Neonatal Nurse Practitioner-Performed Circumcisions

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Circumcision is a practice that dates back to Biblical times. It involves the removal of the foreskin that covers the glans penis. Circumcisions are typically performed in the hospital by a Physician, Nurse Practitioner, or Mohel that has been granted hospital privileges. There are a number of different instruments used to perform circumcision, including Gomco, Plastibell, and Mogen clamp devices. Reportedly, in practices across the state of Texas, Nurse Practitioners are being required to perform circumcisions more frequently than in years past. This change in practice raises a number of questions, including standard training with regard to learning the skill of circumcision, appropriate preceptor identification and the number of circumcisions required and qualifications for credentialing. This article will discuss the process of obtaining consent for circumcision, as well as establish standard contraindications, complications, and adverse outcomes requiring emergent intervention. Additionally, this article will include a description of performing a circumcision utilizing a Gomco clamp, and practice-specific steps to obtaining privileges for circumcision.

In order to obtain consent for infant circumcision, the Nurse Practitioner must understand the indications, contraindications, complications, and need for emergent intervention. Currently, the primary indication for circumcision is parental request. Thus, when obtaining consent, it is common to review with the parents that circumcision is not medically necessary, and is request-driven (Lannon, Bailey, & Fleischman, 1999, p. 686). Other rare indications include phimosis, paraphimosis, or balanitis (Angel, Maddox, & Rosenkrantz, 2011, p. 3). Some suggested benefits of circumcision include a primary reduction in urinary tract infections (Wiswell & Hachey, 1993, p. 4), management of sexually transmitted disease (Weiss, Quigley, & Hayes, 2000, p. 2361)(Bailey, Neema, & Othieno, 1999, p. 294), and a possible decrease in penile cancer (Schoen, 2006, p. 385).

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Letter from the President

I hope your Summer has been filled with fun, relaxation, vacations and spending time with family and friends. It’s time once again for back-to-school activities, tailgating, football and Fall festivities. It’s my favorite time of year because our 23rd FANNP Symposium is just a few short weeks away! Our registration numbers are growing daily, but we still have room for more attendees. So, if you haven’t registered yet, now is the time! You can register easily and quickly using our website at www.fannp.org. Remember to encourage all of your NNP students, new graduates and fellow colleagues to attend. The opportunities for learning and networking are immense! Whether you are seeking employment, looking to hire new or experienced NNPs, hoping to establish professional friendships, or simply eager to refresh or obtain new knowledge, this is the conference for it all...not to mention the beach, sunshine, and incredible sunsets! In your conference activity planning, be sure to register for the FANNP Brunch on Thursday. In addition to the phenomenal food, the Brunch facilitates an opportunity for our members to assemble and share valuable input regarding how to strengthen the mission and goals of our organization. Also, you do not want to miss the 80’s-themed beach party! It’s the time to just have some plain ole fun! Whatever your conference activity choices, we promise a memorable time. Remember..."A day without laughter is a day wasted" (Charlie Chaplin).

See you in October!

Terri Marin, PhD, NNP-BC
President, FANNP

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Having a good time at FANNP’s annual Conference...  
Join us this year at the 23rd National Neonatal Nurse Practitioners Symposium: Clinical Update and Review  
October 16-20, at the Sheraton Sand Key Resort, Clearwater Beach, Florida
FANNP Brag Board

FANNP is very fortunate to be associated with and supported by a multitude of talented and professional Practitioners who continually grow and develop themselves. The purpose of the "Brag Board" is to call attention to achievements such as acceptance by a professional organization for poster presentations, completing an MSN, DNP or PhD program, passing the NCC exam, acceptance to be published in a professional publication, or even survival of one's dissertation defense. The FANNP would like to recognize the following individuals for their recent accomplishments:

On May 3, 2012, Melissa Lopez, MSN, NNP-BC graduated from the University of Missouri in Kansas City and successfully passed her NCC board certification exam on July 19, 2012. She has recently accepted a position at All Children's Hospital, located in St. Petersburg, FL. Melissa attended the FANNP conference in 2011, and found it to be a great preparation resource for her board exam.

On May 4, 2012, Jillian Aschenbrenner, MSN, NNP-BC graduated from the University of Florida in Gainesville and successfully passed her NCC board certification exam on July 5, 2012. She also recently accepted a position at All Children's Hospital's NICU in St. Petersburg, FL. Jillian attended the 2011 FANNP conference with Melissa Lopez in preparation for her board examination. Jillian is excited about her new position and developing her skill set as a new NNP.

On August 11, 2012, Patrice Rogers, MSN, NNP, graduated from the University of Florida's School of Nursing with her MSN degree. She is currently studying for the NCC exam. Patrice hopes to find a position in the Central Florida area and is looking forward to utilizing her many years of dedicated nursing experience in beginning her career as an NNP.

