

# FANNP NEWS



INSIDE: PROPHYLACTIC VS. SYMPTOMATIC TREATMENT FOR PATENT DUCTUS ARTERIOSUS • LEGISLATIVE UPDATE • EDUCATIONAL OFFERINGS • CONFERENCE UPDATE • BRING IT ON • LETTER FROM THE PRESIDENT • POCKET NOTEBOOK • DATES TO REMEMBER AND MORE...

The Publication of the Florida Association of Neonatal Nurse Practitioners

## Prophylactic vs. Symptomatic Treatment for Patent Ductus Arteriosus

*Laura E. Hofer*

A patent ductus arteriosus (PDA) represents a persistent communication between the aorta and pulmonary artery after birth. It is one of the most common congenital heart defects in infants, occurring in 1 per 2,000 term births (Dice & Bhatia, 2007). It is inversely related to gestational age, with higher incidence in extremely low birth weight infants, reaching 70% in infants <28 weeks gestation (Abu-Shawesh & Almidani, 2019). Failure of the ductus arteriosus (DA) to close can lead to increased morbidities and mortality. Current management of PDA includes conservative medical management, such as fluid restriction and increased airway pressures; pharmacological treatment using indomethacin, ibuprofen, and acetaminophen; and surgical intervention by direct closure or percutaneous ligation (Conrad & Newberry, 2019). The controversy arises in the discussion of when and how to treat a PDA. Some believe early, prophylactic treatment is important to prevent the significant pulmonary edema, persistent pulmonary hypertension, systemic hypotension,

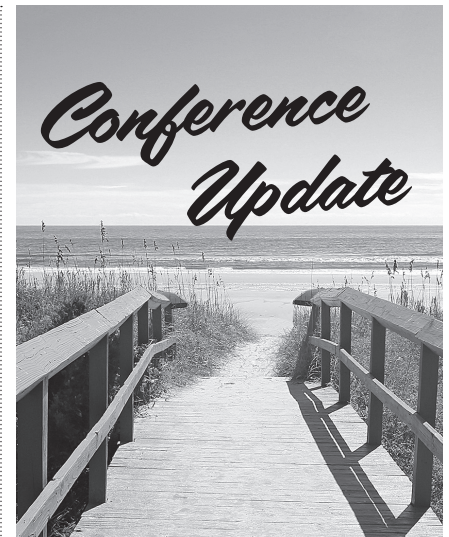
and other long-term consequences associated with a PDA. Others believe management should be more conservative and a PDA should be hemodynamically significant before initiating treatment. This paper discusses symptomatic and prophylactic treatment of a PDA, weighing the positive and negative effects of both.

### Review of the Literature

Historically speaking, the management of PDA has utilized an aggressive prophylactic treatment involving non-selective closure in all pre-term infants by either surgical or medical means in the first 24-72 hours after birth. This approach was adopted with the thinking that some treatment is better than no treatment and closure of the PDA would result in decreased neonatal morbidity (El-Khuffash et al., 2016). The treatment of choice has been non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen and indomethacin. These drugs act to block cyclooxygenase enzymes and reduce prostaglandins throughout the body.

Meta-analysis of randomized

SEE "DUCTUS ARTERIOSUS" on page 4



Summer is here, school is out, and hopefully vacations have been planned!! The good news is we have been able to increase the numbers for onsite registration for the 32nd National Neonatal Nurse Practitioner Symposium, Clinical Conference and Review! The Planning Committee has been working very hard, (trying not to tear our hair out LOL) getting this event planned. Part of the delay is that, in addition to planning the conference, events, speakers, etc., we are concentrating on being fiscally responsible with the type of presentation and attendance in order to give you the product you have been accustomed to in the past, within the framework of the updated culture of today. By the time you read this, registration will be

SEE "CONFERENCE" on page 6

## Letter from the President

As we approach the summer, I can't help but recall where we were in 2020. The pandemic was in full force; shutdowns, stay at home orders, and pure panic. Thankfully, we are finally seeing the light at the end of the tunnel. Although 2020 was not what we expected, I hope that many of you were able to complete your degree and have already passed your boards. For those of you preparing to take the exam, I wish you good luck. Also remember that the FANNP Symposium offers On Demand recordings from our October 2020 conference. You can still purchase access to these lectures. I attended the conference for the first time many years ago and the content was instrumental in my successfully passing the boards. Contact us if you would still like to get some great study materials before you take the exam.

