

Thyroid Trial Up and Running

Most centers were poised to follow through with obtaining IRB approval and other certification procedures following the release of the approved final protocol in September. UAB began screening patients for thyroid levels by mid-October and by mid-December eight of the Network centers were screening. Educating the IRBs regarding the rationale of the protocol procedures for the treatment of subclinical thyroid disorders in pregnancy and the follow-up developmental testing has been the greatest challenge for the investigators.

For the first time, the MFMU Network web site is being used to post patient eligibility results (in a secure fashion) for the trial on the MFMU web site. The central lab sends the blood results daily to the BCC where they are converted by a computer program into patient eligibility status and posted on the web. Each center can only access results from patients who were screened at their site.

The central lab at the University of Minnesota reports that the centers have done an excellent job collecting and shipping the blood samples. Kudos to all those staff who perform these tasks and adhere to the instructions! As of December 17, 375 patients have been screened and 16 patients have been identified as eligible for the subclinical hypothyroidism stratum (S) and 12 for the hypothyroxinemia stratum (H). Five subjects have been randomized, with a larger number currently in the compliance run-in phase.

Work is beginning on the five-year infant follow-up procedures and data collection forms. A training session for follow-up examiners will take place next year.



Network Plans Next Trial of Progesterone

The next trial that the Network will undertake is a study of 17 alpha-hydroxyprogesterone caproate (17P) in nulliparous women with a short cervix, which is planned to get underway early in 2007. The DSMC approved the final protocol in mid-December. Nicknamed the SCAN trial (for Short Cervix And Nullips), the manual of operations and data forms are being finalized in time for a nurse training at the January Steering Committee meeting.

Women who are pregnant for the first time (or have not had a pregnancy lasting more than 19 weeks) will be screened between 16 and 22 weeks gestation by transvaginal ultrasound to see if their cervix is short (less than 30 mm). If so, they will be asked for their consent to participate in a randomized trial of 17P versus placebo to determine if progesterone will prevent a preterm delivery (less than 37 weeks). To reach the sample size of 1000 subjects, approximately 12,000 patients will have to be screened, assuming a 67% consent and successful compliance run-in completion rate.

Results of FOX Published in NEJM



The November 23 issue of the New England Journal of Medicine reported the findings of the Network's Fetal Oximetry Trial (FOX). The New York Times, the LA Times, Newsweek, USA Today, and other media featured an article on the study and more than 235 websites have cited the paper. This study, performed in more than 5300 women at the time of delivery, concluded that monitoring fetal oxygen levels during labor neither reduces unnecessary cesarean deliveries nor leads to healthier newborns. By design, for half of the subjects, the physician was able to see and use the fetal oximetry readings during labor to manage the patient's delivery, and for half of the subjects, the physicians did not have access to the oximetry information. The study found no significant differences between those deliveries where physicians had fetal oximetry data versus no oximetry data.

Earlier this year, as reported in a previous Networker, the manufacturer of the oximetry system ceased supporting the units and supplying the sensors. The FDA issued a statement saying that the study was under review and that they might require the use-label on the monitor to be revised to inform the hospitals about the findings. It is unlikely, the agency said, that it will withdraw its approval of the instrument based on this study alone.

Omega-3 Trial Finishes Earlier than Expected

The last patient was randomized to the Omega-3 trial on October 15, reaching a total of 852 subjects. The trial is testing whether giving Omega-3 (fatty acid) supplements, along with progesterone injections improves the outcome of pregnancy in women who have had a previous preterm delivery. The last patient is expected to deliver by the end of next March. The trial ended more than one and a half years earlier than expected, most likely attributable to patients being eager to receive the progesterone injections which, in an earlier Network trial, were proven effective in preventing preterm delivery in this population.

Other Study Updates

BEAM Follow-up: The last follow-up visit for infants born in the BEAM trial will be January 31. Out of the 2400 infants, only about 175 had not had their two year exam by mid-October. Even if no more infants are tested, the trial will have achieved a 92% primary outcome rate.

CAPPS: The best two weeks ever for recruitment for this study was November 9 - 22, with 155 patients randomized to the RCT and 67 enrolled in Prediction. To date, a total of 7650 patients are in the RCT and 1480 in Prediction, with the RCT trial projected to reach its sample size of 10,000 subjects by late summer next year. The CAPPS subcommittee will meet at the January Steering Committee to re-evaluate the list of candidate markers that will be analyzed upon completion of the study.

News from the Publications Committee

At its October meeting, the Pubs Committee decided to close the Network studies to further analysis (a total of nine) that had a data lock in 2000 or earlier. The data from these studies will be made available for public access, following a fairly lengthy procedure by the BCC to ensure that the data set is thoroughly documented. This includes replacing study identification data with a new identification variable, converting all dates of procedures to an expression of days based on a reference start date, recoding sensitive data such as gender, age, and rare conditions into categorical data. If a Network investigator can make a strong case for conducting another analysis of a study, he/she can present a proposal to the protocol subcommittee and if approved, the proposal will be considered by the Publications Committee. The Preterm Prediction study will be the next study to be released as a public data set by the BCC.



