



Perinatal Gazette



Newsletter of the Regional Perinatal Center

Maria Fareri Children's Hospital at Westchester Medical Center

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RNICU Annual Graduate Reunion Party **September 14, 2005**

On Wednesday September 14, 2005, from 3:00-5:00 pm at the Maria Fareri Children's Hospital the Regional Neonatal Center hosted a "Celebration of Life", a 23 year long standing tradition at Westchester Medical Center. More than 14,000 babies have graduated from Westchester Medical Center's neonatal intensive care unit, which treats many of the sickest newborns in New York State.

The annual RNICU Graduate Reunion party took place on the front lawn of the Children's Hospital and afforded parents and families served by the RNICU a well deserved opportunity to show off their children. Many of these children were born just this year while others were born in previous years and continue to come back each year until they are in school.

This party is a wonderful occasion for the many health care professionals who cared for these children as sick newborns to see them growing and active. What a joy to see these kids enjoying bouncing castles, cupcakes and ice cream in the afternoon sun. RNICU staff & nurses mingled with over 300 guests and FUN was had by all!

Lower Hudson Valley Perinatal Network **(LHVPN)**

On June 21, 2005 the LHVPN held another successful quarterly educational & networking meeting hosted by Good Samaritan Hospital in Suffern, NY. The meeting focused on the importance of educating our communities on Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Spectrum Disorders (FASD). Fifty people attended the meeting where Drs. Jonathan Clyman, PhD., genetics counselor and FASD educator for the Mid-Hudson Family Health Services Institute and Matthew Jaeger, Project Director for the FASD training program & Director of Mental Health at Mid-Hudson Family Health Services presented.

The meeting focused on an overview of Fetal Alcohol Syndrome and included a description of alcohol related disorders, as well as a discussion about prevention through screening and education. The term Fetal Alcohol Spectrum Disorder is used to describe the many problems associated with exposure to alcohol before birth. The most severe of these is fetal alcohol syndrome (FAS), a combination of physical and mental birth defects. The meeting also brought out the fact that although many women are aware that heavy drinking during pregnancy can cause birth defects, many do not realize that moderate – or even light drinking may also harm the fetus.

FAS is the leading cause of mental retardation in the United States, and is the only cause that is entirely preventable. There is no cure for FAS so our goal is simple; we must prevent this avoidable syndrome by educating the general public, teens, adults of childbearing age, and expectant mothers. The members of the LHVPN and all of those who attended the meeting left with new knowledge and the opportunity to improve perinatal, women's, and children's health status in the Lower Hudson Valley Region.

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Ranitidine (Zantac®) Use for Ulcer Prophylaxis in the NICU

Background

Stress Gastritis is a well-known disease entity in the adult, pediatric neonatal intensive care units. It is defined as erosions and ulcers that develop after a physiologic stress in critically ill patients. Physiologic stress could be any of the following: shock, sepsis, critical illness and/or trauma. Any of these can cause gastric mucosal ischemia causing damage to the mucosa making it unable to buffer the acidic environment that it is naturally subjected to. Preterm infants do produce gastric acid and it has been shown that this patient population can have asymptomatic gastric lesions when subjected to stress. Ranitidine (Zantac®) is an H2 receptor antagonist that is most commonly used in the pediatric and neonatal ICUs. Its prophylactic use in the NICU is effective in preventing ulcers.

Ranitidine's mechanism of action is to block H2 receptor which affects a cascade of reactions with a decrease production of gastric acid as the end result. This causes the gastric pH to become alkaline making it an optimal environment for potential pathogenic bacteria to grow (gut colonization). Gut colonization has been associated with infections such as ventilator-associated pneumonia, blood stream infections (BSI) and necrotizing enterocolitis, a life threatening disease that is almost exclusive to the premature infant population.

Animal Studies have also shown the probable effect of Ranitidine in inhibiting immune functions, particularly the neutrophils. But the doses used in these studies were above pharmacologic levels.

There has been growing concern about the use of ulcer prophylaxis in the NICU because of its increased association with infections.

A review of the literature was done in order to come up with a protocol that would guide our medical and nursing staff in the judicious use of Ranitidine (Zantac®) for ulcer prophylaxis:

Continued next column:

Indications for giving Ranitidine as ulcer prophylaxis:

- I. Patient is NPO and has one or more of the following conditions:
 - A. Mechanically ventilated
 - B. Sepsis/infection
 - C. Compromised integument (i.e. burn like lesions)
 - D. Hemodynamically unstable: use of pressors; require multiple NS boluses
 - E. Thrombocytopenia
- II. Active gastrointestinal bleeding
- III. ECMO
- IV. Pharmacologic therapies: Indomethacin, Steroids

Indication to discontinue:

- I. Patient is feeding 20 ml/kg/day of breast milk, or any milk formula.
- II. Patient on mechanical ventilation but otherwise "stable."

