

AMERICAN SOCIETY FOR
Pain Management

Nursing

P.O. Box 15473 ❖ Lenexa, Kansas 66285-5473 ❖ 913/895-4606 ❖ aspmn@goamp.com

Position Statement

Male Infant Circumcision Pain Management

Position Statement:

The American Society for Pain Management Nursing (ASPMN) holds the position that nurses and other healthcare professionals must provide optimal pain management throughout the circumcision process for male infants. Parents must be prepared for the procedure and educated about infant pain assessment. They must also be informed of pharmacologic and integrative pain management therapies.

Definition of Circumcision:

Infant circumcision (Latin *circumcido* to cut around) is defined as an operation to remove part or all of the prepuce (free fold of skin that covers the glans penis). (Stedman's, 2006)

Background:

American Academy of Pediatrics (AAP) Circumcision Policy Statement:

While scientific evidence suggested potential medical benefits of newborn male circumcision, in 1999 the American Academy of Pediatrics stated that these findings are not sufficient to recommend routine infant circumcision. This AAP Policy Statement was reaffirmed in 2005. Parents determine what is in the best interest of their child, thus they may choose circumcision for their male infant because of cultural, religious or ethnic traditions. Therefore, "if a decision for circumcision is made, procedural analgesia should be provided" (AAP, 1999, p. 691; AAP, 2005; AAP & APS, 2001).

According to the American Academy of Pediatrics (AAP, 1999; AAP, 2005) there is solid evidence that male infants who undergo circumcision without the benefits of analgesia experience physiologic stress and pain. Unrelieved pain during circumcision can result in negative physiologic stress responses such as changes in heart rate and blood pressure, apnea, cyanosis, and decreases in cortisol level and oxygen concentration (AAP, 1999; Anand, et al. 2005; Berde & Sethna, 2002). In addition, male infants who are circumcised without analgesia may exhibit a stronger pain response to routine immunizations (Taddio, et al. 1997).

Elaborated Position Statement:

ASPMN recognizes infant circumcision is a painful procedure. The Society further recognizes infants have a right to adequate pain management. Therefore, as healthcare professionals, we are obligated to provide appropriate pain management before, during, and after infant circumcision. Parents must be prepared for the procedure and educated about infant pain assessment. They must also be informed of pharmacologic and integrative pain management therapies.

Ethical Considerations:

Infants are considered a vulnerable population and under the ethical principle of respect for persons there is a moral duty to protect them (National Commission for the Protection of Human Subjects: Belmont Report, 1979). The ethical principle of autonomy does not apply to an infant, but rather to the parents/guardians in the stead of the child. Autonomy encompasses veracity (telling the truth), respect for preferences, and honoring of values (Jonsen, Siegler, & Winslade, 2010). As part of the process of providing informed consent, provision of complete and accurate information regarding the risks and benefits of circumcision is essential. Parental decision regarding circumcision should not be coerced (AAP, 1999). Healthcare professionals are obligated to abide by the ethical principle of beneficence, the duty to benefit another, and in the instance of circumcision to provide optimal analgesia. The principle of nonmaleficence is the duty to do no harm. Thus, it is paramount to prevent the harm of inadequate analgesia before, during, and after circumcision. Justice implies that **every** infant be treated equally and have equal access to optimal analgesia during and following circumcision.

Recommendations for Practice:

It is acknowledged that the following recommendations may be modified according to institutional policies; however, strong consideration must be given to the evidence supporting multi-modal approaches to circumcision pain management in clinical practice (Taddio, 2001; Taddio, Pollock, Gilbert-MacLeod, Ohlsson, & Koren, 2000).

Nursing Practice:

At least two hours prior to procedure:

- Verify infant feeding/NPO status per institutional policy
- Administer pre-emptive analgesic (acetaminophen)
- Apply pre-emptive topical anesthetic cream in advance according to product instruction
- Hold and comfort infant (breast feed if possible) while supplies are gathered
- Position infant in semi-recumbent position on a padded surface with arms swaddled
- Maintain thermoregulation of the environment to prevent cold stress

During procedure:

- Analgesic/Comfort Techniques: in addition to at least one anesthetic
 - Administer 24% sucrose or breast milk orally 2 minutes before penile manipulation
 - Pacifier for non-nutritive sucking, if sucrose or breast milk contraindicated

Following procedure:

- Remove infant from restraint immediately, soothe, and return to parent
- Continue oral acetaminophen around the clock for at least 24 hours
- Instruct family on administration of acetaminophen
- Instruct family on circumcision care
- Instruct family on infant pain assessment and management