In honor of the 40th anniversary of the opening of the University of Tennessee, Knoxville's College of Nursing, Dr. Terri Marin, PhD, NNP-BC was selected as a recipient of the 'Fabulous 40 Nursing Alumni Award'. The award identifies forty outstanding alumni who were nominated and selected because of how they make a difference in the lives of individual patients, organizations, and/or the community. The awardees will be recognized at the 4th Annual Nightingale Gala for EXCELLENCE in nursing and healthcare, LEADERSHIP in advancing the nursing profession and INNOVATION in professional nursing.

Congratulations and strong work to all of our June graduates, Jillian Aschenbrenner, NNP, Melissa Lopez, NNP, Patrice Rogers, NNP and Dr. Terri Marin, NNP for their exciting accomplishments! Do YOU have an exciting professional accomplishment you would like to share with us? If so, please email TiffanyGwartney@gmail.com with submissions.

Thank you!
CIRCUMCISIONS
Continued from page 1

In addition, the Nurse Practitioner must ensure that the patient has no contraindications to circumcision. These include prematurity, concealed or buried penis, webbed penis, chordee, hypospadias, epispadias, micropenis, or ambiguous genitalia (Angel et al., 2011, p. 3). Although bleeding diathesises are not absolute contraindications, they should be discouraged. The most common complications of infant circumcision include bleeding, infection, removal of too much or too little foreskin, and poor cosmetic appearance. After circumcision is complete, the parents should be concerned about excessive bleeding, whether the infant has voided, persistent or increased redness or swelling, yellowish discharge or coating after seven days, or a temperature of 100.4 or greater. Mild swelling, a small amount of bleeding and the formation of a clear film formed over the glans penis are normal findings. In most cases, the circumcision will heal normally within five to seven days.

Frequently, selection of the type of circumcision clamp utilized is Practitioner-specific. A student thereby learns the skill of circumcision utilizing the preceptor’s device of choice. Once consent is obtained, the patient is given Sweet-ease oral sucrose, and secured to a standard circumcision board. Pain medication is then administered via subcutaneous injection of Lidocaine to the foreskin enveloping the glans penis. Lidocaine can also be injected to achieve a dorsal penile nerve block. Additionally, EMLA cream can be applied thirty minutes prior to the procedure for additional analgesia. The adhesions that are commonly found between the foreskin and the glans penis are removed manually, using a curved hemostat. Next, a hemostat is closed upon the dorsal surface of the foreskin to sever the nerves and decrease discomfort, thereby allowing the Practitioner to incise the pinched skin with scissors. When using a Gomco clamp, the bell is placed on the glans of the penis and a safety pin or hemostat is utilized to secure the foreskin to the bell. The base of the Gomco is then attached to the bell, and securely tightened. Finally, a scalpel is used to excise the foreskin distal to the Gomco clamp. Once this is complete, the Gomco device can be removed, and a dollop of petroleum jelly or bacteriostatic ointment can be applied to the glans of the penis.

The standard training for circumcision varies per institution and practice. At Texas Children’s Hospital, training and competency mirrors that of the physician’s training. Training begins with viewing a video of a circumcision being performed utilizing the Gomco clamp. Once the video is viewed, the Practitioner is permitted to either view a circumcision being performed on an infant or begin hands-on training. The Pediatric Hospitalist that trains the Physicians is also responsible for training the Nurse Practitioners. One’s training consists of obtaining consent, performing the procedure, completing a procedure note, and learning to bill for the procedure. A procedure log is maintained tallying the number of circumcisions performed. Once the Nurse Practitioner completes ten procedures with confidence, application for hospital privileges is initiated.

Submitting for privileges at Texas Children’s Hospital consists of two primary forms of documentation, including a letter of recommendation from the training Physician, and the Practitioner’s procedure log. Both documents are submitted as email attachments to the hospital’s credentialing department, requesting privileging in both the primary and secondary institutions.

In the primary institution, privileges are granted without reserve. However, the secondary institution continues to have reservations about Nurse Practitioners performing circumcisions due to a lack of policy and procedure including Nurse Practitioners in the performance of circumcisions. Currently, the Medical Director has been required to appear before the credentialing board to address the necessity, level of training, and Physician support for Practitioner-performed circumcisions. The credentialing board must then confer and agree to extend privileges; they remain in deliberation at this time.

In conclusion, Nurse Practitioners at Texas Children’s Hospital continue to receive training to perform circumcisions. The process is ongoing, and a minimum number of circumcisions performed annually to maintain competency has yet to be decided. As Resident Physician hours continue to decrease, and the responsibilities of the Nurse Practitioner continue to increase, one could anticipate that Practitioner-performed circumcisions may become a common practice.

