FANNP 2008 Conference Planning Update
Neonatal Nurse Practitioner Symposium:
Clinical Update and Review
October 14–18, 2008, Clearwater Beach FL

The FANNP conference planning team is moving along toward another great Symposium! The 19th National Symposium will please both “new” and “seasoned” NNPs. Over 20 speakers will gather from across the continental U.S.: NNPs, Neonatologists, a Pathologist, a Perinatologist, and even law students and their professor. Speakers “back by popular demand” include:

Carol Botwinski, EdD—Assistant Professor at the University of Tampa School of Nursing, Adjunct Clinical Instructor at the University of South Alabama and FANNP Past-President. Dr. Botwinski will present review tract sessions on Fluid & Electrolyte Management, Renal Function/Failure and Sepsis. Her sessions promise to be clear, concise and understandable.

Bruce Buehler, MD—an interesting, engaging speaker; participants request Dr. Buehler’s return every year. His academic appointments include Clinical Professor of Pediatrics and Pathology and the Executive Director of the Hattie B. Munroe Center for Human Genetics in Omaha, Nebraska. Dr. Buehler will present a general session on Expanded Newborn Screening and a Review of Genetics for the review track.

David Burchfield, MD—is a dynamic speaker who combines humor with extensive knowledge that captivates the audience. He will present an Interactive Journal Club for the advanced track and his popular Radiology Review for the review track.

Dianne Charsha—brings over 20 years of clinical experience as an NNP. She is a national speaker and author on numerous professional and clinical topics, and is known

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See “Symposium” on page 6

Apply Now for FANNP Scholarships

2008 Eligibility Guidelines

FANNP was founded to support the educational advancement of Neonatal Nurse Practitioners. To achieve this goal, each year on December 31, at least 10% of the available monies in the general operating budget are put in a scholarship fund.

Guidelines for scholarship qualification:

1. You must be a FANNP member.
   a. All members, student members and associate members are eligible.
   b. Priority for scholarship award will be given to members, followed by student members and then associate members.
   c. Priority for scholarship award will be based on length of membership and service to FANNP.

2. You must be a licensed RN, ARNP, NNP or equivalent. Preference will be given to currently licensed certificate NNPs working towards a NNP degree.

3. You must attend an educational program leading to a degree related to the health care field during the application period.

See “Scholarship” on page 4
Message from
the President

Happy Spring!

Do you have your “head in the sand?”

As Neonatal Nurse Practitioners, we need to take off our blinders or stand
the chance of becoming extinct. We have a national shortage of NNPs, so some
organizations are looking at alternative ways to fill the gaps: PNPs, PAs, and the most
recent threat, the Hospitalists (who do not need a supervising MD and have priced
themselves very well). Listen carefully for changes to local neonatology practices and
be a strong, vocal voice that communicates why NNPs are the best quality healthcare
providers for our tiny patients. Take any opportunity to share with the public what
you do as a NNP. Encourage the skilled bedside RN to return to school to become a
NNP. If your practice can help support a RN with financial assistance, there is not a
better opportunity to “grow your own NNP.” Offer to be a preceptor for a master’s
student who needs to get clinical hours to complete his/her degree. They may not intend to work at your institution,
but I guarantee you that, eventually, what goes around will come around. For example, they may have a friend who is
moving to the area, or things may not work out the way they thought with their current employer, and they’ll remember
the nurturing clinical environment that you provided.

Also, there have been recent changes about the DNP as
entry to practice for all Advanced Practice Nurses. This is
going to further impact our already critical shortage of NNPs
nationwide. Unfortunately, this is a done deal and will be
happening everywhere, whether we feel it’s right or not. Are
you aware that discussion has included a generalist approach
first, then a specialty focus (this would include a generalist certification)? There will
be discussion of these areas at the upcoming APN Forum in Washington DC in June
as well as at the NANN conference in Ft. Lauderdale by NANNP. If you are not able
to attend either of these and want to become more involved, please contact Robin
Bissinger with NANNP. It is imperative that we band together to make sure our voices
are heard.