Prescriber/Provider Practice:

Prior to Procedure:

- Oral acetaminophen 15mg/kg one hour prior to procedure
- Topical anesthetic cream (applied in advance according to product instruction procedure):

During Procedure:

- Analgesic/Comfort Techniques: in addition to anesthetic options
 - 24% sucrose or breast milk orally 2 minutes before penile manipulation
- Anesthetic Options:
 - Topical anesthetic cream
 - Injectable Anesthetics: Injection techniques should use slow injection speed, small-gauge needle, warmed solution (Geyer, Ellsbury, Kleiber, Litwiller, Hinton, & Yankowitz, 2002)
 - Subcutaneous block (circumferential at midshaft or at the level of the corona at 10 and 2 o'clock positions):
OR
 - Dorsal penile nerve block

Choice of anesthetic technique may be at the provider's choice (based on skill and experience) as both techniques are supported in the literature. The AAP (1999) recommends the subcutaneous ring block while the Cochrane Review by Brady-Fryer, Wiebe, and Lander (2004) recommends the dorsal penile nerve block, while acknowledging the subcutaneous ring block technique may be safer for the infant and easier to administer.

Following Procedure:

- Continue oral acetaminophen (15mg/kg) around the clock every 4-6 hours for at least 24 hours.

Institutional Recommendations:

Establish policies or protocols to make certain no infant undergoes circumcision without appropriate comfort measures, analgesia, and anesthetic. This is more likely to occur by involving key stakeholders such as:

- Clinical Practice Committees responsible for the practice of nurses, pharmacists, and any provider who performs circumcision.
- Pharmacy and Therapeutic Committees
- Quality Assurance professionals

Ensure appropriate medications, equipment, environmental factors, and staff are available and prepared to provide safe care for infants undergoing circumcision.

Summary:

ASPMN strongly recommends that infants who are being circumcised must receive optimal pain management. "If a decision for circumcision is made, procedural analgesia should be provided" (AAP, 1999, p. 691). Therefore, it is the position of ASPMN that optimal pain management must be provided throughout the circumcision process. Further, parents must be prepared for the procedure and educated about infant pain assessment. They must also be informed of pharmacologic and integrative pain management therapies prior to, during and after the procedure.

References:

- American Academy of Pediatrics Task Force on Circumcision. (1999). Circumcision policy statement. *Pediatrics*, 103(3), 686-693. Reaffirmed (2005).
- American Academy of Pediatrics & American Pain Society. (2001). The assessment and management of acute pain in infants, children, and adolescents. *Pediatrics*, 108, (3), 793-797.

- Anand, K., Johnston, C., Oberlander, T., Taddio, A., Lehr, V., & Walco, G. (2005). Analgesia and local anesthesia during invasive procedures in the neonate. *Clinical Therapeutics*, 27 (6), 844-876.
- Berde, C. & Sethna, N. (2002). Analgesics for the treatment of pain in children. *New England Journal of Medicine*, 347 (14), 1094-1103.
- Brady-Fryer, B., Wiebe, N. & Lander, J. (2004). Pain relief for neonatal circumcision. *Cochrane Database of Systematic Reviews*, (3), CD004217.
- Geyer, J., Ellsbury, D., Kleiber, C., Littwiller, D., Hinton, A., & Yankowitz, J. (2002). An evidence-based multidisciplinary protocol for neonatal circumcision pain management. *JOGG: Journal of Obstetric, Gynecologic & Neonatal Nursing*, 31(4), 403-410.
- Jonsen, A. R., Siegler, M., & Winslade, W. J. (2010). *Clinical ethics: A practical approach to ethical decisions in clinical medicine* (7thed.). New York: McGraw-Hill.
- National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). The Belmont Report: Ethical principles and guidelines for the protection of human subjects of research. DHEW Publication No 78-00 (OS). Washington, D. C.: Department of Health, Education, and Welfare Publication.
- Stedman's Medical Dictionary. (2006). Baltimore, MD: Lippincott Williams & Wilkins.
- Taddio, A. (2001). Pain management for neonatal circumcision. *Pediatric Drugs*, 3(2), 101-111.
- Taddio, A., Katz, J., Ilersich, A., & Koren, G. (1997). Effect of neonatal circumcision on pain response during subsequent routine vaccination. *Lancet*, 349, 599 – 603.
- Taddio, A., Pollock, N., Gilbert-MacLeod, C., Ohlsson, K., & Koren, G. (2000). Combined analgesia and local anesthesia to minimize pain during circumcision. *Archives of Pediatric & Adolescent Medicine*, 154 (6), 620-623.