Speaking of the conference; our organization is diligently working on preparations for our FANNP Symposium and Review scheduled for October 12-16, 2021. Our planning committee is meeting several times a week to finalize our plans for how



the conference will look this year. We do know that we will have limited availability for in-person attendance, but we are very excited about being able to offer this! We are still finalizing details for in-person capacity, keeping in mind CDC guidelines as well as social-distancing protocols, so that everyone will feel comfortable and get the most out of the time we have. Additionally, we will be offering some type of "hybrid" conference for those who are unable

to attend in person. As I said before, we are finalizing those plans as we speak. Members will be the first to know once all plans are finalized. We ask for your patience. As you know, guidelines are changing rapidly, sometimes daily. Above all, know that we have your safety in mind and are doing the very best we can to offer the educational experience you all have come to know and love. This year is our 32nd annual Symposium and we look forward to seeing everyone live and in-person in October!

To that end, there are some important dates to remember. The deadline for poster presentation is

July 15, 2021. This may look a little different this year, but please share your hard work and expertise in the field of neonatology with us. Also, the deadline for scholarships is September 15, 2021. We have earmarked money for students completing their Master's or Doctorate degrees and hope to give it away at the conference. Don't forget about the Kim Nolan Spirit Award. The deadline for those nominations is July 15, 2021. We look forward to hearing from you.

I truly hope you all have a great summer and get to take those trips that were cancelled or postponed last year. I think we all have a greater appreciation for the little pleasures in life. Remember to watch our Facebook/Instagram/Twitter pages as well as our website for important information regarding conference registration. Again, there is limited attendance for the in-person conference so make plans to register early as we anticipate a huge interest in participating together in Clearwater! I look forward to seeing you all again!

*Gayla Kaye-Steed, NNP-BC  
President, FANNP*

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## LEGISLATIVE UPDATE

Submitted by  
Paula Timoney, DNP, APRN, NNP-BC

### Florida News: Important Message from Florida Medicaid

Effective October 1, 2021, any fee-for-service claim submitted to Florida Medicaid that identifies a nurse practitioner **that is not enrolled with Florida Medicaid will be denied**, and the billing provider will not receive reimbursement for services. This includes claims that identify a nurse practitioner who only referred or ordered other services, and pharmacy claims prescribed by a nurse practitioner. Additionally, effective October 1, 2021, **Florida Medicaid patients will not be able to fill or refill prescriptions prescribed by nurse practitioners who are not enrolled with Florida Medicaid.**

Florida Medicaid requests that ALL nurse practitioners who provide any of these services described above enroll with Florida Medicaid prior to October 1, 2021. You may find the online application on the **Florida Medicaid Web Portal Enrollment Application Wizard** page. For more information regarding the Referring, Ordering, Prescribing, and Attending (ROPA) provider enrollment initiative, please visit the **Provider Screening Initiatives** page on the Agency Initiative page, including the recently created Unenrolled ROPA Provider List, **ROPA Providers Frequently Asked Questions** and **Quick Reference Guides** on ROPA provider enrollment and claims billing.

