

FANNP NEWS



INSIDE: PERINATAL/NEONATAL CASE PRESENTATION • POCKET NOTEBOOK • LETTER FROM THE PRESIDENT • FOOD FOR THOUGHT • LEGISLATIVE UPDATE • EDUCATIONAL OFFERINGS • SCHOLARSHIPS AND GRANTS • BRING IT ON

The Publication of the Florida Association of Neonatal Nurse Practitioners



Conference Update

Hi All! I hope you have had a wonderful spring and are now ready for summer! The Conference Planning Committee has been busy finalizing the speakers and events for the 28th National Neonatal Nurse Practitioner Symposium, Clinical Update and Review on October 17-21. Jacqui Hoffman and her committee have put together a great group of A Track presenters for the experienced NNP's and the "tried and true" B Track speakers are ready for the NNP's wanting to review before certification. We will have several opportunities for networking and fun, including the Welcome Reception Tuesday evening, the Beach Party Wednesday evening, and the Poster Sessions on Thursday evening. Don't forget the beach and other fun things in the area, as well. Keep an eye open for the conference brochure, which will be available by mail and online later this summer. Hope to see you all there!

*Mary Kraus, MSN, NNP-BC
FANNP Conference Chair*

Clearwater Beach Events During Conference Weekend

Clearwater Jazz Holiday	October 19-22, 2017
Clearwater Stone Crab Festival	October 20-21, 2017
Clearwater Chalk Art Festival	October 20-22, 2017

A privacy release form was collected and on file at Tacoma General Hospital in order to share the information of this patient.

Perinatal/Neonatal Case Presentation: Asymptomatic Large Epidural Hemorrhage in Newborn Infant After In-Hospital Fall

Introduction

Newborn infants suffering in-hospital falls from being dropped are uncommon, with one national estimate of 700 cases per year (Monson, Henry, Lambert, Schmutz, & Christensen, 2008). Measures to reduce the risk of falls have been implemented but little attention has been focused on management of infants after falls (Helsley, McDonald, & Stewart, 2010). Newborn infants may represent both a population at high risk for clinically important head injury (Ruddick, Platt, & Lazaro, 2010) as well as one most sensitive to adverse effects of ionizing radiation (Miglioretti, Johnson, Williams, Greenlee, et. al, 2013). This case is presented as a cautionary report of a well appearing infant found to have severe epidural hemorrhage requiring emergency craniotomy after a witnessed in-hospital fall.

Case Report

Patient was a term female born at an outside hospital after normal spontaneous vaginal delivery with a birth weight of 3880 grams. Parents reported no complications with pregnancy and no family members with a history of abnormal bleeding. Patient breast fed normally and showed no abnormalities during her hospitalization. On her second day of life, she fell off mother's hospital bed on to a hard hospital floor, with the right parietal area of the head hitting the floor. She cried immediately after fall, demonstrated no palpable skull depression, and continued to behave normally and fed without emesis.

"CASE PRESENTATION" continues on page 3

Letter from the President

Hello FANNP members, and once again I would like to take the time to say "Thank You" for all your support to the FANNP organization. In our efforts to provide an informative, interactive newsletter we would like the input of our members. Please remember that, as a member, this newsletter is a resource for you. At the conference every year, so many of you share interesting case studies, poster presentations, and unit QI projects that you are involved in currently or have done in the past.



Sending this information to the editor is a great way to have your outcomes published and shared with your fellow NNPs.

The Brag Board section of the newsletter is a fantastic opportunity for you to present your accomplishments or that of other NNPs. All you have to do is email the FANNP editor via newsletter@fannp.org.

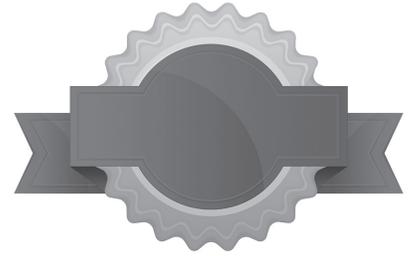
Well the summer is upon us. There are many of you who are getting ready to graduate and the FANNP organization would like to applaud all the new graduates for your hard work and accomplishments. We encourage you to make the FANNP

organization a part of your professional family. The organization has so much to offer, including an excellent annual conference for the NNP graduate, novice NNP, as well as the experienced NNP.