Are you aware of upcoming legislation?

Many legislative issues affect NP practice at the state and even the federal level, but
we sometimes think those issues do not pertain to us, or that they only affect FNP’s. In
some cases you may be right, but in many cases, it can become a snowball effect — that
one legislative change becomes a precedent and affects other areas of NP practice. We
must continue to lobby for changes in legislation to remove practice barriers. Become
active in your state professional organization (if you do not have a neonatal specific state
organization to represent our area of NP practice, look to the NP state organization),
as well as a national professional organization (NANNP). Your voice becomes louder
with numbers. We also must be careful to not let our guard down because we feel we
have triumphed with one legislative success, because legislative gains always have the
potential to be reversed. If you receive an email about an upcoming legislative issue
that can affect the NP practice, take the time to let your individual voice be known
to the appropriate legislative representative. Florida NPs have been successful thus far
in fighting off efforts to restrict NP practice by requiring increased physician direct
supervision; I would not be surprised if we see another bill introduced that would over-
turn this legislative victory. If you have questions regarding legislative issues or how
to become more politically involved, please notify Leslie Parker (FANNP Legislative
Committee Chair) or Robin Bissinger (NANNP). Here’s to a strong professional
practice and taking our heads out of the sand!

— Jacqui
Cyclomydril Ophthalmic Solution Use
In Retinopathy of Prematurity

Pamela S. Laferriere, ARNP

Cyclomydril ophthalmic solution is a combination eye drop comprised of cyclopentolate hydrochloride 2 mg (0.2%) and phenylephrine hydrochloride 10 mg (1%) per 1mL (Myers, Wallace, & Johnson, 2005; Patel, Simon, & Hodgetts, 2004; Thomson Micromedex, 2007). Cyclomydril is commonly used in retinal eye exams in neonates (Patel, Simon, & Hodgetts). Ophthalmic medications might not be considered as high-risk medications; however, when used in pediatric populations, especially neonates and premature infants, the risk is greater because of potential adverse reactions secondary to systemic absorption effects (Laws, Morton, Weindling, & Clark, 1996; Myers, Wallace, & Johnson; Patel, Simon, & Hodgetts; Rush, Rush, Nicolau, Chapman, & Naqvi, 2004; Thomson Micromedex).

Technological advances in the care of premature infants have resulted in decreased mortality; however, the survivors are at risk for significant handicaps and morbidity. Retinopathy of prematurity (ROP) is a disease of survival that can result in blindness. Early recognition and effective therapies can prevent retinal detachment and salvage vision (Flores-Santos, Hernandez-Cabera, Henandez-Herrera, & Sepulveda-Canamar, 2007; Good & Hardy, 2001; Mehta, Adams, Bunce, Xing, & Hill, 2004; Mukherjee, Watts, Al-Madfar, Manoj, & Roberts, 2006; O’Keefe & Kirwan, 2008). Anecdotal observations show some infants experience increased apnea and bradycardia, tachycardia, hypertension, increased respiratory support, feeding intolerance, and necrotizing enterocolitis, following administration of Cyclomydril and eye examinations. These adverse events might prompt staff education on drug administration and changes in feeding regimens for infants receiving Cyclomydril for eye exams.

Some studies attribute the adverse affects to the stress of the eye exam and others to the medication (Laws et al., 1996; Mehta et al., 2005; Mukherjee et al., 2006; O’Keefe & Kirwan, 2008). Acute gastric dilation and paralytic ileus have been reported (Myers, Wallace, & Johnson, 2005).

Although topically administered, systemic absorption of Cyclomydril can occur, making safety an issue, especially in premature infants (Patel, Simon, & Hodgetts, 2004). In a review by Apt (1994), infants are at greater risk for systemic complications because of their size and immature organ function; in fact, unintentional delivery of lethal doses is possible in premature infants (as cited by Patel, Simon, & Hodgetts). The systemic absorption of ocular medications occurs due to excess flow from the eye to the conjunctiva, oropharynx, gastrointestinal system, and skin. Therefore, administration of this medication must be done in a manner that decreases the potential for systemic absorption. A good technique is: (a) immobilize the infant, (b) instill a single drop, (c) provide pressure where the eye meets the bridge of the nose for several minutes, (d) wipe away any excess medication, (e) avoid any medication going into nose or mouth, and (f) wash hands immediately (Myers, Wallace, & Johnson, 2005). It is important to protect the dilated eye from light. Adverse response to the medication should be reported.

