

The Perinatal Gazette

Newsletter of the Regional Perinatal Center Maria Fareri Children's Hospital at Westchester Medical Center



Volume 11, Issue 3

September 2011

Westchester Medical Center Welcomes New Maternal Fetal Medicine Director

Dr Andrew Elimian is welcomed back by Westchester Medical Center as the Director of Maternal Fetal Medicine at Westchester Medical Center and Professor of Obstetrics and Gynecology at the New York Medical College, Valhalla, New York. He earned his medical degree from the Faculty of Health Sciences, University of Ilorin, Nigeria. He came to the United States in late 1988 and completed a 3 year residency in Internal Medicine at Nassau University Medical Center, East Meadow, New York and became Board Certified in Internal Medicine in 1992. He then pursued and completed residency in Obstetrics and Gynecology and a fellowship in Maternal Fetal Medicine at New York Medical College and subsequently served as faculty at New York Medical College-Westchester Medical Center between 1998-1999, Stony Brook University 1999-2005 and the University of Oklahoma Health Sciences Center 2006-2011 where he reinitiated and served as the Director of the fellowship program in Maternal Fetal Medicine.

Dr. Elimian's areas of interest include prematurity and its consequences, fetal diagnosis and treatment, medical disorders of pregnancy, intrapartum fetal surveillance and perinatal research. He has published numerous articles in peer-reviewed journals, book chapters, and presented numerous research projects at professional conferences. He serves as a reviewer for many professional journals including the American Journal of Obstetrics and Gynecology, Obstetrics and Gynecology and the British Journal of Obstetrics and Gynecology. He is currently a fellow of the American College of Obstetricians and Gynecologists, and a member of the Society for Maternal-Fetal Medicine.

Eating for Two

Yvonne S. Thornton, M. D., M. P. H., Sc. D. (hon), FACOG, FACS

"Eating for two" -- I wish I knew where that phrase came from. I suppose it has been around since the beginning of time, but it is the bane of the obstetrical world. Why? Because pregnant women are getting too fat. You will hear many a pregnant woman say, "I'm having a baby and now I have to eat for two. So, I'm just going to stop by the store and get me a quart of Häagen-Dazs?"

That wasn't always the case. In the 1940s and 1950s, obstetricians were telling their patients to gain no more than 20 pounds during their pregnancies for fear of the patient developing preeclampsia (toxemia), a disorder in pregnancy that leads to seizures and increased complications for mother and baby. However, for the past 25 years, the standard obstetric approach to maternal weight gain during pregnancy has been to follow the American College of Obstetricians and Gynecologists (ACOG) recommendation which stated, "Regardless of how much women weigh before they become pregnant, gaining between 26-35 pounds during pregnancy can improve the outcome of pregnancy and reduce their chances of having the pregnancy end in fetal death".

After this dictum was announced (to many obstetricians' chagrin), it became common practice for pregnant women to be told "to eat to appetite" with little other dietary direction. Even in 1990, the Institute of Medicine (IOM) recommended a minimum of 15 pounds weight gain for obese women. Even with the updated 2009 IOM guidelines, obese women are asked to gain between 11 and 20 pounds; which, in my opinion, is entirely too much if the patient starts the pregnancy over 200 pounds.

The fact of the matter is that you are not eating for two, you are eating for one and a twentieth. A baby at term weighs six or seven pounds; if you are a 140-pound woman, that seven-pound baby is one-twentieth the size of you, so there is no reason in the world to eat for two you's. Obesity has become endemic in the United States. Over 35 percent of adult women are considered to be obese.

Currently, 20 percent of all American women are obese at the beginning of their pregnancy. Obesity has been recognized as a risk factor in pregnancy for more than 50 years with various pregnancy complications which include gestational diabetes, preeclampsia, large babies, operative risks, wound infections and a two-fold higher risk of primary cesarean delivery.

An important source of complications in pregnancy, in my opinion, is excessive weight gain. In addition to the increased risk of

INSIDE THIS ISSUE

1. **WMC welcomes new MFM Director**
1. **Eating For Two**
2. **Eating for Two – continued**
2. **Announcements — March of Dimes**
2. **Hailey's Hope - correction**
3. **Abstract: Prediction of Readmissions for NICU Graduates**
3. **NICUniversity**
4. **Project Linus**

Continued on page 2



developing gestational diabetes, obesity is more likely to lead to postpartum depression after the baby is born. Several studies have even linked obesity in pregnancy with an increase in the incidence of neural tube defects (spina bifida) and heart defects.