The 28th FANNP Symposium is just around the corner. At a glance, there are so many excellent speakers with an abundance of knowledge to share. For the first time, we will have the Preemie Parent Alliance participating with their interactive and enlightening session. Those of you wanting to submit abstracts for the Poster Presentation still have time. The deadline is June 30th and the details are on the website, www.FANNP.org. Last year's Poster Session was so educational and eye opening, and the evaluation comments were very supportive and positive. On-line registration for the Symposium will start in early June with the brochures to follow via mail. I hope to see familiar faces, and I'm also looking forward to meeting any new NNPs attending.

To those members seeking additional funding for scholarship or grant proposals, look to the website for details. The organization is always striving to support your professional endeavors.

Have a safe and relaxing summer,
*Diana Morgan-Fuchs, NNP-BC
President, FANNP*



The Kim Nolan Spirit Award... In memory and honor of Kim Nolan

Do you know a special NNP? The Kim Nolan Spirit Award is given annually to a NNP who exemplifies Kim's exuberance and "can-do" attitude in service to profession, community, and/or family. Nominate someone today at award@fannp.org! Nominations are due July 1, 2017.



THE FLORIDA ASSOCIATION OF NEONATAL NURSE PRACTITIONERS

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CASE PRESENTATION from page 1

Physical exam was unremarkable with intact reflexes and normal tone. No imaging was performed. Infant was discharged home with outpatient follow up.

Patient fed well at home and demonstrated no abnormal behavior. She was seen for routine follow up on her fourth day of life. Other than a modest 2 x 2 centimeter right parietal scalp hematoma and mild jaundice, no concerning physical findings were identified. Telephone consultation with neonatology was obtained, and recommendation for CT scan at the nearby Pediatric Emergency Department was accepted.

On presentation to the emergency department, patient was found to weigh 3.870 grams, have unremarkable vital signs and exhibit no evidence of distress. Mild icterus was noted. Pupils were equal and reactive, muscle tone was appropriate, and patient had intact moro, suck and grasp reflexes. No palpable skull abnormalities were detected underneath the parietal cephalohematoma.

CT Scan revealed a 5.8 x 3.2 centimeter right parietal epidural hematoma causing extensive mass effect on the right cerebral hemisphere resulting in distortion of the lateral and third ventricles. A 9.6 millimeter right to left midline shift was noted. Underneath a right parietal scalp hematoma was a mildly displaced right parietal skull fracture. (Figures 1 axial, 2 coronal, 3 sagittal).

A prothrombin time was checked with an international normalized ratio of 1.4. Hematocrit was 37.5% and platelets 193,000 per uL.

Patient was taken to the operating room where a right subgaleal hematoma and a linear skull fracture

with associated arms in a stellate configuration were identified. Craniotomy was performed and tenacious clot material in epidural space was drained followed by irrigation and installation of coagulating gel with observance of some brain re-expansion. Surgical wound was closed with a small drain being left in the epidural space.

After surgery, patient recovered in the neonatal intensive care unit with extubation, reintroduction of enteral feeds, and removal of drain. Repeat CT scan showed minimal fluid collection 0.8 x 40 mm in extra axial space and improvement in the midline shift. Patient was discharged home on day of life 6 and continued to do well on follow up encounters.