## POCKET NOTEBOOK

Sekinah Ajiboye, BSN, RNC-NIC

### NEONATAL APNEA

- I. Definition: Interruption of airflow
  - Can be pathologic if it is greater than 20 seconds, accompanied by bradycardia, hypoxemia, or cyanosis.
- II. Classification
  - Central Apnea: Lack of inspiratory effort
  - Obstructive Apnea: Inspiratory efforts are present but interrupted by airway obstruction. E.g., nasal obstruction, neck flexion
  - Mixed Apnea: combination of central and obstructive apnea
- III. Etiology:
  - Preterm Infants: Mostly due to apnea of prematurity as a result of central nervous system immaturity
  - Term Infants: Asphyxia, Intracranial hemorrhages, seizures, congenital central nervous system abnormalities, maternal medications in the peripartum period
- IV. Evaluation: It is important to rule out pathologic etiologies of apnea especially in late preterm and term infants. The work up should include:
  - CBC, Blood culture, Urine culture (to rule out an infectious process especially if accompanied by other signs of sepsis such as temperature instability)
  - Blood glucose levels, magnesium level, calcium level (to rule out an underlying electrolyte abnormality that could be the cause of the apnea)
  - Cranial Ultrasound, Brain MRI (to rule out intracranial hemorrhages)
  - EEG and Amplitude-integrated EEG (to rule out seizures)
- V. Treatment
  - Tactile stimulation (to resolve primary apnea)
  - Positive Pressure Ventilation and mechanical ventilation
  - Continue to monitor the infant's oxygen saturation and provide oxygen as required
  - Treat the underlying cause of the apnea - antimicrobial therapy for infections, anticonvulsants for seizures, neurology consult for intracranial pathologies and congenital CNS anomalies, maintain euglycemia
  - Caffeine citrate: 20 mg/kg loading dose and initiation of maintenance dose of 5-10 mg/kg every 24 hours, beginning 24 hours after loading dose
    - Due to the prolonged half-life of caffeine, infants should be monitored for 7-10 days after discontinuation to ensure resolution of apnea.

#### REFERENCE

Eichenwald, E.C., Hansen, A.R., Martin, C.R. & Stark, A.R. (2017). Cloherty and Stark's manual of neonatal care (8th ed). Wolters Kluwer.



## DUCTUS ARTERIOSUS

from page 1

controlled trials has shown high incidence of successful closure within the first week after administration without the need for a repeat course or follow-up surgical closure (Mitra et al., 2018). Further studies have shown that treatment with NSAIDs reduces the risk of severe intracranial hemorrhage, pulmonary hemorrhage, necrotizing enterocolitis (NEC), and bronchopulmonary dysplasia (Mitra et al., 2018; Sankar et al., 2019). Ohlsson et al. (2015) also report a decrease in NEC and transient renal insufficiency with the use of ibuprofen. Despite the efficacy of this treatment, the proper dosage, treatment duration, and timing of treatment remains controversial among neonatologists. Surgical ligation has also proven effective in the closure of PDA. It is rarely first-line treatment, but more frequently done after unsuccessful pharmacologic measures. Studies have shown potentially detrimental hemodynamic effects after ligation, worsened neurological outcomes, and vocal cord paralysis (Wyllie & Gupta, 2018).

There is no standardized screening tool for determining which babies to treat, so the question remains of whether we are treating infants unnecessarily and exposing them to the side effects of cyclooxygenase inhibitors and surgical complications. Spontaneous closure of the ductus will still occur in many preterm infants >1000g by two months of age (Wyllie & Gupta, 2018) without requiring intervention and by the end of the first week in approximately 30% of extremely preterm infants (Sankar et al., 2019) and those ≤1500g (Semberova et al., 2017). Many infants are not treated until the PDA is considered hemody-

namically significant, but the trouble lies in the very definition of hemodynamically significant. Defining hemodynamic significance is a complicated dynamic that includes hemodynamic effects, clinical signs, echocardiograph parameters, and severity of shunting/fluid overload, but also risk factors such as perinatal variables, gestational age, chronologic age, and genetics (Shepherd & Noori, 2019). Experts can agree that extreme prematurity and compounding variables make this designation difficult.