Eye exams at 34 weeks gestational age are of utmost importance for diagnosis of severe ROP. However, screening exams are recommended until the retina matures and no further threat of ROP progression exists (O’Keefe & Kirwan, 2008). The final exams can occur on an outpatient basis after the premature infant is discharged from the NICU. The neonatal nurse practitioner

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RETINOPATHY continued

(NNP) should educate parents on the importance of follow up eye exams, in the administration of ophthalmic medication, about potential side effects, and on withholding feedings around the time of the exams (Thomson Micromedex, 2007).

References


SCHOLARSHIP continued from page 1

a. The application period for the 2008 scholarship is September 15, 2007 to September 15, 2008. (i.e. To be eligible for a 2008 scholarship you must have attended classes sometime between September 15, 2007 and September 15, 2008.)
b. An applicant may receive a maximum of two scholarship awards for each degree sought.
c. Preference will be given to those working towards a degree in neonatal health care.

4. If awarded a scholarship, recipients agree to write a short article for the FANNP newsletter within the next year.

5. The Completed scholarship application must be Postmarked by September 15, 2008.

Scholarships of $500 – $1000 dollars per qualified applicant will be awarded each year at the FANNP Annual Business meeting, scheduled in conjunction with the FANNP National Neonatal Nurse Practitioner Symposium: Clinical Update and Review.

The FANNP Board of Directors will select the scholarship recipients based upon the above qualifications and the applicant’s level of practice and educational and professional goals. The number and dollar amounts of the annual scholarships will be determined by the FANNP BOD based upon the amount of monies available in the scholarship fund, the number of applicants, and each applicant’s qualifications as listed above.

To request a scholarship application, e-mail KT@fannp.org or contact Karen Theobald by mail at FANNP, PO Box 14572, St. Petersburg, FL 33733-4572.

Ruth Bartelson, ARNP
2007 Kim Nolan Spirit Award Recipient

The 2007 Kim Nolan Spirit Award recipient is Ruth Bartelson, ARNP. Congratulations Ruth! To nominate someone for the Kim Nolan Spirit Award for 2008, go to the website FANNP.org and download an application, or write to Paula Timoney, c/o FANNP, PO Box 14572, St. Petersburg, FL 33733-4572.
Case Study
Patent Ductus Arteriosus and Ibuprofen Lysine: Treatment in a 26-week Preterm Neonate

Diane McNerney NNP-BC, MS
Doctorate of Nursing Practice, Neonatology Resident/University of South Florida, Tampa, FL

Case:
This case study describes a 26 week preterm male diagnosed by echocardiogram on day of life two with a patent ductus arteriosus and treated with two doses of ibuprofen lysine. Delivered at 26.2 week, this preterm male was born by cesarean section to a 19 year old white female with good prenatal care. Two doses of betamethasone were given prior to delivery. The infant was electively intubated and rescue surfactant was given in the delivery room. Birth weight was 855 grams. An echocardiogram was preformed on day of life two after a 2/6 murmur was auscultated on exam. A two-dimensional ECHO revealed a patent ductus arteriosus (PDA). Ibuprofen lysine was the medication used to treat this PDA based on the evidence of reduced side effects and adverse reactions in the neonatal populations of this gestational age. Two of the three recommended doses were given as there was a slight reduction noted in the urinary output after the second dose. Although the research does not report decreased renal function as a side effect or adverse reaction of Neoprofen, it was elected to discontinue treatment in light of this clinical finding. Urinary output returned to normal that same day. A follow up ECHO three days after the first Neoprofen dose was given revealed normal findings and closure of the PDA with good ventricular function. A murmur was auscultated on physical exam day of life 73 and a repeat ECHO once again revealed normal findings. The treatment with ibuprofen lysine was successful and the PDA remained closed through the neonate’s 83-day hospital course.