Discussion

Despite an absence of abnormal behavior or concerning neurologic findings on thorough examination by multiple clinicians, this patient demonstrated a severe epidural hemorrhage requiring emergency drainage. When developing criteria for imaging, preverbal children are often analyzed separately from older children (Kuppermann, Homes, Dayan, & Hoyle, 2009). Open fontanelles and sutures as well as brain plasticity in the newborn infant may mask clinical findings of serious intracranial hemorrhage (Heyman, Heckley, Magagi, Pladys, & Hamlat, (2005) (Scheibl, Calderon, Borau, Prieto, et. al, 2012). The Pediatric Emergency Care Applied Research Network algorithm based on the only abnormality of a parietal scalp hematoma estimates the risk of clinically important traumatic brain injuries at 0.9% and recommends either observation or CT screening (Kuppermann et. al, 2009). A series

of 11 infants with in-hospital falls found a particularly high (45%) rate of parietal bone fractures despite absence of symptoms in most patients and inconsistent association with overlying scalp hematoma (Ruddick et. al, 2010). Increasing attention has been paid to potential adverse effects of radiation exposure with cranial imaging. One analysis attributed as few as 570 head CT scans in <5 year old females leading to a single case of cancer (Miglioretti et. al, 2013). MRI examinations are free of ionizing radiation but pose their own challenges especially in a healthy vigorous infant being monitored for neurologic changes (Stokowski, 2005).

Clinical presentation of epidural hematomas are often nonspecific with seizures and hypotonia identified as the main symptoms in one series (Heyman et. al, 2005). Cephalohematomas are common findings from epidural hematoma communicating through a skull fracture. CT or MRI scans are needed for diagnosis as ultrasound detected only one case in six examinations done in a series of patients with epidural hemorrhage (Heyman et. al, 2005). Treatment ranges from conservative management in smaller hemorrhages while drainage procedures are often required for larger hematomas associated with shifting of the brain.

Optimal management of the dropped asymptomatic infant remains elusive, but this case serves as a reminder that the newborn may not demonstrate any neurologic signs in the face of a potentially devastating epidural hemorrhage. Small series reports suggest a propensity for significant injury after in-hospital falls in this population. While efforts to prevent dropped

"CASE PRESENTATION" continues on page 9



LEGISLATIVE UPDATE

Repeal and Replace, Resistance Movement, Marches, Recount, Fake News, Alternative Facts, and of course @ POTUS. The list of political headlines goes on and on. Political change is everywhere, and health care is a hot topic.

Some have said, “the devil is in the details”, yet not many concrete details have been made public. A repeal and replacement of the Affordable Care Act (ACA) may affect us both at work and at home. ACA items such as pricing and transparency will be debated.

The presidential executive orders on immigration may affect foreign-born physicians. The American Medical Association states that as many as 25% of practicing physicians were born in another country. FierceHealthcare.com reports that the Cleveland Clinic and Johns Hopkins Medicine have identified more than 30 patients from countries subject to the immigration order who are scheduled to receive medical care in the next 90 days.

From Nursing Community (thenursingcommunity.org)

“Based on the Administration’s Budget Blueprint released in March, President Trump’s FY 2018 Budget Proposal recommends to Congress steep cuts to HHS programs overall. Released officially today, the proposal suggests that the Title VIII Nursing Workforce Development programs be reduced by 64% taking the funding level from \$229.472 million in FY 2017 down to \$82.977 million. To put this in context, this is slightly more than the programs received back in FY 2001. Essentially, what the budget recommends is to only fund the NURSE Corps (Loan Repayment and Scholarship program) and eliminates the funding for the following Title VIII programs:

- Advanced Nursing Education Grants (ANE), ANE Traineeships, and Nurse Anesthetist Traineeships
- Nurse Education, Practice, Quality, and Retention Program

- Nurse Faculty Loan Program
- Nursing Workforce Diversity Grants
- Comprehensive Geriatric Education Grants

As it relates to the National Institute of Nursing Research (NINR), the cuts propose taking the funding levels back to approximately what NINR received 16 years ago. The President recommends a 24% reduction to NINR- taking the funding from \$150.273 million in FY 2017 down to \$113.668 million. For all of National Institutes of Health (NIH), the recommended cut is approximately 21% taking the funding from \$32.084 billion to \$26.9 billion.