There is increased debate regarding the long-term safety and efficacy of current early treatment options, bringing conservative management (treatment after 72 hours of life) to the forefront. Some studies have recently shown that conservative management of increased positive and expiratory pressure and fluid resuscitation as first line treatment in very low birth weight infants with echocardiograph confirmed PDA showed a significant decrease in chronic lung disease compared to early treatment groups (Abu-Shaweesh & Almidani, 2019; Letshwiti et al., 2017). Randomized controlled trials by Clyman et al. (2019) also showed that early pharmacological treatment did not reduce the number of surgical ligations, did delay achievement to full feeds, and had increased rates of late onset sepsis in infants ≥26 weeks gestation. Patent ductus arteriosus also closed spontaneously in the first week of life in 30-40% of the infants being managed with conservative treatment methods. Despite conservative management showing great promise, there is still the risk of prolonged shunting of blood leading to adverse effects such as NEC, intraventricular hemorrhage, periventricular leukomalacia, chronic lung disease, and death.

### Limitations

One of the major limitations with some of these studies was their retrospective nature (Elhoff et al., 2016; Letshwiti et al., 2017; Semberova et al., 2017). It is difficult to determine causation and association without setting up the study with strict controls. Other studies had relatively small sample sizes with fewer than 500-1000 cases examined (Abu-Shaweesh & Almidani, 2019; Letshwiti et al., 2017). Some studies used data from the participation of only one center (as opposed to multi-center). Elhoff et al. (2016) also discussed that they did not have a consistent standardized approach to assessment and treatment in their studies. Much of the data came from research done in the period of aggressive prophylactic treatment, while there is considerably less data on more conservative measures.

### Recommendations for Further Research

While multiple treatment options exist for the treatment of PDA, there is much more to be done to appropriately target and treat these babies. Development of standardized scoring systems and treatment protocols could be beneficial. There is also call for a better definition of a “hemodynamically significant” PDA and what that means for treatment. Long-term neurodevelopmental outcomes are still relatively unknown in both prophylactic and symptomatic treatment of PDA. Despite the proven success of PDA closure with the use of certain medications, their long-term safety and efficacy regarding dosing and route of administration still need to be explored. Are there predictors of severity of a PDA that have not yet been discovered? That could be the real driving force for future PDA treatment!

### Summary

There continues to be much controversy regarding the best method of treatment of PDA in neonates. Over the last decade there has been a switch in thinking regarding optimal timing of treatment. In the past, early treatment was initiated between 24-72 hours in the hopes of minimizing the negative effects of prolonged shunting of blood across the ductus. With greater understanding of the mechanism of action of ductal closure and increased knowledge of medical and surgical treatment side effects, a new way of thinking has emerged. Some providers now favor a more conservative approach to managing a PDA. This involves more watchful waiting and evaluation of clinical decline toward a hemodynamically significant PDA. However, this brings into question what exactly hemodynamically significant means. It can be argued that that could be different for every baby. The population affected by PDA has a broad range, from extremely pre-term to term babies, making standardization of management nearly impossible.

For many term and pre-term infants, spontaneous closure of the DA does occur without incident or with minimal treatment modalities. Caution is recommended with early use of pharmacologic management or surgical intervention. Despite decades of use, uncertainty remains as to the long-term neurodevelopmental outcomes of these treatment options. However, it can be argued that it is difficult to differentiate between causation and mere association with nearly all outcomes and morbidities in these babies, further clouding the issue. Development of a better screening system to decide which babies to treat and a protocol outlining the

optimal time to treat them may be beneficial. With further research, more predictive factors of PDA severity could aid in these challenging decisions in the future.

