’. Non
   therapeutic circumcisions are not uniformly available on the NHS (where they are performed by
   medical practitioners and nurse practitioners) and are also performed in the community by general
   practitioners and non clinicians.

4a. British Medical Association guidelines: Reproduced in part from the BMA document: The law
    and ethics of male circumcision, London, 200635.

   i) Ethics and the Law
   Male circumcision is generally assumed to be lawful provided that:
   - it is performed competently
   - it is believed to be in the child's best interests and
   - there is valid consent.

   ii) Consent and refusal
   - Competent children may decide for themselves.
   - The wishes that children express must be taken into account.
   - If parents disagree, non-therapeutic circumcision must not be carried out without the leave of
     a court.
   - Consent should be confirmed in writing.

   iii) Best interests
   - Doctors must act in the best interests of the patient.
   - The views that children express are important in determining what is in their best interests.
   - Parental preference must be weighed in terms of the child’s interests.
   - The child’s lifestyle and likely upbringing are relevant factors to take into account.
   - Parents must explain and justify requests for circumcision, in terms of the child’s interests.

   iv) Health issues
   Parents seeking circumcision for their son for reasons of hygiene or health benefits must be fully
   informed of the lack of consensus amongst the profession over such benefits. The BMA
   considers there is insufficient evidence concerning health benefit from non-therapeutic
   circumcision.

   v) Standards
   The General Medical Council advises that doctors must "have the necessary skills and
   experience both to perform the operation and use appropriate measures, including
   anaesthesia, to minimise pain and discomfort". There is no legal requirement for non
   therapeutic circumcisions to be undertaken by registered health professionals.

   vi) Facilities
   Doctors must ensure that the premises in which they are carrying out circumcision are suitable
   for the purpose. In particular, if general anaesthesia is used, full resuscitation facilities must be
   available.
vii). Charging patients
Although non therapeutic circumcision is not a service which is provided free of charge, some doctors and hospitals have been willing to provide non therapeutic circumcision without charge rather than risk the procedure being carried out in unhygienic conditions. In such cases doctors must still be able to justify any decision to circumcise a child based on the considerations above.

viii). Conscientious objection
Health care professionals are under no obligation to comply with a request to circumcise a child. Where the procedure is not therapeutic but a matter of patient or parental choice, there is no ethical obligation to refer on.

4b. Anaesthesia and Analgesia for circumcision
i) Anaesthesia
There is an increased risk from general anaesthesia in the neonatal period\textsuperscript{36,37}. According to the Royal College of Anaesthetists handbook, any general anaesthetic should be administered by an appropriately trained anaesthetist with ongoing relevant paediatric experience\textsuperscript{38}.

ii) Analgesia
It is essential that adequate analgesia be provided when undertaking male circumcision. Dorsal nerve block and ring block are equally effective\textsuperscript{45,70}. Adequate time needs to elapse after the block before surgery is started. Eutectic mixture of local anaesthetics (EMLA), contraindicated on open wounds and mucous membranes, should be allowed 1 hour to take effect\textsuperscript{40}. This can be tested by picking up the foreskin in forceps before commencing the procedure. Non-pharmacological methods (non nutritive suckling, rocking, massaging, cuddling) or systemic analgesia with paracetamol are inadequate in isolation for analgesia\textsuperscript{49-59}. Caudal analgesia is effective in anaesthetised boys but has not been studied in neonatal awake circumcisions\textsuperscript{62,64}.

4c. Complications of circumcision
Bleeding (1.5%), local sepsis (8.5%), oozing (36%), discomfort > 7 days (26%), meatal scabbing or stenosis, removal of too much or too little skin, urethral injury, amputation of the glans and inclusion cyst are recorded complications\textsuperscript{81-85}.

There is conflicting evidence with respect to penile sensation, sexual function and satisfaction in adult men following circumcision\textsuperscript{86-89}.

4d. Governance Issues
Clinical Governance applies to all professionals i.e. clinicians including medical and nurse practitioners\textsuperscript{90}. Non clinical practitioners performing circumcisions in the community may apply similar governance principles.

RECOMMENDATIONS

A. Treatment of conditions of the foreskin
1. Inflammatory conditions: Balanoposthitis, Balanitis, Posthitis
Simple bathing, topical steroids and antibiotics.

2. Non retractile healthy foreskin (physiological phimosis):
No intervention, topical steroids, preputioplasty- infrequently.