While Title VIII and NINR are the two programs of interest for the coalition, there are some other highlights. For example, the budget recommends consolidating the Agency for Healthcare Research and Quality into NIH by creating the National Institute for Research on Safety and Quality and suggests maintaining its’ funding at \$272 million. For a full list of the proposed reductions, eliminations, and increases, please see the following:

- Budget of the U.S. Government: A New Foundation for American Greatness FY 2018
- OMB Details
- Department of Health and Human Services
- HHS Budget in Brief (see page 23 and 36 of pdf)
- HRSA Budget Justification

During Nurses Week, we were on the Hill educating Congressional staff about the importance of Title VIII and NINR and will continue during the Congressional appropriations process. We have tremendous champions in the House and Senate who will help support these programs. The President’s Budget is only recommendations and not enforceable by law so we look to Congress to fund these programs and in turn support America’s health.”

Regardless of which side of the aisle you support, health care is a dynamic topic that affects us all. Staying aware and engaged is what we can all do to ensure we remain a vital part of the political process.

FLORIDA LEGISLATION

House Bill 807 Practices of Substance Abuse Service Providers Authorizes Office of Statewide Prosecution to investigate & prosecute patient brokering offenses; increases penalties for operating without license; requires DCF to conduct background screening for owners, directors, CFOs, & clinical supervisors of substance abuse service providers; revises limitations on referrals to recovery residences; authorizes court to approve application for disclosure of substance abuse treatment records; prohibits certain marketing practices; provides fines & penalties. Status:



Ordered Enrolled

House Bill 1041 Laboratory Screening

Clarifies that certain requirements relating to reporting of positive HIV test results to county health departments apply only to testing performed

in a non-health care setting; revises provisions relating to public information initiative on lead-based paint hazards; revises requirements for State Surgeon General's program for early identification of persons at risk of having elevated blood-lead levels. Status: Ordered Enrolled

House Bill 101 Certificates Of Nonviable Birth Creates "Grieving Families Act"; authorizes State Registrar of Vital Statistics Office of DOH to electronically receive certificate of nonviable birth; requires DOH to issue certificate of nonviable birth upon request of specified parent; authorizes rulemaking by DOH. Status: Signed by Officers and presented to Governor

House Bill 103 Public Rec./Nonviable Birth Records

Provides that certain information included in nonviable birth records is confidential & exempt from public records requirements; provides for future legislative review & repeal of exemption; provides statement of public necessity. Status: Signed by Officers and presented to Governor

House Bill 229 Health Care Practitioner Licensure

Revises provisions related to impaired practitioner programs; requires DOH to establish terms & conditions of program by contract; provides contract terms; requires DOH to refer practitioners to consultants; revises grounds for refusing to issue or renew license, certificate, or registration in health care profession. Status: Signed by Officers and presented to Governor

House Bill 249 Drug Overdoses Permitting certain entities to report controlled substance overdoses to the Department of Health; providing immunity for persons who make reports in good faith; requiring a hospital with an emergency department to develop a best practices policy to promote the prevention of unintentional drug overdoses, etc. Status: Signed by Officers and presented to Governor

FEDERAL LEGISLATION

The American Association of Nurse Practitioners (AANP) Call to Action – ACA Repeal and Replace

Health Care Reform in the 115th Congress
ACTION NEEDED: Urge Congress to promote patient-centered health care, including timely access to high-quality care delivered by the patient's provider of choice, such as nurse practitioners.

As Congress considers changes to the health care system, nurse practitioners (NPs) request that any reform or replacement legislation:

- Protects patient choice by ensuring that health care delivered by nurse practitioners is covered by insurance and other healthcare options;
- Uses provider neutral language;
- Ensures patients have access to health care with affordable coverage options, regardless of their preexisting conditions;
- Ensures Medicare, Medicaid and private health insurance coverage continues to protect vulnerable populations such as the elderly, the chronically ill, women and children;
- Upholds the principles of Essential Health Benefits, including patient access to ambulatory care, emergency services, hospitalization, maternity and newborn care, mental health services and addiction treatment, prescription drugs, rehabilitative services and devices, laboratory services, preventive services, wellness services and chronic disease management, and pediatric services;
- Maintains the nation's commitment to strengthening its health care workforce by continuing to invest in the preparation of health care providers such as NPs; and
- Creates greater efficiency in the Medicare system by retiring barriers to practice and eliminating unnecessary duplication of health care providers' efforts.