MUFMU CALENDAR

Steering Committee Meetings

January 18-19, 2007

April 26-27, 2007

July 12-13, 2007

October 11-12, 2007

DSMC Meeting: March 26, 2007

SMFM Annual Meeting: February 5 – 10, 2007, San Francisco

SGI Annual Meeting: March 14 – 17, 2007, Reno

Stork Code Almost Too Late

Karen Dorman submitted this story regarding a UNC medical student whose wife was a CAPPS patient. The Stork Code is used to trigger the appropriate people when a pregnant woman comes in the hospital in apparent distress. The following is his edited note to thank the OB faculty for the training he had received:



“Though my OB/GYN clerkship was about 9 months ago, I’d like to thank you for directing such a good experience. I didn’t realize quite how much I had learned until this last Wednesday. If you heard the Stork Code called Wednesday around 2 pm, it was because I had just delivered my daughter after a precipitous labor in the front seat of our car seconds after we arrived at valet parking line in front of the Children’s entrance. Once the shock of what I had just done wore off, I found myself very grateful that my OB experience was as good as it was. If I had faced that situation without the excellent training that I got at UNC, I suspect they would have called a code blue soon after the Stork code.”

Luckily, one of the study nurses was in L&D when she was rolled by and recognized the patient. No maternal admission blood could be obtained, but they waited for the placenta and got the cord blood. This is just another example of the challenges nurses face obtaining 100% of study samples!

BCC’s Dr. Elizabeth Thom Honored by SMFM

Each year, the Society for Maternal-Fetal Medicine (SMFM) Board selects an individual who is engaged in the practice, research, teaching, or administration of perinatology, whose activities are thought to influence perinatology in a significant and positive manner, but who is not a Maternal-Fetal Medicine specialist. This person is given an honorary membership in the Society. Dr. Elizabeth Thom, the Principal Investigator at The George Washington University Biostatistics Center, the biostatistical data coordinating center for the NICHD MFMU Network, will be bestowed with this honor at the annual meeting of the society in San Francisco in February. She will also serve as a moderator for one of the oral sessions at the meeting. There have been 33 honorary members previously chosen.



Network Smashes Previous Record

This year the Network has beaten its record from 2005 for the number of papers published. Last year 15 peer review articles were published, the previous best being 12 in a year. In 2006, a total of 19 papers have been published, first and foremost being the report of the FOX trial in the *New England Journal* last month. The remaining publications were split evenly between the *Grey Journal* and the *Green Journal*. Another 40 papers are either in draft form or undergoing the publication process at the journal.

Congratulations to all of the authors; to Brian Mercer, Cathy Spong and especially Susan Pagliaro for their tireless efforts in keeping the authors and the manuscripts on track and to the statisticians at the BCC for their dedication and hard work! These are the papers:

In the *New England Journal of Medicine*:

Bloom SL et al. *Fetal pulse oximetry and cesarean delivery.*

In the *American Journal of Obstetrics and Gynecology* (the *Grey Journal*):

Schatz M et al. *Spirometry is related to perinatal outcomes in pregnant women with asthma.*

Wapner RJ et al. *Single vs. weekly courses of antenatal corticosteroids: evaluation of safety and efficacy.*

Andrews WW et al. *Mid-pregnancy genitourinary tract infection with *Chlamydia trachomatis*: association with subsequent preterm delivery in women with bacterial vaginosis and *Trichomonas vaginalis*.*

Mercer BM et al. *Are women with recurrent spontaneous preterm births different from those without such history?*

Mercer BM, et al. *The NICHD-MFMU antibiotic treatment of pPROM study: impact of initial amniotic fluid volume on pregnancy outcome.*

Newman RB et al. *A prospective masked observational study of uterine contraction frequency in twins.*

Bailit JL et al. *The Maternal-Fetal Medicine Units Cesarean Registry: impact of time of day on cesarean complications.*

Durnwald CP et al. *The MFMU Cesarean Registry: Safety and efficacy of a trial of labor in preterm pregnancy after a prior cesarean delivery.*

Peaceman AM et al. *The MFMU Cesarean Registry: impact of fetal size on trial of labor success for patients with prior cesarean for dystocia.*

and in *Obstetrics and Gynecology* (the *Green Journal*):

Yost NP et al. *The effect of coitus on recurrent preterm birth.*

Bloom SL et al. *Decision-to-incision times and maternal and infant outcomes.*

Hendler I et al. *Association of obesity with pulmonary and non-pulmonary complications of pregnancy in asthmatic women.*

Hibbard JU et al. *Trial of labor or repeat cesarean delivery in women with morbid obesity and previous cesarean delivery.*

Alexander JM et al. *Fetal injury associated with cesarean delivery.*

Silver RM et al. *Maternal morbidity associated with multiple repeat cesarean deliveries.*

Landon MB et al. *Risk of uterine rupture with a trial of labor in women with multiple and single prior cesarean delivery.*

Aggaard-Tillery K et al. *Sample bias among women with retained DNA samples for future genetic studies.*

Rouse DJ et al. *Blood Transfusion and Cesarean Delivery.*

New Advisory Board Appointed for Network

The MFMU Network welcomes some old friends and new members who have graciously agreed to serve on the Network's Advisory Board for the 2006 – 2010 cycle.