### References

- Abu-Shaweesh, J., & Almidani, E. (2019). PDA: does it matter? *International Journal of Pediatrics and Adolescent Medicine*. doi: 10.1016/j.ijpam.2019.12.001
- Clyman, R., Liebowitz, M., Kaempf, J., Erdeve, O., Bulbul, A., Håkansson, S., et al. (2019). PDA-TOLERATE Trial: an exploratory randomized controlled trial of treatment of moderate-to-large patent ductus arteriosus at 1 week of age. *The Journal of Pediatrics*, 205, 41–48.e6. doi: 10.1016/j.jpeds.2018.09.012
- Conrad, C., & Newberry, D. (2019). Understanding the pathophysiology, implications, and treatment options of patent ductus arteriosus in the neonatal population. *Advances in Neonatal Care*, 19(3), E1–E2. doi: 10.1097/ANC.0000000000000632
- Dice, J., & Bhatia, J. (2007). Patent ductus arteriosus: an overview. *The Journal of Pediatric Pharmacology and Therapeutics: JPPT: The Official Journal of PPAG*, 12(3), 138–146. doi: 10.5863/1551-6776-12.3.138
- El-Khuffash, A., Weisz, D., & McNamara, P. (2016). Reflections of the changes in patent ductus arteriosus management during the last 10 years. *Archives of Disease in Childhood - Fetal and Neonatal Edition*, 101(5). doi: 10.1136/archdischild-2014-306214
- Elhoff, J., Ebeling, M., Hulsey, T., & Atz, A. (2016). Potential unintended consequences of a conservative management strategy for patent ductus arteriosus. *Congenital Heart Disease*, 11(1), 52–57. Doi: 10.1111/chd.12287
- Letshwiti, J., Semberova, J., Pichova, K., Dempsey, E., Franklin, O., & Miletin, J. (2017). A conservative treatment of patent ductus arteriosus in very low birth weight infants. *Early Human Development*, 104, 45–49. doi: 10.1016/j.earlhumdev.2016.12.008
- Mitra, S., Florez, I., Tamayo, M., Mbuagbaw, L., Vanniyasingam, T., Veroniki, A., et al. (2018). Association of placebo, indomethacin, ibuprofen, and acetaminophen with closure of hemodynamically significant patent ductus arteriosus in preterm infants: a systematic review and meta-analysis. *JAMA*, 319(12), 1221–1238. doi: 10.1001/jama.2018.1896
- Ohlsson, A., Walia, R., & Shah, S. (2015). Ibuprofen for the treatment of patent ductus arteriosus in preterm or low birth weight (or both) infants. *Cochrane Database of Systematic Reviews*, 2015(2), CD003481. doi: 10.1002/14651858.CD003481.pub6
- Sankar, M., Bhombal, S., & Benitz, W. (2019). PDA: to treat or not to treat. *Congenital Heart Disease*, 14(1), 46–51. doi: 10.1111/chd.12708
- Semberova, J., Sirc, J., Miletin, J., Kucera, J., Berka, I., Sebkova, S., et al. (2017). Spontaneous closure of patent ductus arteriosus in infants ≤1500 g. *Pediatrics*, 140(2). doi: 10.1542/peds.2016-4258
- Shepherd, J., & Noori, S. (2019). What is a hemodynamically significant PDA in preterm infants? *Congenital Heart Disease*, 14(1), 21–26. doi: 10.1111/chd.12727
- Wyllie, J., & Gupta, S. (2018). Prophylactic and early targeted treatment of patent ductus arteriosus. *Seminars in Fetal and Neonatal Medicine*, 23(4), 250–254. doi: 10.1016/j.siny.2018.03.005

*All feature articles are submitted to the FANNP Scholarship Committee by FANNP members seeking to further their education. This article was edited by FANNP in conjunction with the student, and with the student's permission*

## CONFERENCE from page 1

in order to evaluate how changes will affect the bottom line. In doing this, we are also keeping in mind YOUR budget! The good news, whether on-site or online, in addition to the availability of on-demand content, is that you will have the opportunity to obtain almost twice the CEU's! Please bear with us in this climate of unprecedented changes in our efforts to bring you yet another great conference!

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



*FANNP'S annual conference returns to the Sheraton Sand Key, Clearwater Beach Florida, October 12-16, 2021. The conference will also be available to attend virtually.*

# 2021



**FANNP's 32nd**

## NATIONAL NEONATAL NURSE PRACTITIONER SYMPOSIUM: CLINICAL UPDATE AND REVIEW

**October 12-16**

**Attend live, or view virtually!**

The Florida Association of Neonatal Nurse Practitioners invites you to join us at our 2021 Annual Conference. This year, FANNP leadership has created a "hybrid format" with alternatives for attendance. So, you'll have the choice to:

- Attend live in-person at the Sheraton Sand Key, Clearwater Beach, Florida

**"The only review course for NNPs, by NNPs"**  
Register online at [FANNP.org](http://FANNP.org)

### CONTINUING EDUCATION CREDITS

The Florida Board of Nursing has approved "live attendance" of this conference event during the scheduled times of October 12-16, 2021 for up to 27.5 contact hours.