3. BXO:
Circumcision
There are no randomised trials that can ascertain the efficacy of other techniques and their long term outcome.
4. **Paraphimosis:**
   Reduction with or without anaesthetic.

5. **Hooded foreskin:**
   Without hypospadias: no treatment, modified circumcision, foreskin reconstruction.
   With hypospadias: no treatment, circumcision or foreskin reconstruction with hypospadias repair.

### B. Circumcision

1. **Indications for circumcision**
2. **The operator**
3. **Standards of care**

#### 1. Indications for circumcision

(a) **Absolute**
   i) Penile malignancy.
   ii) Traumatic foreskin injury where it cannot be salvaged.

(b) **Medical**
   i) Balanitis Xerotica Obliterans.
   ii) Severe recurrent attacks of balanoposthitis.
   iii) Recurrent febrile UTI's with an abnormal urinary tract.

(c) **Non Therapeutic ‘Ritual’ circumcision**

#### 2. The Operator

a) The person performing the procedure should be experienced and competent to do so. Written consent should be obtained from both parents wherever possible.

b) The operator should be able to identify co morbidity and deal with it appropriately.

c) The operator should have a full understanding of the risks and complications of the procedure and their management.

d) The operator should be familiar with various modes of analgesia for the procedure.

e) The operator should keep thorough records and regularly audit his/her practice.

#### 3. Standards of Care

a) The operation should be undertaken in an environment capable of fulfilling guidelines for surgical procedures in children.

b) Adequate analgesia is essential. This involves systemic (oral) paracetamol and an adequate local anaesthetic. Sufficient time for the local infiltration to provide analgesia is crucial and this should be tested prior to conducting the circumcision.

c) There should be close links with the community, GP and hospital services for ongoing care and ease of referral if complications arise.

d) Regular audit of practice at individual level, trust level and in the community is essential.
1. THE NATURAL HISTORY OF THE FORESKIN

The fate of the foreskin has been well documented after the initial description by Gairdner in 1949. There is developmental variability in the appearance of the normal foreskin throughout childhood and puberty. The inner foreskin is attached to the glans. Foreskin adhesions break down and form smegma pearls - white cysts under the foreskin which are then extruded. The foreskin does not retract before the age of 2 years. The process of retractility is spontaneous and does not require manipulation. The majority of boys will have a retractile foreskin by 10 years of age and 95% by 16-17 years of age. Since 1996, there has been a decline in the number of children aged 0-14 treated by general surgeons with more children being seen by paediatric surgeons and paediatric urologists. Figures from the Department of Health demonstrate a reduction in paediatric surgical procedures from 30,000 per annum to nearer 20,000 per annum over a period of 10 years (Prof DFM Thomas- unpublished data). The decrease in the number of circumcisions may be due to the recognition that physiological phimosis - a healthy non retractile foreskin which pouts like a flower on gentle retraction - is normal.

2. COMMON FORESKIN CONDITIONS AND DISEASES ASSOCIATED WITH PRESENCE OF A FORESKIN

Common foreskin conditions

Balanoposthitis (Balanos greek for acorn, posthos greek for foreskin) is the term used for inflammation of both the glans and foreskin. It may present with dramatic swelling and erythema of the distal penis and foreskin associated with discharge, bleeding from the prepuce, dysuria, and occasionally urinary retention. It occurs in about 4% of uncircumcised boys between 2-5 years of age. The aetiology is unclear although infection, contact allergy and contact irritation have been described. Although balanoposthitis may be recurrent, the episodes decrease in frequency in older boys and reflect foreskin maturation.

Balanitis refers to inflammation of the glans that often spreads along the shaft and may occur in the circumcised population.

Posthitis refers to inflammation restricted to the foreskin itself.

Balanitis Xerotica Obliterans (BXO), a lesion akin to lichen sclerosus et atrophicus is the cause of true scarring of the foreskin i.e. pathological phimosis and the shutter type foreskin - no pouting of the inner foreskin on gentle retraction. It is rare before the age of 5 years and presents with discomfort on voiding and a white firm scarring of the foreskin tip. The aetiology is unknown but may be of viral origin. This condition may also affect the glans and urethra. Whereas there is a strong association between BXO in adults and penile carcinoma, there is no such evidence to link it as a precancerous condition in children because the majority of children with BXO have historically undergone a circumcision.

Paraphimosis results when the narrow tip of the foreskin is retracted behind the glans at the coronal sulcus causing oedema of the glans and foreskin and inability to manipulate the foreskin back over the glans.

