



Perinatal Gazette

Newsletter of the Regional Perinatal Center
Westchester Medical Center



Volume 5, Issue 1

January 2005

Otitis Media in Neonates:

Some things you may not have known

Otitis media is one of the most common infectious diseases of childhood, accounting for millions of sick visits to pediatricians nationwide each year. The diagnosis of otitis in neonates and young children can be very difficult for several reasons. Symptomatically, this age group doesn't tend to localize infections well. If otitis is suspected, the examination tends to be more difficult than that of older children. Ear canals are narrow and the cartilage has less spring, leading to canal collapse. It is not unusual for these narrow canals to be obstructed by vernix caseosa or cerumen, which need to be removed to allow adequate visualization of the tympanic membrane. Once it is visualized, the inferior portion of the tympanic membrane is angled away from the observer, making adequate evaluation more difficult. Despite the difficulty, if otitis media is diagnosed at an early age, it may help the pediatrician to predict which of their patients is at a greater risk of recurrent otitis media and chronic middle ear effusions.

Early age of the patient's first otitis has been identified in multiple studies as a risk factor for future bouts of otitis media and chronic middle ear effusions. The reason for this has not yet been established.

Early otitis may reflect an underlying predisposition for otitis media on the part of the child. This would include children with the inability to mount adequate immune responses to pathogens common in otitis as well as those with anatomic abnormalities that lead to eustachian tube dysfunction.

[Continues on page 3](#)

Introduction to Menopause

Menopause is a universal and irreversible part of the overall aging process involving a woman's reproductive system, after which she no longer menstruates. Climacteric is the general term for the time from the period of this transition to the early postmenopausal phase of a woman's reproductive life cycle.

Perimenopause refers to the time before menopause when vasomotor symptoms (hot flashes) and irregular menses often commence. Menopause, by definition, begins 12 months after the final menses and is characterized by a continuation of vasomotor symptoms and by urogenital symptoms such as vaginal dryness and painful intercourse.

The increasing number of middle-aged and older individuals includes a concomitant and continuing rise in the number of women who live most of their lives in a low estrogenic state. More and more women can expect to live approximately 79 years and to experience the consequences of gonadal hormone loss.

Although the time spent in menopause (now up to one third of the life cycle) has increased with the phenomenon of increasing longevity, the actual age of menopause, approximately 50-51 years, has not changed.

Women from ancient Greece experienced menopause at the same age as modern women, with the symptomatic transition to menopause usually commencing at approximately age 45.5-47.5 years. Factors that lower the age of physiologic menopause are few and include smoking, removal of ovaries, and living at high altitudes.

Menopause results from loss of ovarian sensitivity to gonadotropin stimulation, which is directly related to egg decline and dysfunction. The eggs in the ovaries undergo atresia (shrinking) throughout a woman's life cycle, and both the quantity and quality of follicles undergo a critical decline approximately 20-25 years after beginning of menses. Thus, the variable menstrual cycle length during perimenopause can be due to no ovulation or to irregular maturation of eggs. Hormonal fluctuation may not be responsible for all irregular bleeding during this period; therefore, pelvic pathology (eg, uterine fibroids, uterine polyps, endometrial thickening, endometrial cancer), which becomes more common during this time, must be excluded.

During the fifth decade of life, many women are lulled into a false sense of security, thinking that they are no longer fertile because they are so close to menopause. Although fertility declines, pregnancy can still occur, as demonstrated by a relatively high rate of unintended pregnancies in women aged 40-44 years.

[Continues on page 2](#)

INSIDE THIS ISSUE

- 1 Otitis Media in Neonates
Introduction to Menopause
- 2 Continued articles
- 3 Lower Hudson Valley Perinatal Network
- 4 New Perinatal Outreach Coordinator

Continued from Menopause

In fact, the number of unintended pregnancies in this age group has increased over the past decade, which underscores the need for continued contraceptive practice in heterosexual couples.