There is a high incidence of PDA in the premature and low birth weight infant population. When the ductus arteriosus fails to close after birth, the left to right shunt and run off from the PDA has been known to cause pulmonary, renal, neural, and gastrointestinal complications. If not managed appropriately, even death may occur. In the past, treating a PDA with medication was limited to the use of indomethacin. Research has demonstrated that indomethacin and neoprofen have similar efficacy in the closure of PDA, however, indomethacin is associated with significantly greater adverse reactions. The most common reported in the literature are decreased cerebral perfusion and blood flow velocity and decreased mesenteric and renal perfusion. There was a clinical indication for alternative therapy.

Research of ibuprofen lysine has observed its effects on PDA closure, cerebral blood volume and flow velocity, and mesenteric and renal perfusion. Clinical trial comparisons of ibuprofen lysine with placebo, indomethacin, ibuprofen-tham, as well as pharmacological effects before and after treatment are well documented. Consensus of the data clearly reflect ibuprofen lysine’s effect on the preterm neonate with PDA. Ibuprofen was shown to have effective closure of PDA in preterm neonate, decreased effects on renal and cerebral function and no effect on preventing IVH.

Ibuprofen lysine (Neoprofen) was released in 2006 for use in the neonatal population as a non-selective cyclo-oxygenase inhibitor that is labeled for treatment of a patent ductus arteriosus (PDA) in preterm neonates ≤ 32 weeks. Indication for use is to close a significant PDA in preterm neonates ≤ 32 weeks, with birth weight 500 – 1500 grams who have not responded to fluid and respiratory management.

Ibuprofen is a propionic acid derivative and non-selective cyclo-oxygenase inhibitor and is as effective in closing a PDA, but without the adverse reactions of indomethacin. The mechanism of action through which ibuprofen causes closure of PDA in a neonate is not fully known. The formulation is a racemate isomor consisting of S(+) and R(-), which are cyclo-oxygenase inhibitors. Both isomers of the enzyme, S(+) and R(-) are expressed in the ductus, and both cyclo-oxygenase inhibitors can constrict the ductus. Ibuprofen inhibits both cox-1 and cox-2 enzymes, but the cox-1 inhibition is less than the currently approved standard treatment for PDA closure and may offer safety advantages in infants at risk for GI, cerebral, and

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IBUPROFEN continued from page 5

renal side effects.1

The recommended dosing should be started at 10mg/kg followed by 5mg/kg repeated at 24 and 48 hours after the initial dose.1 Contraindications for use include preterm neonates with suspected or proven ductal dependent congenital heart disease where satisfactory pulmonary or systemic blood flow is necessary (eg. pulmonary atresia, severe tetralogy of Fallot, severe coarctation of aorta).1

Preterm infants with active intracranial hemorrhage, gastrointestinal bleeding, thrombocytopenia, or coagulation deficiencies, and preterm neonates with suspected or proven infection, suspected or confirmed necrotizing enterocolitis, or with renal deficiencies should not receive ibuprofen lysine.1

Key strategies used for the treatment for PDA in neonates include wait and watch, pharmacotherapeutics intervention, and surgical repair.3,5 For premature neonates where the PDA is causing increase respiratory distress and heart problems, treatment is indicated. Small PDAs sometimes close without treatment, but if a PDA is large or does not close on its own by the time the child is 1–2 years old, it should be repaired.1 After closure of a PDA, most children grow normally and live healthy lives.1

Ibuprofen lysine is only beginning to gain recognition as an effective intervention for PDA treatment since its release in 2006.1 The neonatal community will be looking for continued research to be published on how effective ibuprofen lysine is when additional courses of therapy are needed to close a PDA that has reopened and what long term effects it will have in regard to cerebral, mesenteric and renal perfusion and alternative dosing by birth schedules.