A pregnant woman should gain only two pounds in the first trimester (before 12 weeks). At 12 weeks, the baby weighs 14 grams. An ounce is 30 grams; so a 14-gram fetus is not even half an ounce, which means there is no reason for a 10-pound weight gain. After the

first trimester, weight gain should be three-quarters of a pound to one pound per week for the remainder of the pregnancy, for a total weight gain during pregnancy of 24 to 26 pounds. A pregnant woman need only eat 100-300 extra calories per day during her pregnancy. This is equivalent to a banana or a quart of skimmed milk.

Why that much even? Because there is a baby in there, which makes for seven pounds. Then there is the weight of the placenta (11/2 lbs), the amniotic fluid (2 lbs), and the increased size and weight of the uterus (21/2 lbs). The breasts, affected by hormones, become about one pound heavier. The blood volume is increased in pregnancy (31/2 lbs), as is the deposition of fat, which should be held to six or seven pounds. A lot of structural changes do occur in pregnancy. But they do not add up to 65 pounds' worth of weight gain.

A 30-pound weight gain for an appropriate-weight pregnant woman is still all right, but, in my experience, if you tell a woman 30 pounds, she will gain 40 or even 50 pounds during her pregnancy. Losing those pounds later may prove to be impossible. Before the baby arrived, you had time and energy to go to the gym. After delivery, however, your whole life changes, and your intention to get back to your pre-pregnancy weight often goes by the board.

Back in the 1970s, Weight Watchers had a pregnancy weight control plan that went a long way in ensuring that the member and her baby were healthy. However, with the medical-legal implications inherent with taking care of pregnant women, they too have backed off regarding healthy eating during pregnancy in obese women. Because of my fascination with obesity and pregnancy, I embarked on a clinical trial back in 1998 that would challenge the dogma that all pregnant women, regardless of their weight, should gain between 26 and 35 pounds. It took me seven years to complete. That study, the first of its kind, was published in 2009 in the Journal of the National Medical Association and it showed that obese women need not gain any weight during their pregnancies. The study (monitored) group gained only 11 pounds during their pregnancies while the control (unmonitored) group gained 31 pounds.

It was a landmark study and rather than focusing on a numerical end-point (numbers on a scale) with respect to weight in obese pregnant women, obstetricians should promote adherence to a monitored, well-balanced nutritional program. The take-home message for obese pregnant women is that they should be eating twice as well, not twice as much.

thornton@carroll.com

Announcements



The **March of Dimes** is pleased to announce the launch of the new **March of Dimes Prematurity Prevention Resource Center (PPRC)**, the most comprehensive online source of information on prematurity and prematurity prevention.

The Prematurity Prevention Resource Center is primarily for professional use and includes current information on interventions, research, advocacy, professional education, global initiatives, teaching tools and resources to use with patients.

The site's URL is

<https://www.prematurityprevention.org>.

Also, please visit the MOD **PeriStats** website – a free, on line source of perinatal health data. The PeriStats website provides:

- Free access to U.S. & local maternal and infant health data aggregated from more than 11 government agencies and organizations.
- Easy access to more than 60,000 graphs, maps, and tables.
- Over 100 health indicators, including measure of prenatal care adequacy, low birthweight, preterm birth, and infant mortality, within many indicators stratified by race, ethnicity and maternal age.
- Detailed perinatal data for the largest U.S. cities and countries.

www.marchofdimes.com/PeriStats



Please note the following corrections to the April 2011 edition of the Perinatal Gazette:

- The donation amount from Hailey's Hope Foundation to families should read \$79,000.
- The correct phone number for the Hailey's Hope Foundation is **914-584-8833**.

Predicting Readmissions for NICU Graduates

Sharon Schell, MD¹, J Kase, MD¹, B Parvez, MD¹, Y Tong, and H Brumberg, MD, MPH¹.
¹Neonatology, Maria Fareri Children's Hospital, Valhalla, NY, United States.

Background:

There is a correlation between hospital readmission (RA) & prematurity. However, little is known regarding predictive factors for readmission among Neonatal Intensive Care Unit (NICU) patients.