AANP urges Congress to ensure that any health care reform legislation is patient centric and includes NPs as a high-quality health care provider.

"Nurse Practitioners have a Critical Role in our Nation's Health Care System

NPs have delivered high-quality health care to their patients for over half a century and are the health care provider of choice for millions of patients throughout the country. They are advanced practice registered nurses who are prepared at the masters or doctoral level to provide primary, acute, chronic and specialty care to patients of all ages and walks of life.

NP daily practice consists of: assessment; diagnosis; initiating and managing treatment; including ordering, performing, supervising and interpreting diagnostic and

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laboratory tests, prescribing medication, coordination of care, counseling, and educating patients their families and communities.

NPs practice in a wide variety of settings, including but not limited to: clinics, hospitals, emergency rooms, urgent care sites, private physician or NP practices (both managed and owned by NPs), nursing homes, VA health facilities, Indian Health facilities, schools, colleges, retail clinics, public health departments, nurse managed clinics and homeless clinics.

NPs hold prescriptive authority in all 50 states and the District of Columbia. Nurse practitioners are widely recognized for the high-quality care they provide to patients, as evidenced by the more than 870 million annual patient visits made to NPs.”

March of Dimes

For the 115th Congress (2017-18), March of Dimes’ top federal priorities are:

- Protecting the health care of women, children and families,
- Promotion of funding for key federal maternal and child health initiatives, and
- Federal efforts to address Zika virus as it relates to pregnant women and infants.

Programs important to the March of Dimes include:

- CDC’s National Center for Birth Defects and Developmental Disabilities and Safe Motherhood efforts,
- Child health research at the NIH’s National Institute for Child Health and Human Development, and
- HRSA’s title V Maternal and Child Health Block Grant and newborn screening programs.

The March of Dimes will work to protect investments in these programs from unwarranted cuts and ensure they have appropriate funding to improve the wellbeing and quality of life for women, infants, children, and families.

The March of Dimes also maintains strong relationships with officials at the Department of Health and Human Services, including CDC, CMS, NIH, HRSA, FDA, and other agencies. The March of Dimes meets with officials and provides both formal and informal input and feedback on dozens of federal regulations and initiatives each year.

Food For Thought

The following is a summary of changes and/or additions to the 7th Edition NRP Guidelines:

1. Resuscitation Team

- Meconium-stained fluid is a perinatal risk factor that requires the presence of one resuscitation team member with full resuscitation skills, including endotracheal intubation.

2. Delayed Cord Clamping

- Current evidence suggests that cord clamping should be delayed for at least 30 to 60 seconds for most vigorous term and preterm newborns. If placental circulation is not intact, such as after a placental abruption, placenta previa, vasa previa, or cord avulsion, the cord should be clamped immediately after birth. There is insufficient evidence to recommend an approach to cord clamping for newborns requiring resuscitation at birth.

3. Initial Steps

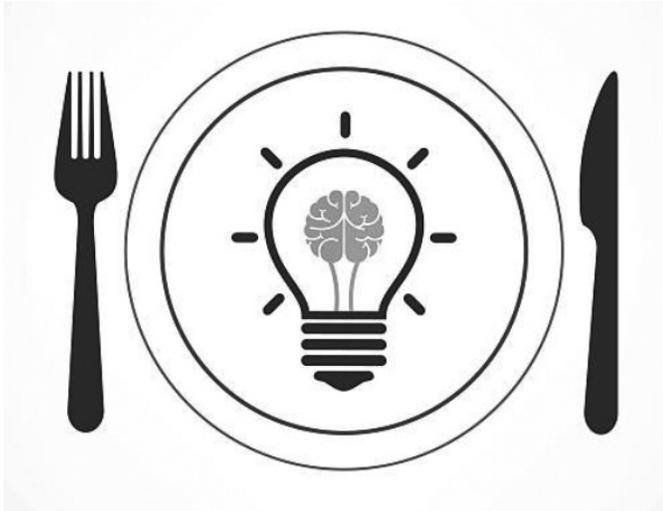
- Non-vigorous newborns with meconium-stained fluid do not require routine intubation and tracheal suctioning; however, meconium-stained amniotic fluid is a perinatal risk factor that requires presence of one resuscitation team member with full resuscitation skills, including endotracheal intubation.

