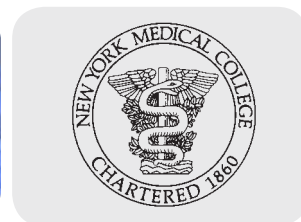


# The Perinatal Gazette

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



Volume 9, Issue 1

January 2009

## The 7th Annual Hudson Valley Regional Perinatal Forum Conference

The RPF conference titled: *Obesity, Preconception Health, Pregnancy and Lactation: The Impact of Bariatric Surgery, Nutrition and Exercise* held in Tarrytown on Wednesday, November 12th, 2008, was a huge success drawing in approximately 360 participants.

Dr. James F. Smith, Chief Perinatal Medicine at Westchester Medical Center started the morning by addressing the state of the Hudson Valley Region. He highlighted the roles of the Regional Perinatal Forum (RPF) which is co-chaired by the Regional Perinatal Center (RPC) and the perinatal networks, The Lower Hudson Valley Perinatal Network (LHVPN) and Maternal-Infant Services Network (MISN). The RPF collaborates with the RPC and its 13 affiliate hospitals, the perinatal networks, and other key stakeholders to improve birth outcomes in our region. The goal of the RPF is to reduce overall rates and racial and ethnic disparities in prematurity, low birth weight, late or no prenatal care, obesity, smoking and periodontal disease. One regional concern noted is the rise of cesarean deliveries in the region, which has climbed past the national average of 31%.

Dr. David A. Kessler, former US Food & Drug Administration Commissioner presented "Obesity: The Public Health Crisis of the 21st Century". Dr. Kessler focused on the underlying causes of obesity highlighting that the use of the combinations of fat/salt and fat/sugar act as salient stimuli for consumers and children as young as toddlers.

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## Visual Light Spectrography (VLS) for detecting alterations in tissue oxygenation with administration of packed red blood cells (PRBC) in Very Low Birth Weight (VLBW) premature infants.

V Bronshtein, EF LaGamma, B Parvez

**Background:** 60-80% of all VLBW infants receive PRBC transfusions (Tx) yet no firm consensus exists regarding ideal hemoglobin levels or even the best method to assess efficacy. Clinical signs and blood tests are late indicators and the latter contributes to iatrogenic anemia. Visible light spectroscopy (VLS; T-Stat 303): non-invasively assesses tissue saturation (StO<sub>2</sub>) based on the proportion of oxyhemoglobin, reliably records during poor perfusion and examines small segments of tissue volume.

**Objective:** To investigate the effect of PRBC on StO<sub>2</sub> in patients with anemia.

**Methods:** VLS buccal probe recordings were made 1h before, 4h during & 1-2 h after PRBC; delta perfusion was calculated ( $P = SpO_2 - StO_2$ ) and mean  $\pm$  SD determined for subjects. All infants were NPO during monitoring. Lactate pO<sub>2</sub>, pCO<sub>2</sub> on PRBC were done. Vitals signs of subjects were measured and NTISS severity of the disease score were assessed.

**Results:** Three subjects ranging in gestational age from 26-31 wks & postnatal age 1-43d, received 5 transfusions under protocol as booster, volume replacement or exchange. Tx's raised the Hct in Pt "A" from 27 to 34%, Pt "B" from 22 to 35% and Pt "C" from 10 to 39% (two PRBC and exchange transfusion). In Pts "A" and "B" StO<sub>2</sub> values dropped by 8.5% + 1.5% during the transfusion but recovered to baseline within 1 hour after it was completed. Similarly, P (a marker of oxygen extraction), increased during transfusion 8.3% + 0.8%. Interestingly, StO<sub>2</sub> correlated faithfully with SpO<sub>2</sub> during acute hypoxic events ( $r_2 = 0.85, p < 0.05$ ). In infant "C" with severe preexisting metabolic acidosis (pH=6.85, BE=-25.8, Lactate>15), P was small yet trends remained useful to assess responses to interventions.

**Conclusions:** The decrease in StO<sub>2</sub> and increase in P during blood transfusion is an unexpected and transient event that may identify patients at risk for developing re-perfusion injury under clinical conditions when no other signs of perfusion deficits are noted. Infants with higher NTISS acuity scores responded more

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Furthermore, Dr. Kessler noted the effects of obesity in pregnant mothers and on newborns pointing out for example that birth weights have been on the rise since the 1960's and that a higher birth weight is directly associated with a high subsequent body mass index (BMI).

Dr. Joseph R. Wax, Professor of Obstetrics & Gynecology, Maine Medical Center, presented "Female Reproductive Issues Following Bariatric Surgery." He described commonly performed bariatric procedures and implications for female reproductive health. The benefits of bariatric surgery for obese women are associated with resolution of irregular menses, Polycystic Ovary Syndrome (PCOS), anovulation, and improved fertility and fecundity. On the other hand malabsorption complications such as iron, vitamin B-12, folic acid and vitamin D deficiencies may occur during pregnancy post gastric bypass surgery but these deficiencies are easily treated. Hypoglycemia may occur in pregnant women due to increased insulin sensitivity after bariatric surgery, which is treated with dietary modifications. Dr. Wax emphasized that despite the complications women can have healthy babies after bariatric surgery if they postpone pregnancy until after the rapid weight loss period (Approximately 12-18 months).