A shorter menstrual cycle length is the most common change in menstrual cyclicality that occurs during the perimenopausal period in women who have no pelvic pathology and who continue to be ovulatory.

The clinical indication that menopause has occurred is the measure of an elevated blood FSH level.

Women often experience several symptoms that are collectively termed the climacteric syndrome. Typical climacteric symptoms include hot flashes, insomnia (lack of sleep), weight gain and bloating, mood changes, irregular menses, breast pain, and headache. As already noted, the length of time over which the climacteric occurs is widely variable; symptoms may begin during perimenopause and continue for 5-10 years after menopause.

Irregular ovarian function and considerable estrogen level fluctuation—not a deficiency of estrogen—cause climacteric symptoms during menopause; thus, stopping hormone fluctuation with oral contraceptive pills (OCPs) and hormone replacement therapy (HRT) alleviates climacteric symptoms. Ovarian function and menstruation therefore usually does not resume if the woman has experienced one year of no menses. As the postmenopause years progress, with an accompanying loss of ovarian response to gonadotropins, associated symptoms of the climacteric also decline.

The effects of gonadal hormone depletion can be obvious on pelvic examination, with changes noted as early as perimenopause in some women. The reproductive organs of a woman of reproductive age greatly differ in appearance from those of a woman who is menopausal. With loss of estrogen, the vaginal surface becomes redder because of thinning of the epithelial layer and increased visibility of the small vessels below the surface. Later, as the vaginal surface further shrinks, it becomes pale because of a reduced number of vessels. Acidity of urine leading to a change in bacterial flora may result in itching and a malodorous discharge. The vaginal wall becomes smooth. Such changes often result in painful intercourse and, for many women, eventually lead to sexual abstinence if left untreated.

Inside the pelvis, the uterus becomes smaller. Fibroids, if present, become less symptomatic, sometimes shrinking to the point that they can no longer be palpated on pelvic examination. Endometriosis and adenomyosis are also alleviated with the onset of menopause, and many patients with pelvic pain finally achieve permanent pain relief.

The menopausal ovary diminishes in size and is no longer felt during gynecologic examination. Feeling an ovary on pelvic examination warrants a full evaluation in all women who are menopausal or postmenopausal.

For older women, a general loss of pelvic tone also occurs, and this may manifest as dropping of reproductive or urinary tract organs. Vaginal pressure, lower backpressure, or bulging at the vaginal entrance is common in women with this condition.

Continues top page 2

Continued from Menopause

Atrophic cystitis, when present, can mimic a urinary tract infection. Women report symptoms of urinary frequency, urgency, and incontinence.

However, women are more prone to urinary tract infection during this time because of atrophic cystitis, and a urine culture should be obtained in all symptomatic women.

In addition to alterations in the pelvic organs, marked changes occur throughout the body. Skin loses elasticity, bone mineral density (BMD) declines, and dense breast tissue is replaced by fat tissue, making mammographic evaluation easier.

The most common reason a woman presents at menopause is because of symptomatic hot flashes. Flashes, which are unpredictable in onset and sometimes occur over many years, are reported in about 75% of women who are perimenopausal or postmenopausal. Hot flashes often cause embarrassment and discomfort, as well as sleep disturbances and emotional lability, especially if they are intense and occur frequently. Episodes vary in frequency from every hour to every few days.

A woman who flushes to the extent that she has major sleep disturbances may also complain of cognitive or affective disorders resulting from sleep deprivation. The vasomotor flush is described as a feeling of warmth or heat that begins from the umbilical area and moves upward toward the head, followed by sweating of the head and upper body. Other cardiovascular or neurologic symptoms (eg, heart race, dizziness, light-headedness, vertigo) can also occur, with or without flushing, making the episode more difficult to classify as simply a climacteric symptom. Because of the wide range of symptoms, symptomatic women who have risk factors for a condition other than menopause should undergo thorough evaluation.