4. Use of Oxygen

- Resuscitation of newborns greater than or equal to 35 weeks’ gestation begins with 21% oxygen (room air). Resuscitation of newborns less than 35 weeks’ gestation begins with 21% to 30% oxygen.
- If a baby is breathing but oxygen saturation (SpO₂) is not within target range, free-flow oxygen administration may begin at 30%. Adjust the flowmeter to 10 L/min. Using the blender, adjust oxygen concentration as needed to achieve the oxygen saturation (SpO₂) target.

5. Use of PPV

- For PPV, adjust the flowmeter to 10 L/min.
- Initial ventilation pressure is 20 to 25 cm H₂O. When PEEP is used, the recommended initial setting is 5 cm H₂O.
- When PPV begins, consider using an electronic cardiac monitor for accurate assessment of the HR. The most



important indicator of successful PPV is a rising HR.

- When PPV begins, the assistant listens for increasing HR for the first 15 seconds of PPV.

6. Endotracheal Intubation

- Newborns greater than 2 kg and greater than 34 weeks' gestation require a size 3.5 endotracheal tube. The size 4.0 endotracheal tube is no longer listed on the NRP Quick Equipment Checklist.
- The vocal cord guide on the endotracheal tube is only an approximation and may not reliably indicate the correct insertion depth. The tip-to-lip measurement, or depth of the endotracheal tube, is determined by using the "Initial Endotracheal Tube Insertion Depth" table or by measuring the nasal-tragus length (NTL).

7. Chest Compressions

- Chest compressions are indicated when the HR remains less than 60 beats/min after at least 30 seconds of PPV.
- Chest compressions are administered with the 2-thumb technique. Once the ETT or laryngeal mask is secured, the compressor administers chest compressions from the head of the newborn and the person delivering ventilation via ETT or laryngeal mask moves to the side to make room for the compressor at the head of the newborn.
- An electronic cardiac monitor is the preferred method for assessing HR during chest compressions.

8. Medication

- Epinephrine is indicated if the newborn's HR remains less than 60 beats/min after at least 30 seconds of PPV that inflates the lungs (moves the chest), preferably through a properly inserted ETT or laryngeal mask, and another 60

seconds of chest compressions coordinated with PPV using 100% oxygen.

- Epinephrine is not indicated before you have established ventilation that effectively inflates the lungs.
- One endotracheal dose of epinephrine may be considered while vascular access is being established. If the first dose is given by the ET route and the response is not satisfactory, a repeat dose should be given as soon as emergency UVC or intraosseous access is obtained (do not wait 3–5 minutes after the endotracheal dose).
- The recommended solution for acutely treating hypovolemia is 0.9% NaCl (normal saline) or type-0 Rh-negative blood. Ringer's Lactate solution is no longer recommended for treating hypovolemia.
- Sodium bicarbonate should not be routinely given to babies with metabolic acidosis. There is currently no evidence to support this routine practice.
- There is insufficient evidence to evaluate safety and efficacy of administering naloxone to a newborn with respiratory depression due to maternal opiate exposure. Animal studies and case reports cite complications from naloxone, including pulmonary edema, cardiac arrest, and seizures.
- If the anticipated gestational age is less than 30 weeks, consider having surfactant available. Consider administering surfactant if the baby requires intubation for respiratory distress or is extremely preterm.

9. Ethics and End of Life Care

- If responsible physicians believe that the baby has no chance for survival, initiation of resuscitation is not an ethical treatment option and should not be offered. Examples include birth at a confirmed gestational age of less than 22 weeks' gestation and some congenital malformations and chromosomal anomalies.