References
**Neonatal Exchange Transfusion Part 1**

1. **Definition** – To exchange all or part of an infant’s blood supply secondary to certain medical conditions.

2. **Types of volume exchange**
   A. Double volume exchange transfusion is replacing the infant’s total blood volume twice, leaving the intravascular blood volume unchanged.
   B. Partial exchange is either increasing or decreasing an infant’s hematocrit, while maintaining a constant blood volume.

3. **Indications**
   Double Volume Exchange:
   - Hyperbilirubinemia
   - Hyperammonemia
   - To remove bacterial toxins
   - To correct life-threatening electrolyte and fluid imbalance
   Partial Exchange Transfusion:
   - Severe anemia with normal or excessive blood volume
   - Clinical pathology

4. **Contraindications**
   - When alternatives such as a transfusion or phototherapy would be an equally effective treatment, with less risk
   - When a contraindication to placement of necessary lines outweighs the indication for exchange transfusion
   - When the patient is unstable and not likely to benefit from the procedure

5. **Standard procedure**
   A. **Double Volume Exchange**
      - Use the freshest blood available for the double volume exchange
      - If whole blood is not available, use a combination of fresh frozen plasma and PRBCs
      - Exchange volume is twice the infant’s blood volume, using 85 ml/kg as the infant’s blood volume
      - Procedure is done slowly, over a minimum of 45 minutes
      - Blood volume should be kept fairly constant
   B. **Partial Exchange**
      - Polycythemia is defined as a hematocrit between 65-72%, depending on if infant is clinically symptomatic
      - Use normal saline for an exchange to decrease the hematocrit
      - Use PRBCs to increase the hematocrit when the infant has chronic anemia, with a normal blood volume
      - Again, an infant’s blood volume is 85 ml/kg
      - The desired hematocrit is usually 50 –55%.

6. **Formula** – Use the following formulas to calculate the amount of the exchange:

   **To Decrease Hematocrit:**
   \[
   \text{Volume to exchange} = \left( \frac{\text{Wt in kg} \times 85}{\text{Observed Hct}} \right) \times (\text{Observed Hct} - \text{Desired Hct})
   \]

   **To Increase Hematocrit:**
   \[
   \text{Volume to exchange} = \left( \frac{\text{Wt in kg} \times 85}{\text{Hct of PRBC's}} \right) \times (\text{Desired Hct} - \text{Observed Hct})
   \]

**References**
The Region 11 attendees were then subdivided by state to address important state-specific legislative issues. The State of Florida presented the HB 1195 bill: Involuntary Examination Under the Baker Act ISB 1750. In the State of Florida, Nurse Practitioners remain unable to have a patient committed under The Baker Act. The House of Representatives passed the HB 1195 bill, however it currently remains delayed in the Senate. It is proposed that the bill may be passed in the year 2013.

The next bill discussed on the agenda was the SB 1014/HB 1267 bill: Controlled Substances. In the State of Florida, Nurse Practitioners remain unable to prescribe controlled substances. It was reported that the SB 1014/HB 1267 bill has been strongly supported by Senator Mike Bennett of District 21 and other state advocacy groups, however it remains a large topic for discussion in many other organizations. Specifics of the discussion include identifying a governing body for Nurse Practitioners with controlled substance prescription privileges. Region 11 currently has the fourth largest number of Nurse Practitioners, yet it remains one of the few regions in the United States that does not extend privileges for prescribing controlled substances.

There was also discussion regarding Nurse Practitioners having privileges to order physical therapy for their patients. In the current system, a Physician’s signature must be provided for a Physical Therapist to acknowledge the order. The issue of extending privileges to Nurse Practitioners permitting them to order physical therapy was attached as an addendum to a bill in review. The Orthopedic Association successfully made an appeal to remove the addendum from the bill. A new bill is to be presented in the future.

The Florida State Representative challenged all Nurse Practitioners to unite in support of their local and state Nurse Practitioner and Nursing organizations, stating that unity shall be the key to future change. Despite many issues relating to other specialties, the issues discussed were a solid representation of the challenges all Nurse Practitioners face collectively, and the direct impact they have on patient care. For continued updates regarding the HB 1267 bill, visit www.AANP.org and search for legislation review. Gail Saddler is the new representative for Region 11. Legislation updates for the Florida Board of Nursing (www.doh.state.fl.us) and the Florida Nurse Association (www.floridanurse.org) can also be found on the AANP website.