The American College of Obstetricians and Gynecologists (ACOG) recently announced the most comprehensive, evidence-based clinical recommendations to date on the most common modality of treatment for menopausal symptoms, which is hormone therapy (HT). ACOG's *Hormone Therapy* report, written by a task force of 21 national experts, "is an exhaustive, one-stop guide for doctors and their menopausal patients reviewing the risks, benefits, and continuing questions about hormone therapy," says ACOG President **Vivian M. Dickerson, MD**.

Dr. Alireza Navab is a graduate in OB/GYN from Brookdale University Hospital Center in Brooklyn, New York. He is currently Assistant Professor in Obstetrics and Gynecology and a faculty member at New York Medical College. His field of interest is Menopause and surgical reconstruction of pelvic defects.

Alireza Navab, MD

Assistant Professor in Obstetrics and Gynecology

Westchester Medical Center

New York Medical College

Email: alireza_navab@nymc.edu

Phone: (914) 593-8950

Continued from page 1

Early Otitis may in and of itself predispose a child to future otitis. The infection may cause a chronic inflammatory process in the eustachian tube and middle ear. This inflammatory process may directly produce fluid, leading to further bouts of otitis and continuing inflammation. This first “triggering otitis” may be caused by a viral infection and subsequent eustachian tube dysfunction. Children in the neonatal intensive care unit have other risk factors for early otitis, including nasotracheal intubation, the use of nasogastric tubes, low birth weight and prematurity.

Studies of neonatal and infant temporal bones have identified amniotic fluid cellular contents spread throughout the middle ear and mastoid. The amniotic fluid causes a foreign body giant cell reaction, chronic inflammation and formation of varying amounts of granulation tissue without overt evidence of otitis media on physical examination. This process has the potential to obliterate the normal aeration roots of the middle ear space. Obstruction of airflow into the middle ear predisposes the patient to recurrent otitis.

Most patients with otitis can be treated by the pediatrician without input from an otolaryngologist. Physicians may consider a referral for many reasons. If an otitis is suspected, but the tympanic membrane can't be visualized the otolaryngologist may be able to clean the canals out in the office using a microscope for better visualization. When an otitis has been identified and treated appropriately, but the infection will not clear, a tympanocentesis may be performed in the office or the operating room for diagnosis as well as treatment. Neonates typically have pathogens similar to those that affect older children (*S. pneumonia*, *Haemophilus influenzae*, group A *Streptococcus* and *Moraxella catarrhalis*); however, several studies demonstrated an unusual incidence of enteric Gram negative bacteria, group B streptococcus, *P. aeruginosa*, *Staphylococcus aureus* and *Staphylococcus epidermidis* in the middle ears of young children. Patients rarely develop complications of otitis including sepsis, meningitis, mastoiditis, or intracranial sinus thrombosis. Drainage of the middle ear fluid (in addition to IV antibiotics) is of utmost importance for adequate treatment of these patients.

David M. Merer, MD, FACS, FAAP
Assistant Professor of Otolaryngology
New York Medical College
Maria Fareri Children's Hospital
Phone: (914) 693-7636
Email: DMMMD109@aol.com



**The Lower Hudson
Valley
Perinatal Network**

Lower Hudson Valley Perinatal Network (LHVPN), a collaborative effort of regional public and private perinatal organizations and other organizations interested in the health of women and children is a reality, thanks to a generous grant that both Dr. Edmund LaGamma and Dr. Heather L. Brumberg wrote to the March of Dimes. We are pleased to have Cheryl Hunter-Grant, MSW join us as Executive Director, providing leadership to the Perinatal Network. Ms. Hunter-Grant, a lifelong child advocate and sickle cell disease supporter, has worked in the field of Family Services for more than 25 years. Cheryl earned a Masters of Social Work degree from Hunter College School of Social Work in New York City, and a Bachelor of Arts degree from Simmons College, Boston, Massachusetts.