Objective:

To determine risk factors including demographic, antenatal, & neonatal morbidities during hospitalization that contribute to readmission within 6 months of NICU discharge (d/c).

Design/Methods:

This is a retrospective chart analysis of neonates discharged in 2008 from Maria Fareri Children's Hospital's Level 4 Regional NICU. Exclusion criteria were transfer prior to discharge home or death. Infants who were readmitted within 6 months of discharge were identified. Data included demographic, antenatal, and morbidities during hospitalization, at discharge, and at readmission. Fisher's Exact tests, χ^2 , t-tests & logistic regression were used.

Results:

This is an interim analysis of 380 patients, 51 readmissions and 339 controls. Demographics were similar between groups. Readmission rate was 13%. The average time to readmission was 65 ± 54 days (mean \pm SD). The most common reasons for readmission were apparent life threatening event, respiratory illness, and elective surgery. Maternal factors associated with readmission ($p < 0.05$) were higher maternal age & prolonged rupture of membranes. Although short term respiratory factors such as being on an oscillator ventilator, days on a ventilator, & postnatal steroid use were significantly associated with readmission, no long-term respiratory variables contributed, including the diagnosis of bronchopulmonary dysplasia and requiring home oxygen. Readmission rates were significantly higher for neonates with gastrointestinal morbidities & feeding issues. More outpatient appointments at discharge, the need for visiting nurse services, and congenital anomalies also increase this risk. In contrast to previous reports, patients without congenital malformations with increased post-menstrual age (PMA) at discharge were at a 26% higher risk of readmission (OR=1.26, 95% CI 1.01-1.49) when controlling for discharge with reflux or apnea medication, length of time on a ventilator, and gestational age (GA). For those infants with congenital anomalies, post menstrual age was no longer statistically important (OR=0.75, 0.44-1.27) after adjusting for the same covariates.

Conclusions:

Based on this interim analysis, surprisingly, gestational age is not associated with readmission at our institution. Instead, post-menstrual age is associated with readmission in patients without congenital anomalies. This suggests readmission is likely related to degree of illness rather than maturational issues. At discharge, understanding these factors can define a high-risk group in need of additional anticipatory management to prevent readmission.

Complete research results in upcoming article

NICUniversity Mission Statement

The NICUniversity mission is to be an educational and informational resource for neonatologists and other members of the neonatology health care team. We deliver the highest quality information designed to stimulate critical thinking and analysis of the current issues and trends in neonatology.



NICUniversity delivers:

- Access to lectures by internationally recognized expert faculty.
- ME/CE on topics that can improve patient management and outcomes.
- Timely and relevant, unbiased, and balanced educational
- Information critical to the care of neonatal patients.

NICUniversity is a Web-based medical education center for Physicians, Nurse Practitioners, Nurses, Respiratory Therapists, and Pharmacists. We offer continuing education credits through the Accreditation Council for Continuing Medical Education (ACCME).

At NICUniversity, we are dedicated to the continuing education of the neonatology community, where neonatal professionals can explore the latest issues and findings in neonatology.

Continuing Education (CME/CE)

The CME/CE Courses at NICUniversity are provided through an online lecture format easily accessed from your computer. The lectures feature internationally recognized medical experts in the neonatology field. The lectures are approximately 60 minutes in length, and each one completed can earn our registered members up to 1 CE credit. Physicians, Nurse Practitioners, Nurses, Respiratory Therapists, and Pharmacists can all earn continuing educational credits at NICUniversity.

Continuing Education for Fellows

Fellows and Fellowship Program Directors can supplement traditional education with the resources in the Fellows' Hall, the newest section of NICUniversity.org. The Fellows' Hall offers non-CME lectures, hot topics, fellow-specific resources and links and information to meet the needs of today's neonatology Fellow.

Continuing Education for Residents

Resident, Fellows, and their Program Directors can supplement traditional education, without additional faculty costs, time, or resources in the Residents' Lecture Series. This resource is designed to meet the needs of today's neonatology Residents and Fellows, while allowing Program Directors to track and monitor the performance of their groups.