A hooded foreskin is an abnormal dorsal hemiforeskin (the penis is anatomically described in the erect position) which is deficient ventrally and may or may not be associated with hypospadias.
Diseases associated with presence of a foreskin

Penile cancer

Cancer of the penis is extremely rare and was previously not documented in circumcised men. Several recently reported cases question the protective effect of circumcision on the development of penile cancer as an adult. Poor personal hygiene, smoking and exposure to wart virus (human papilloma virus) increase the risk of developing penile cancer at least as much as being uncircumcised.

Circumcised men are more at risk from penile warts than uncircumcised men, and the risk of developing penile cancer is now almost equal in the two groups. Routine circumcision in children cannot be recommended to prevent penile cancer.

Human immunodeficiency virus (HIV) infection

The results from existing observational studies showed a strong epidemiological association between male circumcision and prevention of HIV. These observational studies however were done in specific high risk groups. Randomised controlled trials are currently under way and the results are awaited. A Cochrane review found insufficient evidence to support an interventional effect of male circumcision on HIV acquisition in heterosexual men.

Cervical cancer

Several studies have shown an association between an increased incidence of human papilloma virus infection in heterosexual uncircumcised men with high risk activity (multiple sexual partners, avoidance of condoms) and cervical cancer. These studies are retrospective observational studies from different geographical areas with a variable incidence of cervical cancer. The current evidence is inadequate to recommend routine male circumcision as a preventive measure against cervical cancer.

Urinary tract infection (UTI)

Recent meta analysis, data on 402,908 children were identified from 12 studies (one randomised controlled trial, four cohort studies, and seven case-control studies). Circumcision was associated with a significantly reduced risk of UTI for all three types of study design. Given a risk in normal boys of about 1%, the number-needed-to-treat to prevent one UTI is 111. In boys with recurrent UTI or high grade vesicoureteric reflux, the risk of UTI recurrence is 10% and 30% and the numbers-needed-to-treat are 11 and 4, respectively.

3. TREATMENT OF CONDITIONS OF THE FORESKIN

Inflammatory conditions: Balanitis, Balanoposthitis, Posthitis: simple bathing, topical steroids and antibiotics. Circumcision may very rarely be considered if recurrent severe episodes of inflammation occur.

Physiological phimosis: No intervention is necessary. Topical steroid application to the preputial ring to treat ‘phimosis’ has reported success rates between 33% – 95% in various series but frequently authors fail to define the difference between a healthy non retractile foreskin and true BXO. A preputioplasty technique has been described with good results for the non-retractile foreskin though the authors gave no significant reason for intervention.

Pathological phimosis (BXO): Intralesional steroid injection, long term antibiotics, carbon dioxide laser therapy, a radial preputioplasty alone or with intralesional injection of steroid have all been described. There are no randomised trials to ascertain the efficacy and the long term outcome of these techniques.

Most paediatric urologists circumcise the foreskin for BXO. Once the range of treatment options are presented, the surgeon should express his or her own preference. If a surgeon is faced with a parent who refuses a conventional circumcision for BXO, but wishes for an alternative option, the surgeon is
at liberty to decline to treat. The surgeon then has a duty to offer a second opinion, although there is no obligation to find a colleague who is likely to advocate the alternative option.

**Paraphimosis:** Gentle compression with a saline soaked swab\(^{31}\) followed by reduction of the prepuce over the glans is usually successful. Alternatives include multiple punctures in the oedematous foreskin\(^{32}\) or injection of hyaluronidase\(^{31}\) prior to compression reduction. General anaesthesia may be required. Paraphimosis is not an indication for circumcision as after reduction, the foreskin continues to develop normally.

**Hooded foreskin:** A hooded foreskin without hypospadias is a cosmetic abnormality. Any therapeutic intervention should be undertaken after full discussion with both parents and may be a modified circumcision or foreskin reconstruction. Hooded foreskin with hypospadias needs treatment with correction of the hypospadias.

### 4. Circumcision: Background

Circumcision is a surgical procedure that involves partial or complete removal of the foreskin (prepuce) of the penis. Circumcision may be performed for therapeutic or non-therapeutic reasons and both are accepted practices within the U.K. provided certain standards are met\(^{33,91}\). There is as yet no policy for non-therapeutic or religious circumcision in the U.K. although a position statement was published by BAPS in 2001\(^{34}\).