References

SYMPOSIUM continued from page 1

for her enthusiasm and teaching skills. Dianne will speak on Congenital Heart Disease, Differential Diagnosis and Management of Respiratory Distress, and Blood Gas Interpretation and Ventilation for the review tract.

Jacqui Hoffman is the Coordinator of the NNP Online Program at the University of Alabama at Birmingham, a Neonatal Nurse Practitioner with Pediatrix Medical Group, Inc. and current FANNP President. She will present review tract sessions on Common GI Conditions and Neonatal Nutrition. She’ll offer a concise overview with comprehensive handouts great for NCC review.

Marion Kay will be the opening keynote speaker. She is a management consultant specializing in communication. She is one of the few speakers that does not need a slide show to engage the audience; this year she will discuss Motivating Yourself and Others.

Leslie Parker is a Neonatal Nurse Practitioner and Clinical Assistant Professor at the University of Florida in Gainesville, where she is program director of the Neonatal Nurse Practitioner Program. Leslie will discuss Neonatal Metabolic and Endocrine Function for the review tract in a two-part session.

Edwina Popek, MD is a pathologist who brings the focus of pathologic placental findings and the impact on the fetus/neonate. This year she will discuss Multiple Gestations and Congenital TORCH Infections for the advanced track.

Lisa Glantz-Williamson is a Neonatal Nurse Practitioner at Blank Children’s Hospital in Des Moines, Iowa. She will present the ever-popular Test Taking/Study Tips with a “Game Show” format Q&A portion, in conjunction with Pam LaFerriere, for the review track. In addition, she will provide a Hematology Review that is sure to provide an excellent review for the NCC exam.
1. Inotropic drugs are frequently used in the medical management of congestive heart failure to improve cardiac output. Of the three drugs listed below, which has a decreased effect on heart rate and rhythm and causes less peripheral constriction?
   a. Dopamine
   b. Dobutamine
   c. Isoproterenol

2. The objective of therapy when treating hypovolemic shock is:
   a. Prompt restoration of adequate tissue perfusion
   b. Rapid expansion of the vascular bed
   c. Rapid rise in blood pressure

3. A 4000 gm neonate delivered by cesarean for failure to progress in labor has a limp right arm held in internal rotation with the elbow extended. There is no Moro reflex on the right but the grasp is intact. This injury is consistent with:
   a. Erb-Duchenne palsy
   b. Horner syndrome
   c. Klumpke palsy

Networking activities will once again include the “Welcome Reception,” “Roundtable Discussion” and a “Luau” on the beach for the entire family to attend. We encourage everyone to wear to the Luau their favorite Hawaiian shirt or dress as they listen to music provided by Rob Synder, DJ, and enjoy a buffet feast.

The topics for this year’s Roundtable Discussion are: Role Transition and Workforce Issues and Expanded Shifts. The Roundtable includes an incredible buffet dinner and dessert (my favorite part).

Mark your calendars now! The Symposium offers a great way to prepare for your certification exam, or keep up with the latest knowledge; it’s also a great way to network and have fun. Hope to see you in October!
In March, the Florida Legislation began its 2008 session and the Florida Nurses Association has been busy promoting positive changes for nurses and advanced practice nurses in Florida. The four priority bills for the 2008 session include:

1. **Safe Patient Lifting (SB 508/ HB 471).** This bill was strongly supported by the Florida Hospital Association and was intended to protect nurses working in direct patient care from injury. Unfortunately this bill failed to pass.

2. **Clinical Nurse Specialist Bill (SB 736/ HB 285).** This bill was proposed to assist in resolving some of the negative consequences of the Clinical Nurse Specialist Bill from the 2007 session. This bill would allow the Board of Nursing to grant waivers to CNSs who practice in a specialty area that does not offer a certification exam if they have 1000 hours of clinical experience in that area. This bill successfully passed through both the House and Senate.

3. **Clinical Laboratories Bill (SB 716/ HB 695).** This bill would add ARNPs to the list of providers from whom clinical laboratories are mandated to accept specimens. This bill failed to pass.