Dr. Raymond Bain is vice president of Biostatistics and Research Decision Sciences at Merck Research Laboratories in Bluebell, Pennsylvania. He received his PhD in Biostatistics at Emory University and was the GWU Biostatistic's Center PI for the MFMU and NICU Networks in the late 1980s and early 1990s. Ray has remained connected to NICHD through his participation at the annual Maternal-Fetal/Neonatal/Reproductive Medicine Aspen Conference as the presenter of the ever popular seminar on clinical trial issues.

Dr. Larry Gilstrap is currently the Director of Evaluation at the American Board of Obstetrics & Gynecology in Dallas, Texas. Previously, he was Chair of the Dept. of Obstetrics & Gynecology and Reproductive Sciences at the University of Texas at Houston Health Science Center and Co-Principal Investigator for the Houston center in the MFMU Network. He served on the MFMU Network's Data and Safety Monitoring Committee in the early 1990s.

Dr. Margaret Harper is Associate Professor in the Department of Obstetrics and Gynecology at Wake Forest University School of Medicine. She is currently the Protocol Subcommittee Chairperson for the MFMU Network's *Randomized Trial of Omega-3 Fatty Acid Supplementation to Prevent Preterm Birth in Pregnancies at High Risk*. She also was the Principal Investigator of the Wake Forest center in the MFMU Network from 1996 – 2001 and Co-Principal Investigator prior to 1996.

Dr. Martin Keszler is Professor of Pediatrics/Neonatal-Perinatal Medicine and Director of Nurseries at Georgetown University Hospital in Washington, DC. His special interests are ECMO, modes of ventilation, and nitric oxide.

Dr. Roger Newman is Professor and Vice Chairman for Academic Affairs and Women's Health Research/Obstetrics and Gynecology in the Division of Maternal-Fetal Medicine at the Medical University of South Carolina. He was the Co-Principal Investigator for the MFMU Network at the MUSC from 1991 to 1996. Roger is the current President of the Society for Maternal-Fetal Medicine.

PEOPLE IN THE NEWS

From the University of Utah:
Farewell and good luck to **Kris Anderson**, coordinator at Utah who has departed for California to be near her daughter and grandchildren. However, she must be keeping her MFM ties since we just heard she will be part of the Research Support Personnel Focus Group meeting at SMFM! The new coordinator, **Peggy Ashby**, who was introduced by Kris and welcomed at the October Steering Committee meeting, has many years of experience in all areas of L&D, post partum and neonatal nursery, including supervisory roles. She has also been involved with working in and teaching about community health. In 2006, she was Utah's coordinator for the NICHD Stillbirth Network. She grew up in Southern California, but after a year at BYU, she decided to stay in Utah. She has been singing with the Mormon Tabernacle Choir for almost ten years, loves genealogy, reading, gardening and water skiing. She and her husband have 7 children between them and 3 grandchildren with another on the way.

From the University of Texas – Houston: **Brenda Glenn-Cole** is leaving her coordinator position to return to graduate school and to take care of family members. She is handing over the reins to a long-time friend, **Krishna Cannon**, who joined the UT-Houston Network research staff earlier this year. Krishna has a MBA in Health Care Management and 28 years of diverse nursing experience, ranging from direct nursing care, quality assurance, long-term care regulatory as well as management in the home health industry. Her most recent experience as a nurse surveyor monitoring state and federal regulations has taught her the importance of compliance and protocol adherence. She is active in her church, the nurses' association and community and is a musician. Her three grown children and three grandchildren are her pride and joy and her hobby is traveling with her husband.

The BCC welcomes its newest research assistant, **Beatriz Echarte**.

Beatriz grew up in south Florida and graduated in 3 ½ years from Vanderbilt University with a B.S. in Psychology and Spanish. She has interned with a number of clinical research studies, including prevention-intervention research with minority families in the University of Miami's School of Medicine Center for Family Studies and another UM study at the Mailman Center for Child Development studying the effects of parenting intervention for low SES mothers with young at-risk children. She has done extensive traveling, is an avid runner, and is looking forward to living in the Washington area and attending graduate school.

*Happy Holidays to
All, and to All
Best Wishes for a
Happy, Healthy
and Safe New
Year!*