#### 4a. British Medical Association (BMA) Guidelines 2006\(^{35}\):  
The BMA have set out guidelines with respect to both therapeutic and non-therapeutic circumcision. These guidelines discuss the issues mentioned below:

- Ethics and the law
- Consent and refusal
- Best interests
- Health issues
- Standards
- Facilities
- Charging patients
- Conscientious objection

A full discussion of the guidelines is beyond the scope of this document. The 2006 guidelines (*The law and ethics of male circumcision - guidance for doctors*) can be obtained from the BMA website ([www.bma.org.uk](http://www.bma.org.uk)).

With respect to consent the working party point out that having both parents consent for a therapeutic circumcision is not necessary. The legal purpose of consent is to provide the clinician with a defence against negligence and battery, so a single consent is valid. In non-therapeutic circumcision, the purpose of the second consent is to protect the second parent from having a procedure performed on their son of which they disapprove. At present case law is clear (Re J (Specific Issue Orders: Child's religious upbringing and circumcision) [2000]1 Family Law Report 571 Court of Appeal. Permission from both parents is required for non-therapeutic circumcision. Currently, the only way for the clinician to show that they have conformed to this is to get both parents to sign the consent form. However, legal advice has suggested that this position is open to challenge. In discussion with the wider membership of BAPU there was widespread support for the requirement for both parent's signatures, but this was not unanimous. Paediatric patient information documents for circumcision (ref PSO2) are available from EIDO Healthcare at [www.eidohealthcare.com](http://www.eidohealthcare.com).
4b. Anaesthesia and Analgesia for circumcision

(i) Anaesthesia

Modern general anaesthesia is extremely safe. However the risk of general anaesthesia will never be zero and is increased in infants. In two large series the risk of complications was significantly higher in infants than in children. Adequate analgesia must always be provided whether a general anaesthetic is being administered or not.

There is an increased risk from general anaesthesia in the neonatal period. According to the Royal College of Anaesthetists handbook, any general anaesthetic should be administered by an appropriately trained anaesthetist with ongoing relevant paediatric experience.

(ii) Analgesia

Introduction

Adequate analgesia for male circumcision is required and is the subject of 2 Cochrane reviews. In unanaesthetised neonates who underwent circumcision a rise in adrenal corticoids, skin flushing, vomiting and cyanosis, increases in crying, apnoea and choking and a pneumothorax have all been described. Increases in heart rate and respiratory rate with decreases in oxygen saturation have been recorded with inadequate analgesia. Infants who undergo circumcision show exaggerated pain behaviour to their routine immunisations during the ensuing six months when compared to uncircumcised control infants suggesting that they develop a ‘pain memory’ from an early age.

INTERVENTIONS

Non-pharmacological

In neonates, rocking, massage, tucking and cuddling reduce pain responses to invasive procedures. Music and heartbeat sounds have been shown to modulate pain perception. None of these seem adequate as stand alone methods of providing analgesia for neonatal circumcision and cannot be endorsed as such. These and similar methods may well have a role to play as adjunctive therapies.

Non-nutritive suckling

There are several trials comparing sugar solutions to water and or no treatment in neonatal circumcisions without general anaesthesia. Since a large range of concentrations (24-50%) and volumes (1.5 – 10 ml) were used across these studies it is hard to draw any firm conclusions. Heterogeneous outcome measures were used but, cry times and heart rate changes were not significantly different in the treatment groups when compared to the controls in the context of circumcision. This is not to say that non-nutritive suckling does not have a role to play as an adjunctive therapy.

Systemic analgesia

Paracetamol has been compared to placebo in two trials. Macke found a benefit from paracetamol compared to placebo but Howard found no difference between placebo and paracetamol as judged by a 20-point comfort score.

Parenteral opioids have been compared to caudal anaesthetics in older children having general anaesthetics for circumcision. Intramuscular codeine, fentanyl and paracetamol, intramuscular morphine, intravenous diamorphine and intramuscular buprenorphine have all been compared with caudal analgesia. In summary, parenteral opioids lead to a greater need for rescue analgesia than caudals and result in a higher incidence of nausea and vomiting.

Post-procedural analgesia should always be provided. The paracetamol dose should not exceed 60mg/kg/24 hours for neonates and 90mg/kg/24 hours for older children.
**Dorsal Penile Nerve Block (DPNB)**
The results of DPNB when used against active treatment controls are shown in the table below. Penile block is recommended as an effective means of providing analgesia. It should be noted that performance of this block requires training, and that it is generally best performed in the anaesthetised infant.