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### Bring it On Answers

See questions on page 12

1. Answer is **B**: Approximately 1 in 2000 newborns has a significant sensorineural hearing loss, which impairs speech and language development. The most common cause is maternal infection transmitted placentally to the infant. The most common organisms include toxoplasma, rubella virus, cytomegalovirus (CMV), herpes simplex virus, and Treponema pallidum. Hyperbilirubinemia is a potential cause of hearing loss as well as neonatal asphyxia. Premature infants who are prone to infection often receive ototoxic medications such as aminoglycosides. However, in general, long-term follow-up studies have indicated a low risk of hearing loss after use of these medications.

2. Answer is **C**: Rocker bottom foot deformity or congenital vertical talus must be differentiated from the more common and benign calcaneovalgus (clubfoot). The former is generally associated with an underlying malformation or syndrome, while the latter is generally benign.

3. Answer is **A**;

<table>
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<th>BPP Score</th>
<th>Course of Action</th>
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<tr>
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<td>No fetal indication for intervention</td>
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<tr>
<td>8 with normal amniotic fluid volume</td>
<td>No fetal indication for intervention</td>
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<tr>
<td>8 or less with oligohydramnios not explainable by rupture of membranes</td>
<td>Deliver fetus</td>
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<tr>
<td>6 with normal amniotic fluid volume; <strong>&gt; 36 weeks with favorable cervix</strong></td>
<td>Deliver fetus</td>
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<tr>
<td>6 with normal amniotic fluid volume; <strong>&lt; 36 weeks OR immature lungs OR unfavorable cervix</strong></td>
<td>Repeat test in 24 hours; If repeat test score &gt;6, observe and repeat periodic testing; If repeat score 6 or less, Deliver fetus</td>
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<tr>
<td>4 with normal amniotic fluid volume</td>
<td>Repeat testing the same day; If repeat test score 6 or less, Deliver fetus</td>
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<td>0 to 2</td>
<td>Deliver fetus</td>
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Neonatal Nurse Practitioner
Tallahassee Memorial HealthCare

This newly created position is seeking a self-starter to work directly with Registered Nurses, Neonatal Nurse Practitioners, Neonatologists, and Respiratory Therapists to provide safe, quality care. The 32-bed NICU is part of the Florida Neurological Network led by Shands Hospital in Gainesville. For additional information on this opportunity, please contact George Bruno at 850-431-5134 or george.bruno@tmh.org

Advertising in FANNP Newsletters

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• Classified ads only
• Link on website for direct submission
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May run ad in one newsletter or all year – 4 total newsletters, March, June, September and December.

Cost

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Format

• The classified ad section of the newsletter will be limited to 1 page only with approximately 30 ads per page
• Ads will be processed on a first come, first serve basis

Closing Dates for Space and Advertising Materials

• December, 2012 – ads must be received by November, 11, 2012, and paid in full
• March, 2013 – ads must be received by February 8, 2013, and paid in full

About the FANNP

Established in 1989, the FANNP promotes the highest standards of neonatal nursing through education, practice and research. The Florida-based organization now represents neonatal nurse practitioners across the United States.

We believe that all newborns and their families have a right to optimal care, and we are dedicated to facilitating cooperation among all health care professionals; promoting ethical and professional practices; serving as advocates for newborns and their families; increasing public awareness of the neonatal specialty; and enhancing the effectiveness of nursing in the promotion of human well-being.

The FANNP offers yearly awards, scholarships and research grants. Please see our website, FANNP.org for more information and eligibility requirements.

New Active Membership (only $50) is open to all nurse practitioners whose field of interest includes neonatal care. Student Membership ($40) is open to all NNP Students. FANNP now offers an Associate Membership. Associate membership is open to any person in an advanced practice role, other than a NNP, interested in fostering the mission and goals of the organization ($50). Retired NNPs may join for $25.
Practice Questions to Prepare for the NNP Certification Exam

1. The most common cause of sensorineural hearing loss in newborn infants is:
   A. Hyperbilirubinemia.
   B. Maternal infection transmitted transplacentally to the infant.
   C. Ototoxic medications.

2. The majority of cases of rocker-bottom foot deformities are:
   A. Also known as benign calcaneovalgus.
   B. Benign, isolated findings.
   C. Often associated with an underlying malformation or syndrome.

3. At 32 weeks gestation, a diabetic woman has oligohydramnios with intact membranes. Her nonstress test is nonreactive, and contraction stress test is suspicious. A biophysical profile (BPP) score is 6 with oligohydramnios. The recommended next course of action would be to:
   A. Deliver the fetus.
   B. Assess lung maturity. If mature, deliver the fetus. If immature, give steroids and deliver the fetus in 48 hours.
   C. Repeat the stress test and BPP in 24 hours.

Answers on page 6

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