Suggested Readings:

- Agency for Healthcare Policy and Research. (1992). Acute pain management: Operative or medical procedures and trauma. Clinical practice guideline AHCPR Pub No. 92-0032. Rockville, MD: Author.
- Anand, K.J.S. (1995). Analgesia and sedation in ventilated neonates. *Neonatal Respiratory Disease*, 5, 1-11.
- Anand, K.J.S., & Hickey, P.R. (1987). Pain and its effects in the human neonate and fetus. *New England Journal of Medicine*, 317, 1321.
- Anand, K.J.S. & The International Evidence-based Group for Neonatal Pain. (2001). Consensus statement for the prevention and management of pain in the newborn. *Archives of Pediatric and Adolescent Medicine*, 155, 173-180.
- British Medical Association. (2004). The law and ethics of male circumcision: Guidance for doctors. *Journal of Medical Ethics*, 30, 259-263.
- Harrison, D., Loughnan, P., Manias, E., Gordon, I., & Johnston, L. (2009). Repeated doses of sucrose in infants continue to reduce procedural pain during prolonged hospitalizations. *Nursing Research*, 58 (6), 427-434.
- Harrison, D., Stevens, B., Bueno, M., Yamada, J., Yamada, J., Adams-Webber, T., Beyene, J., & Ohlsson, A. (2010). Efficacy of sweet solutions for analgesia in infants between 1 and 12 months of age: A systematic review. *Archives of Disease in Childhood*, 95, 406 – 413.
- Joyce, B., Keck, J., & Gerkenmeyer, J. (2001). Evaluation of pain management interventions for neonatal circumcision pain. *Journal of Pediatric Health Care*, 15 (3), 105-114.
- Kraft, N. (2003). Foundations of newborn care: A pictorial and video guide to circumcision without pain. *Advances in Neonatal Care*, 3 (2), 50-64.
- Lander, J., Brady-Fryer, B., Metcalfe, J. B., Nazarali, S., & Muttitt, S. (1997). Comparison of ring block, dorsal penile nerve block, and topical anesthesia for neonatal circumcision. *Journal of the American Medical Association*, 278, 2157-2162.

- Lerman, S. E., & Liao, J. C. (2001). Neonatal circumcision. *Pediatric Clinics of North America*, 48, 1539-1557.
- Macke, J. K. (2001). Analgesia for circumcision: Effects on newborn behavior and mother/infant interaction. *JOGGN: Journal of Obstetric, Gynecologic & Neonatal Nursing*, 30 (5), 507-514.
- Masciello, A. L. (1990). Anesthesia for neonatal circumcision: Local anesthesia is better than dorsal penile nerve block. *Obstetrics and Gynecology*, 75, 834-838.
- Maxwell, L. G., Yaster, M., Wetzel, R. C., & Niebyl, J.R. (1987). Penile nerve block for newborn circumcision. *Obstetrics & Gynecology*, 70(3), 415-419.
- Meyer, W. J., Nichols, R. J., Cortiella, J., Villarreal, C., Marvin, J. A., Blakeney, P. E., et al. (1997). Acetaminophen in the management of background pain in children post-burn. *Journal of Pain and Symptom Management*, 13, 50-55.
- Razmus, I., Dalton, M., & Wilson, D. (2004). Practice applications of research: Pain management for newborn circumcision. *Pediatric Nursing*, 30(5), 414-417.
- Ridings, H., & Amaya, M. (2007). Male neonatal circumcision: An evidence-based review. *Journal of the American Academy of Physician Assistants*, 20(2), 32-34.
- Simpson, K. R. (2006). Circumcision pain management. *Maternal Child Nursing*, 31, 276.
- South, M., Strauss, R., South, A., Boggess, J., & Thorp, J. (2005). The use of non-nutritive sucking to decrease the physiologic pain response during neonatal circumcision: A randomized controlled trial. *American Journal of Obstetrics and Gynecology*, 193, 537-543.
- Van Howe, R. & Svoboda, S. (2008). Neonatal pain relief and the Helsinki Declaration. *Journal of Law, Medicine & Ethics*, 36 (4), 803-823.
- Wang, M., Macklin, E., Tracy, E., Nadel, H., & Catlin, E. (2010). Updated parental viewpoints on male neonatal circumcision in the United States. *Clinical Pediatrics*, 49 (2), 130-136.

Susan O'Conner-Von PhD, RN
Helen Turner DNP, RN-BC, PCNS-BC
Revised July, 2011

Original version: October, 2001
Renee Manworren, MS, RN, CNS
Sarah Leahy, BA, RN, RSCN