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### Comparison of active treatments versus DPNB in neonatal circumcision

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Outcome measure</th>
<th>Author(s)</th>
</tr>
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<tbody>
<tr>
<td>DPNB vs. EMLA</td>
<td>Lower pain scores and lower behvioural distress scores in DPNB.</td>
<td>Butler O'Hara 1998&lt;sup&gt;67&lt;/sup&gt; Howard 1999&lt;sup&gt;68&lt;/sup&gt; Lander 1997&lt;sup&gt;45&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Cry times not significantly different.</td>
<td></td>
</tr>
<tr>
<td>DPNB vs. sucrose</td>
<td>Lower pain behaviour scores in DPNB when 2 ml 50% dextrose used, less cry time</td>
<td>Kass 2001&lt;sup&gt;55&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>and lower heart rate.</td>
<td>Herschel 1998&lt;sup&gt;69&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Lower heart rate in DPNB when 10 ml 50% dextrose used.</td>
<td></td>
</tr>
<tr>
<td>DPNB vs. local block</td>
<td>1% lidocaine to foreskin. 2 injections: serum cortisol favoured local injection</td>
<td>Masciello 1990&lt;sup&gt;70&lt;/sup&gt;</td>
</tr>
<tr>
<td>DPNB vs. ring block</td>
<td>Cry time and heart rate not significantly different.</td>
<td>Lander 1997&lt;sup&gt;45&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

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**Bicarbonate solution**
Although there are theoretical advantages to adding bicarbonate to the local anaesthetic solution in any block in terms of decreasing the pain on injection and increasing the speed of onset of the block Stang et al<sup>56</sup> showed no advantage in doing this as judged by any of the outcome measures of heart rate, cry time, behavioural distress score or serum cortisol levels.

**Ring Block**
There are two trials comparing ring block to no treatment<sup>45,71</sup> the latter showing significantly lower heart rates in the treatment group and the former showing no difference in respiratory rate and oxygen saturation. When compared to EMLA there was no advantage versus ring block as judged by heart rate and cry time<sup>45</sup>.

A test of the adequacy of the block such as gently picking up the foreskin with forceps should always be undertaken prior to surgery and the operator should be satisfied that there is no pain response to this test.

**Caudal Epidural Block**
There is a reduced requirement for early post-operative rescue analgesia and less post-operative nausea and vomiting if a caudal is used.

Urinary retention and leg weakness are known complications of caudal block. All studies<sup>62,64</sup> comparing caudal block against other modes of analgesia for circumcision were in anaesthetised children.
Topical Analgesia

**EMLA**

Six studies compare EMLA (Eutectic Mixture of Local Anaesthetic) to placebo as cited in the Cochrane review by Brady-Fryer and colleagues. EMLA significantly reduced pain behaviour scores in most studies.

Heart rate was significantly reduced in the EMLA groups whereas respiratory rate and blood pressure were not.

There is risk of methaemoglobinaemia with the use of prilocaine (a constituent of EMLA) especially in neonates. Indeed the BNF for children 2005 does not recommend its use in neonates. It has been safely used for heel lancing in neonates on neonatal units. EMLA should not be used on open wounds or mucous membranes. EMLA cream should be allowed adequate time to take effect and one hour is regarded as the minimum.

**Amethocaine (tetracaine 4%) gel**

Like EMLA the BNF for children 2005 does not recommend the use of amethocaine gel in neonates although it is commonly used in this population. Repeated applications should be avoided.

Amethocaine only takes 30 minutes to become clinically effective and is thus twice as fast in onset as EMLA. A common practice is to apply topical local anaesthetic such as amethocaine gel half an hour before performing a deeper block such as DNPB or ring block thus helping to minimise the pain of injection of the deeper block.

**Lidocaine**

Three trials compare topical lidocaine to placebo. Cry time is significantly reduced by lidocaine. Oxygen saturations tend to be higher in the treatment groups but not statistically so.

Summary

It is essential to provide adequate analgesia when undertaking male circumcision. Dorsal nerve block and ring block are easy to perform and are effective. Adequate time needs to elapse after the block before surgery is started. Non-pharmacological methods and optimum treatment with systemic analgesics should also be employed.