Ms. Hunter-Grant has served as a Public Health Administrator for the NYS Department of Health coordinating Sickle Cell and Genetics Services for the Metropolitan NY Region. Following her tenure at the Health Department, Ms. Hunter-Grant directed the Programs & Health Services Divisions at the Bronx Perinatal Consortium, Inc.; a state funded Comprehensive Prenatal Perinatal Services Network. She has also worked as a Senior Program and Policy Associate with the Children's Defense Fund – New York office. Ms. Hunter-Grant served as Vice President for Marketing and Planning at Today's Child Communications, Inc., a multi-service media firm that provides services to families and the organizations that serve them, prior to starting her own consulting business, IOE Total Consulting.

The goal of the LHVPN is to meet the health needs of under-served mothers and children in Dutchess, Putnam, Rockland and Westchester counties. “I believe a coordinated, collaborative system of care can enhance the health status of women and improve birth outcomes and reduce prematurity. I look forward to leading the Lower Hudson Valley Perinatal Network and charting a course for quality Perinatal and Women's Health in our 4 counties.”

Cheryl Hunter-Grant, MSW
Executive Director Lower Hudson Valley
Perinatal Network
The Regional Neonatal Center
Maria Fareri Children's Hospital
at Westchester Medical Center
Valhalla, NY 10595
Phone: 914-493-6435
Fax: 914-493-1005

New Perinatal Outreach Coordinator

Susan Allen, CNM has joined the staff of Children's & Family Physicians of Westchester, LLP in a newly created position as perinatal outreach coordinator. One of her major responsibilities is to coordinate the communications related to high-risk maternal transports between various maternity providers in the region and Westchester County Medical Center. Susan will also be working with the Regional Perinatal Center team participating in some the RPC educational and QA activities.

Susan has lived in the Hudson Valley for over 12 years. She received her Bachelor of Science degree in nursing from St. Xavier College in Chicago and a Master of Science in Maternal Child Nursing and Nurse-Midwifery from the University of Illinois in Chicago. Since coming to the Hudson Valley, she has worked in clinical nurse-midwifery and nursing administrative positions. In 1997 she co-founded the Rose Women's Care Service: Community Resource Center, Inc, a not-for-profit agency located in Highland, NY that provides information, education and referrals for women's health concerns. In July of 2001, she opened a solo midwifery practice, Midwifery Enterprise of the Rose Women's Care Service, P. C., also located in Highland. In 2003, she initiated a third business enterprise with two friends, *3White Roses Consulting* which is dedicated to facilitating *well environments* in organizations and businesses.

If you have questions/comments regarding perinatal outreach in our region, Susan can be reached at **(914) 594-4788 or email: Susan_Allen@NYMC.edu**

State Perinatal Database Team &

Perinatal Gazette Editorial Board

Edmund LaGamma, M.D., Director Newborn Medicine

(914) 493-8558 (edmund_lagama@nymc.edu)

Chaur-Dong (C.D.) Hsu, M.D., M.P.H., Director OB/GYN

(914) 593-8987 (mailto:chaur-dong_hsu@nymc.edu)

Heather L. Brumberg, M.D., M.P.H., Neonatal Epidemiologist

(914) 493-8491 [mailto:\(heather_brumberg@nymc.edu\)](mailto:heather_brumberg@nymc.edu)

Susan Marchwinski, R.N., C., M.S., SPDS Coordinator

(914) 493-8590 (marchwinskisa@wcmc.com)

Donna Dozor, R.N., M.S. Neonatal Data Collection

(914) 493-8309 (dozord@wcmc.com)

Nancy Satou, R.N. Maternal Data Collection & Editor

(914) 493-8346 (satoun@wcmc.com)

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>

Maria Fareri Children's Hospital at Westchester Medical Center

1 Woods Road

Valhalla, New York 10595

Phone: 914-493-8590

Fax: 914-493-1493

E-mail: dozord@wcmc.com satoun@wcmc.com

marchwinskisa@wcmc.com

ADDRESS CORRECTION REQUESTED