Refer to Algorithm on next page →

Happenings:

***Lower Hudson Valley Perinatal Network –**

The LHVPN has launched it's new website! Please log-in at www.LHVPN.net and check out an array of resources and relevant links to perinatal health information in our local geographic region as well as nationally.

Special features include:

- Perinatal tips
- Perinatal Resource Directory, which lists the contact points and mission statements of over 110 health service organizations in the 7 counties of the Lower Hudson Valley Region. (It is the most comprehensive of its kind.)
- Resources for Dads
- ...And much more.

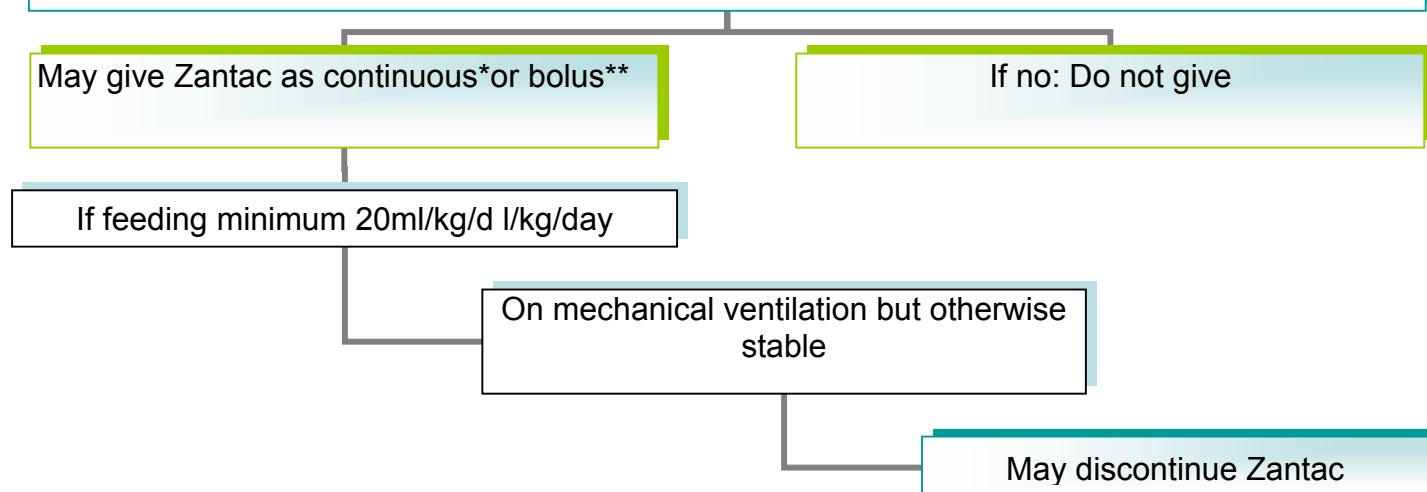
Please pay us a visit and let us know what you think... and spread the word!

(The LHVPN is currently supported by a March of Dimes Greater New York Chapter 2004-2005 Community Service Grant)

The mission of the March of Dimes is to improve the health of babies by preventing birth defects, premature birth & infant mortality. *Please* support the MOD in this effort by visiting the national MedImmune website. They will donate \$1 To the MOD each time you or friends or family members visit their national website. Thank You!

Algorithm for Ranitidine Use

- I. Patient is NPO and has one of the following conditions:
- A. Mechanically ventilated
 - B. Sepsis/Infection
 - C. Compromised integument (i.e. burn like lesions)
 - D. Hemodynamically unstable: use of pressors; require >2 NS boluses
 - E. Thrombocytopenia
- II. Active GI bleeding
- III. ECMO
- IV. Pharmacologic therapies: Indocin, Steroids



Neofax 2004

		*Continuous IV Infusion	** IV Bolus
Preterm	GA < 37 weeks	0.0625mg/kg/hr	0.5mg/kg q 12hrs
Fullterm	GA ≥ 37 weeks	0.0625mg/kg/hr	1.5mg/kg q 8 hrs
Infant on ECMO		2mg/kg/day	

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Please join us at the next
Lower Hudson Valley Perinatal Network Education & Networking Meeting

Disparities in Breastfeeding

Tuesday, January 24, 2006 in Rockland County. (Specific location and time to be determined)

For further information call Cheryl Hunter-Grant at 914-493-6435 or email at

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We are interested in providing you with a newsletter that is relevant and of interest to you. Please contact us with perinatal topics you would like to see addressed.

For a copy of our newsletter or to be placed on our mailing list contact us by phone or e-mail.

Please see below the NYMC neonatal web site address to locate other issues of The Perinatal Gazette:

<http://www.nymc.edu/neonatology>

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ADDRESS CORRECTION REQUESTED