4c. Complications of circumcision

Numerous techniques have been described for circumcision. This is achieved either by the freehand or sleeve technique, using a clamp or a plastibell device. Circumcisions performed in hospitals have a statistically lower complication rate than those in the community. These include bleeding, local sepsis, mental scabbing or stenosis, removal of too much skin or too little skin, urethral injury, amputation of the glans and inclusion cyst. Engorgement of the glans as a result of failure of the plastibell ring to fall off is well recognised and necessitates removal of the ring. An inappropriate circumcision in the presence of a penile abnormality such as a hypospadias can lead to long term morbidity. Griffiths et al in a prospective survey of hospital circumcision recorded the following complications: oozing in 36%, discomfort >7 days 26%, infection needing antibiotics 8.5% and haemorrhage in 1.5%. Kaplan noted the effect of the exposed glans to wet ‘diapers’ causing meatitis and mental ulcers.

There is conflicting evidence with respect to penile sensation, sexual function and satisfaction in adult men following circumcision.

4d. Governance Issues

In 1999 the Department of Health set out a white paper defining clinical governance in the NHS. This is maintained by regular audit, evidence based practice, Continuing Professional Development (CPD) and Research, risk management and clinical effectiveness. All medically qualified practitioners fall under this umbrella and are answerable to their peers.

The role of nurse practitioners in performing circumcision depends on their contractual position and...
consultant supervision. It is anticipated that liability would be shared between the employing trust and the operator, and only with the supervisor if it is 'just and reasonable' that they should share liability. Non medical personnel performing circumcisions in the community must obtain valid consent and have appropriate experience. There is a need for personal audit in these circumstances.

References

1. Gairdner D. The Fate of the Foreskin. BMJ. 1949; 2:1433-1437
2. Øster J. Further Fate of the Foreskin. Arch Dis Child. 1968; 43:200-3


ADDENDUM A  
Comment by Doctors Opposing Circumcision

This statement, Management of Foreskin Conditions, is a progressive move to reform the treatment of foreskin conditions. The statement favours conservative treatment over radical circumcision and should do much to promote genital integrity. We urge its speedy adoption.

Our comments are small ones:

Lawfulness. The lawfulness of non-therapeutic male circumcision is questionable under British law. Law professors Fox and Thomson recently argued that non-therapeutic male circumcision is unlawful under the Offences Against the Person Act 1861 after the House of Lords decision of R v Brown (1993)¹. Fox and Thomson argue that consent cannot excuse the practice of non-therapeutic circumcision because no one can consent to a criminal act¹. No court has ruled on this matter so this question remains unsettled.

Complications. Death is a possible outcome of male circumcision².

Natural history and development of retractile foreskin. This section provides newer and more accurate data. These data should greatly reduce the incidence of erroneous diagnosis of pathological phimosis in boys and adolescents.

Diagnosis and Treatment of Inflammation (Balanitis, Posthitis, and Balanoposthitis.) We would like to see greater emphasis placed on the importance of careful diagnosis, since these conditions have varied etiology, which require varied treatment³. Careful diagnosis is necessary to find the cause and select the appropriate treatment. The British Guidelines provide excellent information⁴. Diagnosis may include a patient history, physical examination, swab and culture, and biopsy¹⁴. The presence of infection with Candida Albicans should cause suspicion of diabetes mellitus¹. Recurrent mycotic infection may indicate a compromised immune system and dictate further investigation⁵.

References

ADDENDUM B
Comment on BAPS Statement on management of foreskin conditions 2006 from norm-UK

On the whole NORM-UK do not consider that this is a balanced view of the management of foreskin conditions, since they are looking at circumcision rather than the management of foreskin conditions.

It is pleasing to see that conservative management is stressed in the cases of balanitis/balanoposthitis, non-retractile foreskin and paraphimosis. With regard to circumcision, a realistic view of complication rates is mentioned. We also welcome your sensible, up to date view of the natural history of the foreskin.

It is also pleasing that the authors of report are not impressed by supposed prevention of penile cancer by circumcision. It is interesting however that they note increased risk of penile warts in circumcised men as compared with intact.

With regard to BXO, we would urge you to state that this is lichen sclerosus, rather than merely being akin to lichen sclerosis. We also believe that there is RCT evidence to support the efficacy of topical steroids for the treatment of lichen sclerosus. Lindhagen presented a prospective, randomised, double-blind study, although it is admittedly unclear as to whether those who were effectively treated actually had lichen sclerosus. Kiss and colleagues also presented a randomised, placebo controlled double blind study to show the effective treatment of “BXO” histopathology by mometasone furoate. At the very least this would seem to merit a recommendation for further research.