Continuing Education for Nurse Practitioners and Nurses

This Nurse Practitioner and Nurse Section is being developed in joint sponsorship with the National Association of Neonatal Nurses (NANN) and will support and provide continuing nurse education. Our NP/Nurse Corner is designed to meet the needs of neonatal nurses at all levels and in all roles. The series will include presentations on topics of interest to nurse practitioners and neonatal nurses, and up to 1 CNE credit can be earned for each lecture.

www.nicuuniversity.org

Project Linus Blankets Provide a Personal Touch in the NICU



Cindy Read, Northern Westchester Coordinator for the Westchester-Rockland Chapter

The NICU is a high tech environment in the business of saving the lives of the most fragile newborns. Monitors, ventilators, feeding tubes, oxygen, IV lines, surgical dressings, procedures and tests, all provide a constant reminder that the baby is first and foremost a hospital

patient. But if you walk through the NICU at Maria Fareri Children's Hospital - and other NICUs and nurseries in the Regional Perinatal Network (RPC) network - you may see something else; a beautiful handmade blanket covering an isolette. These blankets, made with love by volunteers from Project Linus, help parents remember that this patient is also their precious baby and that someone outside the hospital cares. They give the baby's family, as well as the nurses and doctors who care for them something sweet and personal on which to focus along with all the necessary medical equipment and procedures.

The blankets at Maria Fareri, Sound Shore Medical Center, Good Samaritan Hospital, Phelps Memorial Hospital, and about 20 other hospitals and agencies in the area, are made by volunteer "blanketeers" in Project Linus's Westchester-Rockland chapter. Project Linus

is a national nonprofit organization founded in 1995 to offer love and comfort by giving handmade blankets to children who are seriously ill, traumatized, or in other challenging circumstances. It is named after the security-blanket-toting character from the Peanuts® comic strip, with the blessing of the strip's creator, Charles Schultz.

Currently there are approximately 400 chapters of Project Linus in the U.S., and over 3,000,000 handmade blankets have been lovingly handmade and donated to children in need. Some blanketeers work on their own, some work with kindergarten classes and Girl Scout troops, or church knitting clubs and groups in nursing homes. Some blankets are patchwork quilts, some are knitted or crocheted. Before delivery, volunteers sort and wash them and then sew on a Project Linus label with logo that says "Made with Tender Loving Care."

The Project Linus blanket given to a baby in the NICU is the family's to take home and keep forever as one of the happier reminders of the baby's challenging start in life. Sadly, of course, some babies never make it home, but their blankets provide their own special blessing. This is how one mother of a baby who spent her brief life in the Maria Fareri NICU described it: "My daughter was born on December 11 and died later that day. Due to complications from the surgery, I was never able to see or hold her during her short time here, but when I did finally see and get to hold her, she was beautifully snuggled in one of your blankets. There are not many mementos a mother can hold on to when an infant dies, but I will cherish the blanket always. I know your aim is to bring comfort to children, but know also the comfort you are bringing to their parents. Thank you."

For more information about Project Linus, including how you can become a volunteer blanket-maker: email cindyread@gmail.com, Northern Westchester Coordinator for the Westchester-Rockland chapter, or visit www.projectlinus.org.

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 visit <http://www.worldclassmedicine.com/RPC> for information about the Regional Perinatal Center at the Maria Fareri Children's Hospital at Westchester Medical Center and to locate other issues of *The Perinatal Gazette*.

State Perinatal Database Team and Perinatal Gazette Editorial Board

Susan Marchwinski, R.N., C., M.S., SPDS Coordinator
Editor in Chief
(914) 493-8590 (marchwinskisa@wcmc.com)

Donna Dozor, R.N., M.S.
Neonatal Data Collection
(914) 493-8309 (dozor@wcmc.com)

Clare Nugent, R.N., C., BSN
Neonatal Data Collection
(914) 493-8346 (nugentc@wcmc.com)

Edmund LaGamma, M.D., FAAP
Director Newborn Medicine
(914) 493-8558 (edmund_lagama@nymc.edu)

Heather Brumberg, M.D. M.P.H., FAAP
Coordinator, Regional Perinatal Center
(914) 493-8491 (heather_brumberg@nymc.edu)

Howard Blanchette, M.D., FACOG
Professor and Chairman of the Department of Obstetrics and Gynecology
(914) 594-4526 (howard_blanchette@nymc.edu)



The Regional Perinatal Center
Maria Fareri Children's Hospital
At Westchester Medical Center
100 Woods Road
Valhalla, New York 10595

nonprofit org
US POSTAGE
PAID
White Plains, NY
Permit No. 9523