Dr. Diane M. Ashton, Deputy Medical Director, March of Dimes (MOD), followed with her presentation the "March of Dimes New York State Premature Birth Report Card" pointing out that preterm births have increased by 30% in the last 20 years. The New York State (NYS) preterm birth rate is currently 12%, which is on par with the national rate. The NYS Healthy People 2010 goal is to decrease the current preterm birth rate by at least 4%. The MOD premature birth report card indicates that no states are meeting the Healthy People 2010 objectives with the state of Vermont being the only state with a grade of "B."

Dr. Jon R. Cohen, senior advisor to NYS Governor Paterson, spoke on New York State's Health Crisis noting that approximately three million people are uninsured in NYS. Referring to obesity as an epidemic Dr. Cohen noted that one in four African-American children and one in three Hispanic children are obese.

A panel discussion followed on Regional Successes in Addressing Childhood Obesity. County health commissioners and public health directors from within our 7 county region spoke on successful programs their individual counties implemented to address obesity issues.

Dr. Sherlita Amler, Commissioner, Putnam County Department of Health (DOH), spoke on Putnam County's ongoing programs such as the newly created Live Healthy Putnam Web site which provides residents with information on how to live a healthy lifestyle.

Dr. Jean Hudson, Commissioner, Orange County DOH spoke on "Healthy Orange" programs, such as "Fit Kids" and "Eat Well and Play Hard". Dr. Joan Facelle, commissioner, Rockland County DOH, spoke on "STEPS to a Healthier Rockland", part of a five-year grant to address risk factors for obesity, diabetes, and asthma. In Rockland County, teen weight loss programs were created and involved 87 restaurants offering over 950 healthy menu options. Nancy McGraw, Deputy Public Health Director, Ulster County DOH, spoke about the NYS DOH child obesity grant that Ulster County received last year towards "Heal Ulster County" programs. Lastly, Dr. Cheryl Archbald, Commissioner, Westchester County DOH, spoke on various youth oriented programs designed to lower child obesity rates.

Dr. Ashutosh Kaul, Director, Minimally Invasive and Robotic surgery at WMC, spoke on "Obesity: Can We Really Blame the Mom?" He expressed the ramifications obesity in pregnancy can have on a child explaining that there is a 40% chance that a child will become obese if born to an obese mother. In regard to bariatric surgery, Dr. Ashutosh noted that 85% of fat is reduced within five years of undergoing bariatric surgery, which can not only save the life of the obese mother but also prevent obesity in her child.

Obesity is programmed at a very young age. Therefore teaching proper nutrition (including breastfeeding) and healthy lifestyle must start from birth and is a crucial preventative effort.

The Annual Hudson Valley Regional Perinatal Forum continues to be a vehicle for providing education on cutting edge perinatal health issues for providers serving women, men, children and families in the region.



**Standing L-R:** Edmund LaGamma, MD; Jaime Farrel-Lizotte, RN, MS; Diane Ashton, MD, MPH; Heather Brumberg, MD, MPH; Cheryl Hunter-Grant, LMSW; Ashutosh Kaul, MD; Joseph Wax, MD; James Smith Jr., MD

**Seated L-R:** Caren Fairweather, MPS; Cheryl Archbald, MD, MPH; Susan Rose

**\*New\***

**Regional Perinatal Center Website**

[www.worldclassmedicine.com/rpc](http://www.worldclassmedicine.com/rpc)

What is an RPC? Who is the team? What do we do?

Who are our affiliates? Interested in a mini-grant?

*Please visit our website for answers to these questions and for more information about the*

**RPC at Westchester Medical Center**

## WANTED!

### Perinatal Outreach Coordinator/ Clinical Nurse Specialist

Westchester Medical Center Perinatal service is **seeking a highly motivated Registered Nurse** to fill the position of Clinical Nurse Specialist.

This position offers an exciting opportunity to join a dynamic, rapidly expanding high-risk obstetrical division offering world-class obstetrical medicine.

#### Responsibilities Include:

- Serving as a clinical resource for L&D and mother/baby staff focused on high-risk perinatal nursing, fetal monitoring and well baby care.
- Developing & implementing educational programs on high risk obstetrical and well baby nursing.
- Maintaining & improving communication between the Regional Perinatal Center (RPC) and its affiliate obstetrical services within our seven county region.
- Working collaboratively with perinatal personnel and the Regional Perinatal Center team relating to maternal transport quality improvement issues.
- **Qualifications:** Masters prepared with at least five years recent acute care obstetrical experience. Certification in inpatient obstetrical nursing preferred. Preference will be given to candidates with outreach experience.

**If interested please contact:  
Rose Codella at 914-493-7808**

## CONGRATULATIONS DR. CALO!

We are pleased to announce that **Dr Joy Calo**, Neonatal Fellow, Maria Fareri Children's Hospital at Westchester Medical Center, has been awarded a \$10,000 grant from the Advancing Newborn Medicine Grant Program for Fellows by IKARIA for her proposal entitled "The Interplay Between Superoxide Dismatuse and Nitric Oxide in BPD."