It is also pleasing that they are not impressed by claims that circumcision prevents cervical cancer in female partners. Unfortunately in this connection they have not questioned the ethics of performing surgery on a healthy child with a view to preventing disease in a third party at some distant time in the future on the assumption that the individual will go on to have a partner of the opposite sex. Setting aside that this is outside the scope of managing actual disease of the foreskin, it is surely an example of where a choice for circumcision could be made by a consenting adult rather than being imposed on an un-consenting child?

In the case of prevention of UTI the fact that it is necessary to operate on 111 infants to prevent one case of UTI is pretty clear evidence that circumcision should not be undertaken for this reason, particularly in view of the complication rates, which they report. However, they haven't pressed that conclusion clearly enough. It is also noteworthy that the one RCT to examine circumcision for the prevention of UTI in boys found that circumcision was not effective at reducing recurrences of UTI. While this was a study solely of boys having anti-reflux surgery for VUR, this is to the best of our knowledge the only published RCT to consider circumcision for prevention of UTI. It seems disingenuous to recommend circumcision in boys with VUR when the only RCT to have considered the matter shows that it doesn't work.

We note that in their discussion of the management of Hooded Foreskin, a congenital defect of cosmetic but not functional significance, the authors do not propose a course of management of waiting for the patient to be mature enough to express an opinion as to whether he wants surgical correction or not, which might be a suitable plan in some cases. We consider this to be an illustration of the wider question as to why male circumcision should be construed as a matter of personal choice as opposed a choice to be made by the individual affected when he is of sufficient age and maturity to make the choice for himself. We urge you to bear this in mind when you go on to consider religious circumcision.

Dr J Warren
Chairman
ADDENDUM C
Management of Foreskin Conditions: Statement from the British Association of Paediatric Urologists—Comments from a Muslim Male Religious Circumcision Practitioner

In my capacity as a General Practitioner who also serves my community with such a service, my comments will only concern ‘non-therapeutic ritual/religious’ circumcision.

I would like to make mention, again, that I do NOT ascribe to the view that a child should be circumcised simply to ‘look like his dad’- the main reason for circumcision in the States and elsewhere! I think this is a deplorable state of affairs! I have had to turn many parents away who come to me to have it done ‘because his dad is circumcised’! Circumcision been an irreversible procedure with attendant surgical/anaesthetic risks.

Specifically I would like to raise certain pertinent points under the headings Non Therapeutic ‘Ritual’ circumcision and Standards of Care of the associations draft statement.

‘The operator should have a full understanding of the risks and complications of the procedure and their management’ I assume this means the operator must be aware of the different management decision making processes when he / she encounters complications, as opposed to actually been able, skilled, and qualified to deal / handle any complications that may arise. Whereas some us may at the very least be ‘trained’ to perform circumcisions, most us are necessarily not trained to handle the more than simple, albeit uncommon, complications of circumcisions e.g., significant bleeder, significant infection, concealed penis, denuded penis, meatal stenosis, revision of circumcisions, urethrocutaneous fistula, etc. There was a G.M.C. case recently where it was felt that it was inappropriate and beyond the professionalism of the G.P. to manage a post-operative bleeder. The child should have been referred to hospital instead. This is in keeping with the very useful and almost pragmatic B.A.P.S guidelines and G.M.C guidelines on offering “appropriate after care” A lot of us who seek support or training have been either turned down (no PCT funding etc) or have had very “unsupportive” letters back. There is a lot of noise about protecting children and the welfare of children being paramount, but in reality, training/support is never forthcoming for those G.P.s who want to offer a circumcision service for the children amongst the 3,000,000 Muslims who live in the UK.

Even if help is offered, the conditions under which one will be trained would be that of a motionless, unconscious child with a low blood pressure: ie general anaesthetic. One should not underestimate the singular advantage this gives the operator. Community practitioners are faced with the singular hurdle of operating on a person with local anaesthesia with all its limitations, including a moving, slippery target. A lot of Paediatric surgeons/urologists have stated how difficult it is to operate on a moving target, and that they view with disbelief and awe how we manage to perform circumcision under L.A-(personal e-mail communications with >10 paediatric surgeons, including a professor of paediatric surgery).It would therefore not be unreasonable to form an opinion that community practitioners would legitimately have intra-/post operative outcomes not as favorable as those performed in hospitals.