Targeted Pre-ductal Oxygen Saturation (SpO₂) Levels After Birth

1 min	60-65%
2 min	65-70%
3 min	70-75%
4 min	75-80%
5 min	80-85%
10 min	85-95%

Use of Umbilical Cord Blood for the Initial Newborn Blood Tests

1. Objective -
 - Understand how the use of placental blood for admission blood testing prevents phlebotomy in the first hours of life, reduces need for blood transfusion, reduces risk of IVH secondary to early blood transfusion, and minimizes false negative blood cultures.
 - Understand how the umbilical cord and fetal side of the placenta are bathed in the same amniotic fluid as the fetus, are exposed to the same pathogens as the fetus at the time of delivery, and that cord blood remains isolated from maternal blood by the trophoblastic membrane.
2. Blood Sampling -
 - Admission lab testing in premature and critically ill infants commonly includes CBC, blood culture, blood type and screen, metabolic screen, and cord gas. Chromosomes or other genetic testing is also occasionally necessary.
 - Even without genetic testing, routine tests typically require 3 or more mL of blood.
3. IVH Risks and Blood Transfusions -
 - Rates of transfusion in VLBW are higher in neonates than any other pediatric population.
 - Up to 90% of neonates less than 1 kg at birth require at least one packed red blood cell transfusion prior to discharge.
 - More than 50% decrease in severe IVH following institution of restrictive transfusion guidelines.
 - Rate of IVH was 27% among infants receiving a transfusion in the first week of life v. 2 % among those not receiving a transfusion.
4. Blood Cultures -
 - Require more blood volume than any other laboratory test with the exception of genetic testing.
 - Obtaining culture from placenta allows increased volume of blood, thereby decreasing the chance for a false negative result.
 - Greater sensitivity due to higher volume of blood cultures from cord blood may prevent extending the course of antibiotic treatment.
5. Infant Metabolic Screen -
 - Obtaining the first newborn metabolic screen from cord blood is accurate for hemoglobinopathies, biotinidase deficiency, galactosemia, and fatty acid oxidation disorders.
 - Other conditions may yield false positive or negative results, whether the sample immediately after birth is from cord blood or blood directly from the neonate.
6. Cord pH and Blood Gas, Blood Type & Screen -
 - Already being drawn from placenta
7. Technique for drawing cord blood -
 - Remind the obstetrician to clamp the placental side of the umbilical cord.
 - Maintain sterile technique.
 - Cord blood specimens should be obtained within 15 minutes of delivery of placenta.
 - Several techniques have been described, including using umbilical cord segment accessing the vessels directly on the placental surface, either artery or vein.
 - The placental surface and base of the umbilical cord are prepared with betadine or chlorhexidine (must dry to be effective).
 - Recommend insertion of an 18-gauge needle with the bevel down attached to a 10 mL syringe into a pre-identified large artery or vein near the umbilical cord insertion on the placenta.

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infants need to continue, clinicians need to carefully consider the unique characteristics of newborn infants which often mask significant injury when making their imaging decisions.

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Answers (Questions on page 12)

- (C) Urogenital defects are common in neonates born with Trisomy 13. Cardiac defects are more common in neonates with Trisomy 21. Rocker bottom feet and ophthalmologic abnormalities are seen in both syndromes.
- (B) Renal disease is associated with oligohydramnios. Neural tube defects and trachea-esophageal atresia are associated with polyhydramnios.
- (A) Metabolism is slower in infants because the liver enzyme systems are not fully developed. This causes a prolonged effect of some drugs (phenobarbital). The renal system is also immature, but this relates to drug clearance. Larger volume of body water increases the volume of distribution, but is not associated with metabolism.



NEWS FLASH

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FANNP Newsletter Submission Calendar

Edition	Article Submission Deadline	Publish Date
March 2017	02/10/17	03/10/17
June 2017	05/12/17	06/09/17
September 2017	08/11/17	09/08/17
December 2017	11/10/17	12/08/17

In addition to the core components of the newsletter, we would love to hear what you have to say! Please send in anything you would like to see added to the newsletter, whether it is an interesting article, a hot topic in the neonatal world, or even a shout out regarding a fellow FANNP member who is doing awesome things! We want to hear from you! Please submit following the above guidelines to newsletter@fannp.org



You Might Be Eligible For A 2017 FANNP Scholarship Check It Out!

