

ANAESTHESIA FOR RITUAL CIRCUMCISION IN NEONATES

Michael Rosen

▶ To cite this version:

Michael Rosen. ANAESTHESIA FOR RITUAL CIRCUMCISION IN NEONATES. Pediatric Anesthesia, 2010, 20 (12), pp.1124. 10.1111/j.1460-9592.2010.03445.x. hal-00594932

HAL Id: hal-00594932

https://hal.science/hal-00594932

Submitted on 22 May 2011

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Pediatric Anesthesia

ANAESTHESIA FOR RITUAL CIRCUMCISION IN NEONATES

Journal:	Pediatric Anesthesia
Manuscript ID:	PAN-2010-0379.R1
Manuscript Type:	Original Paper
Date Submitted by the Author:	06-Sep-2010
Complete List of Authors:	rosen, michael; University of Wales, Anaesthetics
Key Words:	neonatal, circumcision, ritual, anaesthesia

SCHOLARONE™ Manuscripts Professor Michael Rosen 45 Hollybush Road Cardiff CF23 6TZ

e-mail: rosen@mrosen.plus.com

Title: ANAESTHESIA FOR RITUAL CIRCUMCISION IN NEONATES

Author: PROFESSOR MICHAEL ROSEN RETIRED CONSULTANT ANAESTHETIST

ABSTRACT

Objectives

To ascertain whether there is medical and religious agreement that neonates being circumcised should have anaesthesia.

Aim

To enquire of paediatric and anaesthetic surgical bodies and religious authorities, the need for and any objections to, anaesthesia.

Background

Many neonatal circumcisions are still carried out without anaesthesia worldwide. Muslims are recommended to be circumcised but it is not a religious requirement. It can be carried out at any time, by a surgeon and anaesthetist. Jewish law requires circumcision (Bris) on the **eighth** day, by a Jewish circumciser (a mohel) and is usually, but not essentially, in the home.

Result

All the medical authorities agree that anaesthesia should be administered. Religious authorities cannot find any reasons to avoid anaesthesia. The 'any day' request for anaesthesia is difficult to meet with a shortage of paediatric anaesthetists. Local anaesthesia is suitable, but requires skills.

Conclusion

- 1. That anaesthesia should be provided for neonatal circumcision.
- 2. That there will be difficulties in providing a professional service.
- 3. That EMLA cream is the most practical, even if only partly effective.
- 4. A website demonstrating application to parents would encourage usage.

KEY WORDS: ANAESTHESIA: RITUAL CIRCUMCISION: NEONATAL

Professor Michael Rosen 45 Hollybush Road Cardiff CF23 6TZ

e-mail: rosen@mrosen.plus.com

Title: ANAESTHESIA FOR RITUAL CIRCUMCISION IN NEONATES

Author: PROFESSOR MICHAEL ROSEN RETIRED CONSULTANT ANAESTHETIST

ABSTRACT

Objectives

To ascertain whether there is medical and religious agreement that neonates being circumcised should have anaesthesia.

Aim

To enquire of paediatric and anaesthetic surgical bodies and religious authorities, the need for and any objections to, anaesthesia.

Background

Many neonatal circumcisions are still carried out without anaesthesia worldwide. Muslims are recommended to be circumcised but it is not a religious requirement. It can be carried out at any time, by a surgeon and anaesthetist. Jewish law requires circumcision (Bris) on the **eighth** day, by a Jewish circumciser (a mohel) and is usually, but not essentially, in the home.

Result

All the medical authorities agree that anaesthesia should be administered. Religious authorities cannot find any reasons to avoid anaesthesia. The 'any day' request for anaesthesia is difficult to meet with a shortage of paediatric anaesthetists. Local anaesthesia is suitable, but requires skills.

Conclusion

- 1. That anaesthesia should be provided for neonatal circumcision.
- 2. That there will be difficulties in providing a professional service.
- 3. That EMLA cream is the most practical, even if only partly effective.
- 4. A website demonstrating application to parents would encourage usage.

KEY WORDS: ANAESTHESIA: RITUAL CIRCUMCISION: NEONATAL

Introduction

Ritual circumcision is carried out for religious reasons upon 1.5 million Muslims (UK about 15,000) and 100,000 Jews (UK about 1000) males worldwide each year. A Muslim circumcision is not a requirement but a recommendation, **it** may be carried out within seven days of birth, but can be at any time and can be carried out with anaesthesia in a hospital or other location. There are no religious barriers to anaesthesia or surgery, and prayers are not required at the operation. The only problem therefore may be cost.

For Jews, circumcision (Bris) is a religious requirement, based on the law (Torah) Genesis 17:10-14. "Every male among you shall be circumcised". If the baby is well, it has to be carried out on the **eighth** day after birth (day one being the day of birth) by a circumciser (a mohel). The mohel, who acts as locum for the father, should be a religious Jew. The technique of circumcision is prescribed. The prepuce is drawn from the glans, a shield is placed over the glans and with one sweep of a scalpel the foreskin is excised. The remains of the foreskin is pulled back to expose the glans fully. The bleeding is controlled and a dressing is applied. The procedure takes about **one to two** minutes and the incision seconds.