4. **Improving Patients’ Access to Care (SB 972/ HB 515).** This bill is basically the controlled substance bill FNA has attempted to pass for the last 14 years that would allow ARNPs to prescribe controlled substances. The emphasis this year was on obtaining privileges for ARNPs who work in Medically Underserved Areas and with Medically Underserved Populations to increase their access to care. Unfortunately, once again this bill failed to pass.

On a national level, there have been several updates in legislation concerning nurses and nurse practitioners. These include:

1. **Increased nursing workforce development funding.** Bipartisan support from both chambers emphasized the importance of ANAs request for $44 million increase in funding for the Title VIII Nursing Workforce Developmental Programs. These programs include the provisions in the Nurse Reinvestment Act which are needed to fight the current and future nursing shortage. This was in response to President Bush's recommendation for $46 million in decreased funding for these programs.

2. **Inclusion of nurse practitioners in medical homes.** The medical home concept rewards primary care providers for providing ongoing care and coordination of care for mainly complex patients. The Medicare Improvement and Extension Act of 2006 limits the definition of primary care provider to a board certified physician. Legislation is currently being developed to expand this definition to include ARNPs.

3. **Troops to Nurse Teachers Act.** This bill was introduced in the House and Senate to address the current nurse faculty shortage. It would develop partnerships between the military and civilian schools of nursing. Nurse Corp Officers would be able to serve as nurse educators. The goal is to increase the number of nurse faculty members thereby increasing the number of nurse graduates.

As advanced practice nurses, it is necessary that we become involved in both state and national legislation. At a minimum we need to become members of both our state and national nurse's organizations. By increasing the number of members in these organizations, we will increase the power these organization hold and positively influence nursing legislation. For those who are interested in becoming more deeply involved, organizations have ample opportunity to further this goal. As the single largest group of health care providers in the nation, one can only imagine the impact nurses could have in government if even a percentage of the 2.4 million nurses in America became members of the American Nurses Association.

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**Bring it On Answers (questions on page 7):**

1. **(b) Dobutamine** Dopamine has both direct and indirect adrenergic effects that are dose dependant (increases renal blood flow, heart rate, blood pressure and contractility and causes peripheral vasoconstriction). Dobutamine has decreased effects on the heart rate and causes less peripheral vasoconstriction. Isoproterenol has adrenergic effects. Its usefulness in neonates is limited because it causes increased heart rate, arrythmias, and decreased systemic vascular resistance, making hypotension worse.

2. **(a) Prompt restoration of adequate tissue perfusion** The goal of volume expansion is treating the neonate in shock to achieve adequate tissue perfusion

3. **(a) Erb-Duchenne Palsy** The clinical picture presented in the question is consistent with Erb's palsy. With Erb's palsy, spontaneous recovery is common. In Klumpke's palsy there is usually injury to C7 or C8-T1 nerve roots, the hand is flaccid with little control. Horner's syndrome involves ptosis, miosis and anhidrosis and usually results in poor prognosis.
Neonatal Coagulation Disorders

**PATHOPHYSIOLOGY:** Neonatal bleeding results from disorders of platelets, coagulation proteins, and disorders of vascular integrity.

1. **Platelet Disorders**
   - A. Thrombocytopenia (platelet count <150 x 10⁹/L)
     - Decreased platelet production occurs in congenital, certain syndromes (e.g., Thrombocytopenia Absent Radius, Fanconi).
   - B. Sepsis and Hemolytic Disease of Newborn.
   - C. Increased platelet consumption.
   - D. Impaired platelet function

2. **Coagulation Protein Disorders**
   - A. Congenital factor deficiencies: Hemophilia A (Factor VIII) and Hemophilia B (Factor IX), Factors V, VII, X, XI, XII, XIII, afibrinogenemia. Acquired deficiencies, most common is Vitamin K deficiency
   - B. Combined Platelet and Coagulation Factor Disorders: (DIC), Hepatic Dysfunction
   - C. Disorders of Vascular Integrity

**SIGNS AND SYMPTOMS:** Vary with the cause of bleeding, magnitude of blood loss and the underlying disease. Signs of abnormal bleeding tendency include petechiae, excessive bruising, prolonged bleeding from puncture sites, umbilical oozing, gastrointestinal bleeding, hematuria, pulmonary hemorrhage, subgaleal hemorrhage, and intracranial hemorrhage. When blood loss is large, the infant may present with signs of hypovolemia (pallor, weak pulses, tachycardia, hypotension, metabolic acidosis).