Please take advantage of this opportunity! FANNP would like to distribute scholarship money to qualified candidates.

Scholarship Application 2017 Eligibility Guidelines

1. Applicants must be FANNP members.
 - a. All members, student members and associate members are eligible.
 - b. Priority for scholar 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. Applicants must be a licensed RN, ARNP, NNP or equivalent.
 - a. Preference will be given to currently licensed certificate NNPs working towards an advanced NNP degree.
3. Applicants must attend an educational program leading to a degree related to the health care field during the application period.
 - a. The application period for the 2017 scholarship is September 15, 2016 to September 15, 2017 (i.e. to be eligible for a 2017 scholarship you must have attended classes sometime between September 15, 2016 and September 15, 2017).
 - b. An applicant may receive a maximum of two scholarship awards for each degree sought.
4. Applicants will provide a short article, case study, practice pointer, evidenced-based practice update, or literature review to be published in the FANNP Newsletter.

FANNP was founded to support the educational advancement of Neonatal Nurse Practitioners and remains committed to promoting education for NNPs.

Each year on December 31st, a percentage of monies from the FANNP general operating budget are put in a scholarship fund.

FANNP is proud to be able to award scholarships to nurses and NNPs continuing their educational pursuits in the field of neonatal health care.

To obtain a scholarship application contact FANNP via email scholarships@fannp.org. COMPLETED applications must be postmarked by September 15th each year.

EDUCATIONAL OFFERINGS

Academy of Neonatal Nursing 17th National Neonatal Nurses

Conference

September 13-16, 2017

Westgate Resorts

Las Vegas, NV

www.academyonline.org

National Association of Neonatal Nurses (NANN)

33rd Annual Educational Conference

October 11-14, 2017

Omni Hotel Rhode Island Convention
Center

Providence, RI

www.nann.org

The 28th FANNP Neonatal Nurse Practitioners Symposium: Clinical Update and Review

October 17-21, 2017

Sheraton Sand Key Resort
Clearwater Beach, FL

www.fannp.org



Hot Topics in Neonatology

December 10-13, 2017

Marriot Marquis

Washington, DC

www.hottopicinneonatology.org



CLASSIFIEDS

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POSTER & PODIUM PRESENTATION CALL FOR SUBMISSIONS

SUBMISSION DEADLINE:

June 30, 2017

FANNP is seeking abstracts for posters and podium presentations for the annual FANNP's National Neonatal Nurse Practitioner Symposium on October 17th-21st, 2017. The planning committee invites submissions by members and non-members and participation is open to health professionals whose specialty has a focus on the Neonatal Population (this includes but is not limited to NNPs, RNs, Clinical Nurse Specialists, & Neonatologists). We invite colleagues to share their expertise in one of the following categories:

- Original Research
- Innovations in Practice or Education
- Patient Safety
- Quality Improvement and Benchmarking Initiatives
- Case Studies

MORE INFORMATION IS
AVAILABLE NOW AT FANNP.ORG

For information on Classified Advertising in the FANNP Newsletter, please refer to the guidelines and fees, which can be found at fannp.org under the Newsletters heading.



Bring it On...



**Practice Questions
to Prepare
for the NNP
Certification Exam**

1. In comparing the characteristics between Trisomy 13 and Trisomy 21, a characteristic that can differentiate the two syndromes is the presence of:
 - A. Eye abnormalities.
 - B. Rocker bottom feet.
 - C. Urogenital defects.

2. A pregnant woman arrives to Labor and Delivery in labor. An ultrasound indicates the fetus is approximately 36 weeks gestation and the amniotic fluid is noted to be low. The infant should be screened for the following:
 - A. Neural tube defect.
 - B. Kidney disease.
 - C. Tracheo-esophageal atresia.

3. Drug metabolism is generally decreased in neonates primarily because of:
 - A. An underdeveloped liver enzyme system.
 - B. An immature renal system.
 - C. A large volume of body water.

Answers on page 9

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