As in many religions there is a spectrum of practices and observances between ultra orthodox, orthodox, reform and liberal congregations. Generally more conservative views about change are held by the more orthodox.

In the UK orthodox mohels are trained and licenced jointly by the Initiation Society of Great Britain and the London Beth Din (Court of the Chief Rabbi); most are doctors or rabbis. Reform and Liberal mohelim are trained by the Association of Reform and Liberal Mohalim; all are doctors. The licensees have indemnity insurance. Circumcision is usually performed without anaesthesia in the home (often a little wine is sucked as sedation) in the presence of family members, followed by a celebratory meal.

Before 1987 most medical authorities accepted that neonates did not recall pain and that anaesthesia was not important.[1] Some thoracic operations were carried out with muscle relaxants and oxygen. Anaesthesia and analgesia are now always used for surgery and in the intensive care units for neonates. Ritual circumcision is the only operation on the newborn carried out without anaesthesia. Furthermore there is evidence that the pain of circumcision has long lasting effects on the nervous system [2]. This paper investigates the reasons for not using anaesthesia and attempts to provide advice on the issues.

Methods

Enquiries were made of:

- a) Medical Authorities for their opinions as to the necessity for anaesthesia. The bodies were The Royal College of Child Health and Paediatrics, the Royal College of Anaesthetists, the Association of Anaesthetists of Great Britain and Ireland, the British Association of Paediatric Surgeons, the British Association of Paediatric Anaesthetists, the American Society of Anesthesiologists and the Israel Society of Anesthesiologists.
- b) The General Medical Council as to whether an anaesthetist could work with a licenced mohel.
- c) Religious authorities, ultra orthodox, orthodox and reform and liberal in the UK, USA and Israel, were asked what if any objections there were to anaesthesia for circumcision.
- d) Information was sought among a few mohelim about current practices of anaesthesia, sedation and pain relief.



Results

- a) All the medical authorities agreed that anaesthesia was indicated and should be administered for neonatal circumcision.
- b) The General Medical Council believed that it would be appropriate for an anaesthetist to conduct anaesthesia for a licenced mohel.
- c) A recent analysis of Jewish law by Professor A Steinberg, a medical ethicist, an orthodox rabbi, and an Israel Prize Laureate, concluded that there is no source which requires pain for circumcision [3]. Indeed the relief of pain in child birth is allowed as well as for the terminally ill. In recent years the Israeli Chief Rabbinate approved general and local anaesthesia for over 3,000 Russian adults having circumcision. [3].
 - Similar opinions were expressed by the London Beth Din (Orthodox), Chabad USA (Ultra orthodox), the Israeli Chief Rabbinate (Orthodox) and the Reform and Liberal authorities. Anaesthesia is permitted; but some authorities express concern about its safety in neonates.
- c) Many mohelim permitted the parents to apply EMLA cream, although a few commented on a change in texture of the skin and occasionally, allergic reactions requiring cancellation of the procedure. Now that EMLA is licenced for use in neonates, more mohelim recommend its use, although they complain about the one hour duration of onset time. Some medically qualified mohelim use local block anaesthesia, especially in the USA where many are paediatricians as well. None appeared to have had specific training in local anaesthetic technique, except possibly from each other.

Discussion

There can be no compromise with safety. In the UK, we have decided that children's anaesthesia should be administered by specially trained anaesthetists as part of a consultant paediatric service. Therefore anaesthesia for neonatal ritual circumcision, general or local, [4] [5] should be administered by a paediatric anaesthetist with appropriate anaesthetic monitoring, resuscitation equipment and drugs, supported by trained staff and accompanying facilities. This will be available in a hospital treating neonates in the health service or private sector. However at present research is being undertaken into the safety of general anaesthetics in neonates. Until this is resolved it is unwise to use general anaesthesia for healthy neonates [6] [7]. Local anaesthesia, penile block or infiltration are used, however it is more difficult to carry out these blocks on an awake baby. Some mohelim, too, claim that the needle is as bad as (or worse) than an efficient circumcision! This pain can be prevented with the use of anaesthetic cream. Penile block has an incidence of failures which are increased during the learning curve [8]. Therefore some paediatric anaesthetists use caudal or spinal anaesthesia. Teaching local anaesthetic techniques is difficult, and may grow more so because of ethical considerations.

There are, too, practical problems for hospitals. It is a religious occasion. Therefore the licenced mohel must be acceptable to the hospital, permitted to carry out the circumcision, and to recite prayers in the presence of the father and a few other male members of the family or community. The requirement to carry out circumcision on the **eighth** day will be organisationally difficult on weekends and public holidays, and would require use of the emergency service. It will be necessary, therefore, for Jewish congregations to discuss with the NHS and private hospitals, whether and how this can be arranged; and at what cost.