Continuing education credits can also be obtained by

*Download the conference brochure and register online at [FANNP.org](http://FANNP.org). On-site attendance is limited, and we are quickly reaching capacity for the B (review) track. We have space in the on-site A (advanced) track at this time. Virtual attendance is unlimited!*





## Calling for Research Proposals... FANNP Grants Available

Each year FANNP sets aside funds for the support of research projects. Applications for funding are reviewed by the Research Committee. The Research Committee makes recommendations to the Board of Directors on proposals received. Members of the Research Committee are appointed by the Board of Directors. The grant application period is rolling—there is no deadline for grant submission. Grants will be awarded within six weeks following submission, based on the Research committee and BOD decision.

Please visit [www.fannp.org](http://www.fannp.org) for more details

## Brag Board



Dr. Tiffany Gwartney has an upcoming publication in Neonatal Network related to Covid-19 breastfeeding practices. Congratulations, Dr. Gwartney!

Gwartney, T. & Duffy, A. (2021). Maintaining safe breastfeeding practices during the COVID-19 pandemic: An overview of the evidence to inform clinical guidelines. *Neonatal Network*, 40(3).

Tammy Murray APRN, NNP-BC graduated from Northeastern University, Boston Massachusetts in May of 2020 with her DNP. Congratulations Dr. Murray!

Dr. Leslie Parker, along with colleagues Katelyn Desorcy-Scherer, RN and Marina Magalhães, RN have been published in the March 2021 edition of *Advances in Neonatal Care*. Their State of the Science Review, titled 'Feeding Strategies in Preterm Very Low Birth-Weight Infants' seeks to examine safe and effective feeding protocols in preterm neonates. "Providing enteral feeds to preterm very low birth-weight (VLBW) infants is critical to optimize nutrition, enhance growth, and reduce complications. Protocols guiding feeding practices can improve outcomes, but significant variation exists between institutions, which may limit their utility.



To be most effective, protocols should be based on the best available evidence." The review concluded that "Initiation of feeds within the first 3 days of life and advancement by 30 mL/kg/d may decrease time to attain full feeds without increasing complications. Insufficient evidence guides optimal timing of HM fortification, as well as feeding infants undergoing blood transfusions, infants diagnosed with a PDA, and infants receiving medical treatment of PDA closure."

Congratulations Dr. Parker and fellow colleagues!

Everyone...keep up the great work! Also, thank you to all the family and friends for your support!

*FANNP Research Committee  
Members Present a FREE  
Virtual Workshop*

## Preparing your Podium Presentation and Virtual Poster

Posters are used to update practice and communicate new findings. Information is shared in a compact, concentrated and efficient manner. Posters can be found at the local level in NICUs, throughout the hospital and at the state or national level in universities and large conferences.

The FANNP Research Committee share their expertise and guide participants through tips and tricks to be utilized when developing a poster or podium presentation. They encourage participants to share QA studies, unique case studies, evidence-based practice pointers and research projects.

The live virtual interactive session was held June 10, 2021 via Zoom and a recording of the presentation is available On-Demand. Interested participants can register on the FANNP website to view the presentation and earn a FREE 1 hour CEU.

The workshop discusses the necessary elements for poster and podium abstract development, the process for virtual poster development, how to prepare a virtual poster PowerPoint presentation and how to create an effective podium presentation.