**Best wishes in your continued research!**

## TREASURE TREE



*In a world longing for compassion...  
A Treasure Tree is about the wonder of healing and  
mutual caring in community.*

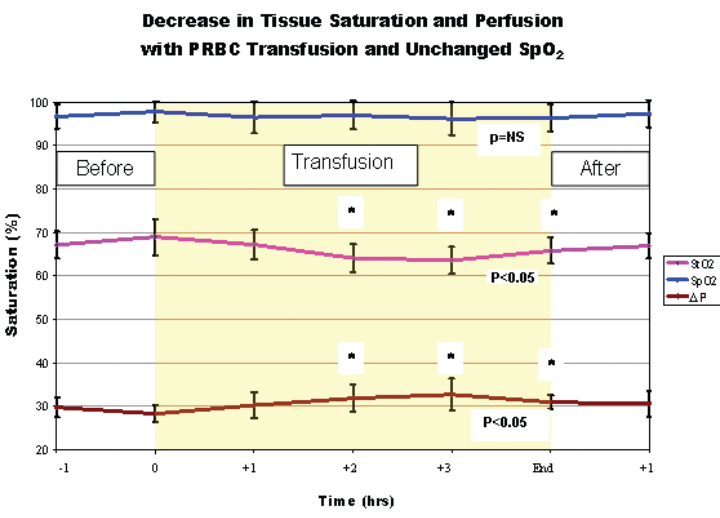
At the Maria Fareri Children's Hospital (MFCH) Regional Neonatal Intensive Care Unit at Westchester Medical Center, where doctors and nurses give of themselves to heal bodies, the Chaplaincy Service recognizes there is a hidden component of healing – the gift of spirit and heart. Amidst the work of healing, we provide symbols of the compassion that makes us human, and we recognize that all of us – staff, patients, families and friends, need someplace to go where we can unburden ourselves of the strains, pains and stresses associated with this healing work.

The Treasure Tree Project which began at the MFCH at Westchester Medical Center in 2001, fosters compassionate caring for all. A Treasure Tree has been installed in the NICU Waiting Room. This Compassionate Care icon will foster opportunity for Neonatal Staff, patients, their families and friends to write prayers and well wishes regarding "Treasured Children" within MFCH. Messages are considered sacred and are kept for an annual inter-faith remembrance service honoring each prayer and wish for a loved one.

*Anne Gentile, Associate Chaplain, Westchester Medical Center  
phone: (914) 654-9875 • Please visit [www.treasuretree.us](http://www.treasuretree.us)*

### Continued from pg. 1- Visual Light Spectrography...

favorably to PRBC indicating that preexisting perfusion problems improve with PRBC.



### Vadim Bronshtein, MD, Neonatal Fellow

Maria Fareri Children's Hospital at Westchester Medical Center  
vadimbronshtein@gmail.com

# Perinatal Services at Westchester Medical Center and New York Medical College

Our expanding Perinatal Service at Westchester Medical Center includes the addition of new faculty members, equipment & services. We offer comprehensive antenatal diagnostic services, consultation and management of high-risk pregnancies. Our team consists of highly skilled & experienced obstetricians, maternal fetal medicine specialists and sonographers using “state of the art” equipment to advance quaternary care for patients with complex obstetrical, medical and fetal conditions complicating pregnancies.

## Our team members include:

Frank Manning, MD; Geetha Rajendran, MD; Yvonne Thornton, MD; Michael Kessler, MD; Lissa Francois, MD; Jane Ponterio, MD; Monica Brito, MD; Karin Wollschlaeger, MD; James Smith, MD; Howard Blanchette, MD.

## Services offered include:

First trimester screening  
Second trimester screening  
Routine and targeted obstetric ultrasound  
3D/4D ultrasound  
Chorionic villus sampling  
Amniocentesis  
Percutaneous umbilical blood sampling  
Fetal transfusion  
High-risk pregnancy consultation  
Referral for management of high-risk pregnancies

We are supported by outstanding pediatric subspecialties at Maria Fareri Children’s Hospital at Westchester Medical Center, and collaborate with neonatologists, cardiologists, surgeons, urologists, and geneticists for transitional care of the highest risk newborns.

Please call for further information about our services:

**ADVANCED OB/GYN ASSOCIATES  
19 BRADHURST AVE. SUITE 2700  
HAWTHORNE, NY 10532  
(914) 493-2250**

## State Perinatal Database Team & Perinatal Gazette Editorial Board

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

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

Heather Brumberg, M.D. M.P.H., FAAP, Director Neonatal Public  
Health Programs, Coordinator, Regional Perinatal Center  
(914) 493-8491 (heather\_brumberg@nymc.edu)

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

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

Howard Blanchette, M.D., FACOG Professor &  
Chairman of the Department of Obstetrics & Gynecology  
(914) 594-4526 (howard\_blanchette@nymc.edu)

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.**



The Regional Perinatal Center  
Maria Fareri Children’s Hospital  
At Westchester Medical Center  
95 Grasslands Road  
Valhalla, New York 10595