**LABORATORY INVESTIGATION:**

A. Initial screen
   - CBC, differential, smear, platelet count
   - Partial Thromboplastin Time (PTT)
   - Prothrombin time (PT)
   - Fibrinogen

Draw blood from non-heparinized source (or ask Laboratory to add Heptasorb).

B. Neonatal Allo-Immune Thrombocytopenia is suspected, send mother's and infant's blood for platelet count and typing. For severe thrombocytopenia, platelet transfusion is indicated. Washed maternal platelets (to remove antibody) are the treatment of choice. Random-donor platelets should be used if other choices are not available. IVIG therapy will often increase the platelet count.

**MANAGEMENT:** For secondary bleeding disorders, treat underlying disease. Replacement of clotting factors is often necessary:

A. Prolonged prothrombin time (PT), normal PTT, platelets and fibrinogen:
   - Give Vitamin K 1 mg IV slowly over 1 min. Repeat PT in 4h. If not improved, consider Hematology Consult to R/O specific factor deficiency.

B. Prolonged PT and PTT: Give Fresh Frozen Plasma 10 mL/kg and Vitamin K 1 mg. Send repeat clotting studies in 2h.

C. Low fibrinogen: Give cryoprecipitate 1 unit.

D. Thrombocytopenia: Serious bleeding usually does not occur unless there is severe thrombocytopenia (i.e., <20 x 10⁹/L). In some neonates bleeding may occur at higher levels. With these infants, use platelet transfusions to

*Continues on page 10*
to maintain platelets >50 x 10^9/L. Platelets should be type and Rh specific, irradiated, and CMV negative (If infant is possibly immunocompromised).
E. For any bleeding problem that is not controlled adequately and quickly, obtain Hematology Consult.
F. For significant bleeding from any cause, consider cranial ultrasound, especially in preterm infants.

### Products for Treatment of Coagulopathies

<table>
<thead>
<tr>
<th>Product</th>
<th>Content</th>
<th>Dose</th>
<th>Indications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh frozen plasma</td>
<td>All factors</td>
<td>10-20 mL/kg</td>
<td>Disseminated intravascular coagulation (DIC); liver disease; protein C deficiency</td>
</tr>
<tr>
<td>Exchange transfusion*</td>
<td>All factors, platelets</td>
<td>Double volume</td>
<td>Severe DIC; liver disease</td>
</tr>
<tr>
<td>Factor VIII concentrate</td>
<td>Factor VIII</td>
<td>25-50 U/kg</td>
<td>Factor VIII deficiency (Hemophilia A)</td>
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<tr>
<td>Factor IX concentrate</td>
<td>Factor IX</td>
<td>50-100 U/kg</td>
<td>Factor IX deficiency</td>
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<tr>
<td>Vitamin K</td>
<td>1-2 mg</td>
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<td>Vitamin K deficiency</td>
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<tr>
<td>Platelet concentrate</td>
<td>Platelets</td>
<td>1-2 units/5 kg‡</td>
<td>Severe thrombocytopenia</td>
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<tr>
<td>Intravenous gamma globulin</td>
<td>IgG</td>
<td>1-2 g/kg</td>
<td>Severe sepsis; thrombocytopenia due to transplacental antibodies</td>
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*If fresh whole blood is used. ‡Response to platelets can vary markedly, depending on underlying condition.

### References


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**Classified Advertising in this Newsletter will be Available Beginning December, 2008**

**Acceptance of Advertising**
- Professional Classified ads only.
- Link provided on website for direct submission.
- All advertisements are subject to review and approval by the Editor.