Consider sharing your knowledge and experience with others. FANNP is seeking submissions for Poster and



## *FANNP's National Neonatal Nurse Practitioner Symposium: Clinical Update and Review, 2021*

### **POSTER & PODIUM PRESENTATION CALL FOR SUBMISSIONS**

**SUBMISSION DEADLINE: July 15, 2021**

FANNP is seeking abstracts for posters and podium presentations for the annual FANNP's National Neonatal Nurse Practitioner Symposium October 12-16, 2021. 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**

Podium Presentations for the 2021 NNP Symposium: Clinical Update and Review. This workshop can get you started. A Poster Presentation looks great on your resume and can make you shine brighter at your next performance review. For more information, visit the FANNP

website.

Thanks to Terri Marin (Augusta, GA), Jennifer Humphries (Northport, AL) and Paula Timoney (St. Petersburg, FL) for developing and presenting this workshop.





## It's Scholarship Application Time!

As part of FANNP's commitment to education, we are excited to be able to award scholarships of \$1000 - \$2000 to nurses and NNPs continuing their educational pursuits in the field of neonatal health care. Scholarship monies can be used for tuition, books, or any expenses incurred while in school. Scholarship recipients are announced each year in October at the FANNP Symposium.

Scholarship recipients give back to their profession and provide a short article, case study, practice pointer, evidenced-based practice update or literature review to be published in the FANNP Newsletter.

FANNP members pursuing a degree in neonatal health care are encouraged to apply for a scholarship. Preceptors, mentors and instructors please encourage students to become a FANNP member and apply for scholarships.

To obtain an application or for questions, please contact FANNP via email at: [scholarships@fannp.org](mailto:scholarships@fannp.org).

**COMPLETED applications must be postmarked by September 15, 2021**



### Scholarship Application 2020 Eligibility Guidelines

1. Applicants must be FANNP members.
  - a. All voting members, student members and associate members are eligible.
  - b. Priority for scholarship awards is given to voting members, followed by student members and then associate members.
  - c. Priority for scholarship awards is 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 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 2020 scholarship is September 15, 2019 to September 15, 2020 (i.e. to be eligible for a 2020 scholarship you must have attended classes sometime between September 15, 2019 and September 15, 2020).
  - 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.

**To obtain a scholarship application contact FANNP via email [scholarships@fannp.org](mailto:scholarships@fannp.org)**

## FANNP Dates to Remember

*ANA and WHO have again designated 2021 the Year of the Nurse.*

<b>Event/Item</b>	<b>Date/Deadline of Event/Item</b>
FANNP Grant.....	Ongoing
Poster Presentation Abstracts .....	July 15, 2021
Kim Nolan Spirit Award.....	July 15, 2021
FANNP 2020 Conference Available On Demand.....	Aug. 15, 2021
FANNP Scholarship .....	Sept. 15, 2021
Annual National Neonatal Nurse Practitioner Symposium: Clinical Update and Review* .....	Oct. 12-16, 2021
Nurse Practitioner Week* .....	Nov. 7-13, 2021

*\*Dates change annually*

### FANNP Newsletter Submission Calendar

Edition	Article Submission Deadline	Publish Date
Summer 2021	05/08/21	06/05/21
Fall 2021	08/07/21	09/04/21
Winter 2021	11/06/21	12/04/21
Spring 2022	02/12/22	03/12/22

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](mailto:newsletter@fannp.org).

## BRING IT ON ANSWERS from page 12

1. A- Suspicion for CF is raised in neonates with meconium ileus following birth. Diagnosis is confirmed with DNA testing and sweat test. Presence of meconium ileus requires prompt attention to prevent complications such as volvulus, sepsis, bowel necrosis, or intestinal perforation.
2. B- Short bowel syndrome is a syndrome of chronic malabsorption and malnutrition as a direct result of surgical bowel shortening. Loss of the ileocecal valve specifically, results in small-bowel colonization with colonic bacteria and less time for digestion and absorption of nutrients in the small intestine.
3. C- Syndactyly refers to webbed or conjoined fingers or toes. It is the most common malformation of limbs, affecting approximately 1 in 2000-3000 children each year.

## The Kim Nolan Spirit Award... In Memory and Honor of Kim Nolan

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. This award is a very prestigious honor! To read more about Kim visit [www.fannp.org](http://www.fannp.org). Nominations are due July 15, 2021 and the winner will be announced at this year’s FANNP Conference.