Who then decides what an acceptable outcome in the community setting is? Throw in certain confounding variables: assent NOT consent, unlicensed usage of local anaesthesia, operators not been surgeons NOR trained properly, a contentious surgical technique, suboptimal anaesthetic conditions e.g. the child been awake! In medical malpractice litigation the standard of care is that degree of care which a reasonably prudent person in similar circumstances would be expected to exercise1-2. In view of the recent statement on Medical Expert Witness from the Academy of Medical Royal Colleges, it would be very difficult for a hospital paediatric surgeon to claim to pronounce on a case carried out by a community practitioner3. There being a difference between, reasonable, acceptable practice and
the Gold standard, as explained by Bolam and Bolitho. In terms of drawing up guidelines around religious circumcision it is unclear what benefit can be derived from such publications when such a position does not reflect the diversity of opinion and practice in the profession itself.

‘The operation should be undertaken in an environment capable of fulfilling guidelines for surgical procedures in children’. At a single stroke you will stop all qualified Jewish doctors, who are also Mohels, from performing home ceremonial religious circumcision on babies! It has been shown time and again that Jewish religious neonatal male circumcision can be carried out under aseptic technique, with minimal morbidity and mortality and primary healing. The singular advantage of neonatal circumcision is the reduced infective and technical burden. I am somewhat embarrassed to say the Muslim community, as far as I am aware, has no such internal system of training and accreditation and hence benchmarking.

There is ample work done to show that paediatric circumcision is a safe office procedure and not requiring an "environment capable of fulfilling guidelines for surgical procedure in children" This is neither necessary nor cost-effective. The bare minimum appears to be it must take place under hygienic conditions.

There is not much good research published to determine complications rates, especially when those done in the community are not often reported. A commonly quoted range is 2-10%. Looking at the international experience, complications rates are indeed quite high. But a casual review indicates that the operators are mainly non medics with no ideas of surgical technique or infection control.

The procedure itself is relatively straightforward: when this is done in hospital and so under general anaesthetic. To help prevent complications four principal factors have to be adhered to attention to aseptic conditions, adequate but not excessive excision of inner and outer preputial layers, meticulous haemostasis, and protection of glans and urethra.

References
5. Dr J Spitzer, The Surgery of Bris Milah. Published under the auspices of The Initiation Society, London. 1996
8. General Medical Council, Guidance for Doctors asked to circumcise male children: (procedure must take place in 'hygienic' conditions), September 1997.

10. Iftikhar Ahmad, Circumcision in babies and children with the Plastibell technique: an easy procedure with minimal complications. *Pakistan Journal of Medical Sciences*, 2004;20:175-180


17. Personal reply from the Department of Health to an e-mail, 7 June 2006.


**Dr Noor Ahmad**

G.P.

June, 2006
ADDENDUM D

Response to position statement from the Association of Reform & Liberal Mohelim

The ARLM is a group of doctors who perform religious, ritual and non-therapeutic circumcisions, mostly for the Jewish Reform & Liberal communities, but extending to other communities (non-Jewish) as well. We start from the premise that circumcision is required by our religion, is not illegal in this country, and therefore must be allowed. However, our particular association dictates that we must all be doctors, all trained to an appropriate level, and we all agree to abide by certain standards of performance and conduct in relation to circumcision.

All of the standards we agree to are encompassed in the GMC guidelines, and in particular we agree that the interest of the child are paramount, safe medical practice must be observed, and religious requirements must never override medical requirement when the safety of the child is at risk.

We believe that circumcision in the home is a safe procedure (having taken appropriate steps to ensure sterility of instruments etc) and analgesia is necessary, though can be provided by a variety of conventional medical approaches. Pre-op assessment, consent, method of circumcision, post-op care and note keeping must follow standard medical guidelines.

We disagree with the complication rates quoted in the position paper: home circumcision in the neonatal period does not produce the level of complications quoted, and we have yearly internal audits which can demonstrate this. The complication rate is only at the level quoted when older children, hospital circumcisions, medical (therapeutic) circumcisions and adult circumcisions are all mixed in the figures.

We therefore believe that circumcisions in the community can and should be a safe procedure, although would agree that standards (such as those drawn up by our association) should apply to all doctors performing circumcisions in the community. Those standards are more akin to minor surgery in General Practice that the standards that apply to hospital surgical procedures.

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