**Ad Options**
May run ad in one newsletter or all year – 4 total newsletters, December, March, June, and September issues.

**Cost and General Information**
- $50.00/ad each newsletter or $150.00 for all 4 newsletters. No cash discounts.
- Payment must be received in full prior to the scheduled close date for the quarterly issue.
- Payments can be made though PayPal on the FANNP website.

**Format**
- Each ad will be limited to 6 lines/30 characters per line.
- 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, 2008** — ads must be received by November 14, 2008, and paid in full.
- **March, 2009** — ads must be received by February 13, 2009, and paid in full.
- **June, 2009** — ads must be received by May 15, 2009, and paid in full.
- **September, 2009** — ads must be received by August 14, 2009, and paid in full.

— FANNP BOD
Penelope’s Pose

In October 2007, at the National FANNP Neonatal Nurse Practitioner Symposium, a questionnaire was distributed to interested attendees. The targeted population was neonatal nurse practitioner (NNP) students or recent graduates. In attendance were 256 NNPs, of which 93 were registered as students. Nineteen questionnaires were returned.

The questionnaire is not a tested tool. No statistical analysis has yet been calculated. Basic figures have been tallied. Several questions were open-ended and comments were encouraged; furthermore, some themes emerged. The basic figures and themes are herein presented.

- The median age was 34 years and females outnumbered men, 18 to 1.
- The average years of nursing experience was 10.8 years; moreover, the respondents had 8.9 years of neonatal nursing experience.
- Approximately 50% received tuition assistance from employer. Of those receiving tuition assistance, 100% were required to give time retribution at an average of 4.4 years.
- Thirteen different schools were represented.
- Approximately 50% of the programs attended were affiliated with a specific hospital.
- The programs were online (44%), live (28%), and blended (28%).
- The average programs were 4.6 semesters and required 2 years to complete.
- Clinical orientation was arranged by the student (37%), by the school (32%), by student and school (25%), and by the employer (5%).
- Program requirements for clinical hours ranged from 270 to 800 with an average of 633 hours. This amount was deemed sufficient by 94% of the respondents.
- The length of new-job orientation was on the average 2.2 months. The majority (47%) were not sure if this was enough time.
- The majority (89%) was satisfied with their clinical education; unfortunately, only 20% of respondents were satisfied with new-job orientation.
- What was least-liked about the clinical experience? Preceptors, schedules, and competition for procedures.
- What was least-liked about new-job orientation? Issues with preceptors.
- What should be changed with the clinical education experience?

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POSE continued from page 11

Contract issues, schedule flexibility, and opportunities for procedures and specific experiences.

• The new-job orientation can be improved by providing supportive and knowledgeable preceptors.

• Clinical and new-job orientations can be made easier by supportive and patient preceptors while made harder by disinterested and inconsistent preceptors.

• Other tools that make orientations easier are: the Gomella text, defined goals and objectives, and handbooks and cheat sheets.

• Lack of opportunities and exposure to learning experiences is frustrating for the orientee.

• Qualities and characteristics of an educator or clinical coach deemed positive are patience, supportive, communicative, and knowledgeable. Those deemed as negative qualities are disinterested attitude, disgruntled, demeaning, accusatory, and condescending.

• Saddest comment: “Nurses tend to eat their young, I expected more from NNPs.”

We NNPs must support our profession at the macro-levels of practice, education, certification, licensure, and politics. But, how can we most impact our profession, evidence-based practice, and healthcare delivery? I say, at the micro-levels of practice. We need to precept as mentors. We must nurture new NNPs to leave living legacies as we vacate our vocation. If we cannot precept with a passion, if we cannot guide, orient, and direct in a fashion that encourages and fosters excellence in clinical practice, then we must decline to wear the “preceptor hat.” I have heard the question “are leaders born or made?” Perhaps we must ask “are preceptors born or made?” It is time to create and explore curriculums that will recognize and cultivate NNPs who can capably guide the NNPs of the future.

Until next time,

— Penelope Nerdski