*Kim Nolan*

## Newsflash – FANNP Online

Get the latest news and updates from FANNP, including valuable conference information at [www.fannp.org](http://www.fannp.org). Here, you can also check out past newsletters, find out about available scholarships and grants, nominate someone for the Kim Nolan Spirit Award, learn more about FANNP, and so much more!

Join us on Facebook and follow us on Twitter and Instagram @FANNPorg. Be sure to tag us and let us know when you PASS YOUR BOARDS!!

### The 31st FANNP National NNP Symposium is now available On-Demand:

Neonatal nurse practitioner students, neonatal nurses and novice or seasoned NNPs will enjoy an up to date, all-inclusive neonatology review. Prepare for the National Certification Corporation (NCC) Neonatal Nursing Specialties exams, Continuing Competency Assessment or Certification Maintenance Education hours. FANNP’s 2020 Conference includes:

- An on-demand library to review recorded presentations available until 8/15/21
- Virtual Exhibit Hall
- Virtual Poster Exhibit

FANNP leadership’s goal is to provide an excellent educational opportunity while keeping our participants, speakers, and exhibitors safe. Learn and earn educational credits while at home in comfy pants!

*“The only review course for NNPs, by NNPs”*



## EDUCATIONAL OFFERINGS

\*\*Check with individual conferences for changes in dates or cancellations due to Covid-19

### 35<sup>th</sup> International Conference on Neonatology and Perinatology "Virtual via Webinar"

July 26-27, 2021

<https://neonatology.insightconferences.com>

### 21<sup>st</sup> National Neonatal Nurses Conference – Academy of Neonatal Nursing

September 8-11, 2021

Hyatt Regency  
Chicago, IL

[www.academyonline.org](http://www.academyonline.org)

### NANN 37<sup>th</sup> Annual Conference "Virtual"

September 13-15, 2021

Denver, CO

[www.nann.org](http://www.nann.org)

### The 32<sup>nd</sup> FANNP Neonatal Nurse Practitioners Symposium: Clinical Update and Review

October 12-16, 2021

Sheraton Sand Key  
Clearwater Beach, FL

[www.fannp.org](http://www.fannp.org)



### Neonatal Pharmacology Conference – MUSC

November 8-10, 2021

Francis Marion Hotel  
Charleston, SC

[www.medicine.musc.edu/education/cme](http://www.medicine.musc.edu/education/cme)

### Vanderbilt University Medical Center 40<sup>th</sup> Annual Conference: Advances and Controversies in Neonatal Medicine

November 11-12, 2021

Hilton Garden Inn  
Nashville, TN

[www.pediatrics.vumc.org](http://www.pediatrics.vumc.org)

### Hot Topics in Neonatology

December 5-8, 2021

Gaylord National

National Harbor, MD

[www.hottopicinneonatology.org](http://www.hottopicinneonatology.org)

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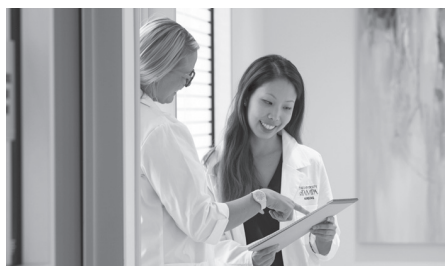
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Bring it On...



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

1. Baby G. is a term male with cystic fibrosis. He presented on DOL 1 with abdominal distention and erythema along with significant metabolic acidosis. Which common cystic fibrosis GI complication do you suspect?
  - A. Meconium ileus
  - B. Gastroschisis
  - C. Pyloric stenosis
2. For the same Baby G. above, ileocecal valve was removed during surgery with bowel resection. What long-term complication are you anticipating?
  - A. Rectal atresia
  - B. Short bowel syndrome
  - C. NEC
3. The incomplete separation of fingers and toes is called:
  - A. Camptodactyly
  - B. Clinodactyly
  - C. Syndactyly

Answers on page 10

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