In the USA, some medical mohels (e.g. paediatricians) administer local anaesthetic – nerve blocks or infiltration, in the home. This would be difficult in the UK because of an insufficiency of trained paediatric anaesthetists. Maybe doctor mohelim could be trained, although there are no courses at present and they would be difficult to arrange. Possibly simulation models can be developed for practice. Even so it would be advisable to introduce quality control [8] and a system for recording complications.

A simple solution might appear to be the sole use of an anaesthetic cream. EMLA is now licenced in the UK(September 2008) for circumcision in neonates in a dose of 1g. A Cochrane Report [9] concludes that EMLA reduces the heart rate, increases the oxygen saturation, reduces the crying time; but does not provide full anaesthesia. The use of EMLA undoubtedly does help to reduce pain during circumcision and probably postoperatively [10,11]. It is already used by many mohelim. Ametop (4% tetracaine) cream, although not licenced for neonates, is used by some mohelim because of its shorter onset time (30 minutes). These creams are applied to the skin surface and therefore do not block the mucous surface. So anaesthesia is partial. Besides that there is variability in the methods of applying EMLA and the duration of application. It is proposed by Astra Zeneca to set up a website (EMLA/Circumcision) to describe best practice and to teach parents to apply the cream to save the time of the mohel.

Sucrose in solutions of 12½% up to 50% is used on a dummy (pacifier) dipped in the solution. Results appear to be very similar to EMLA, and it may be used with EMLA [10][11].

All are agreed it is important to ensure that pain relief postoperatively is adequate with the use of analgesics (e.g. paracetamol 10mg/kg, (acetaminophen)) [12] starting before the circumcision.

CONCLUSIONS

1) Mohelim

Ensure parents know how to apply EMLA – starting 1½ hours before circumcision. Use oral sucrose or glucose with a dummy (pacifier).

At the same time, advise paracetamol 30mg (10mg/kg) orally (repeated 4 hourly after circumcision).

2) Medical Mohelim

Additional, if trained, use local anaesthetic block or infiltration.

3) <u>Paediatric Anaesthetists</u>

Consider also, caudal or spinal anaesthesia.

4) I believed that the main problem would be religious objections to anaesthesia. This did not prove to be very difficult. However, it seems that there is no perfect anaesthetic solution which combines safety, effectiveness, cost and convenience. That is somewhat disappointing and will remain a challenge for the specialty.

ACKNOWLEDGEMENTS

I thank Dr. Kester Brown, Professor David Hatch, Dr. Peter Lloyd Jones, Dr. Peter Morris, Dr. Neil Morton and Professor Avraham Steinberg for helpful advice. They are not, however, responsible for my opinions or conclusions.



REFERENCES

- 1. Anand KJS and Hickey P.R. Pain and its effects in the human neonate and fetus. *New England Journal of Medicine* 1987; 317:1321-1329.
- 2. Taddio A, Katz.J, Ilersich, AL, Koren G. Effect of neonatal circumcision on pain response during subsequent routine vaccination. *Lancet* 1997; 349:599-603.
- 3. Steinberg A. Anesthesia in circumcision Medical and halachic consideration. *Jewish Medical Ethics* 2007; 6:15-25.
- 4. Brown TCK, Eyres RI, McDougall **R.J**. Local and regional anaesthesia in children. *British Journal of Anaesthesia* 1999; 83: 65-77.
- 5. Brown TCK, Weidner NH, Bouwmeester N. Dorsal nerve penis block anatomical and radiological studies. *Anaesthesia and Intensive Care* 1989; 17:34-38.
- 6. Mellon RD, Simone AF, Rappaport BA. Use of anaesthetic agents in neonates and young children.

 Anesthesia and Analgesia 2007; 104:509-520
- GAS STUDY: Effects of anaesthesia on neurodevelopment, outcome and apnoea in infants.
 www.controlled-trials.com/isrctn12437565/Gas
- 8. Schuepfer G, Johr M. Generating a learning curve for penile blocks in neonates, infants and children: an empirical evaluation of technical skills in novice and experienced anaesthetists.

 Paediatric Anaesthesia 2004: 14: 574-578.
- 9. Brady-Fryer B, Wiebe N, Lander JA. Pain relief for neonatal circumcision. *Cochrane Database of Systematic Reviews* 2004, Issue 3. Art. No: CD004217. DOI: 10.1002/14651858. CD004217.pub2.
- 10. Mohan CG, Risucci, DA, Casamir M, Gulrajani LaCorte M. Comparison of analgesics in ameliorating the pain of circumcision. *Journal of Perinatology*. 1998; 18: 13-19.
- 11. Godbole P, Duffy P, Boddy S.A, MacKinnon E, Baillie A, Wheeler R, Thomas M, Patel K. Management of foreskin conditions: British Association of Paediatric Urologists on behalf of British Association of Paediatric Surgeons and the Association of Paediatric Anaesthetists.

 www.baps.org.uk/documents/Circumcision 2007
- 12. Atkinson P, Chesters A, Heinz P. Pain management and sedation for children in the emergency department.

 British Medical Journal 2009; 339: b4234.