

JOURNAL OF WOMEN'S HEALTH
Volume 26, Number 4, 2017
© Mary Ann Liebert, Inc.
DOI: 10.1089/jwh.2017.29011.abstracts

Abstracts from

Women's Health 2017: The 25th Annual Congress

April 28–30, 2017
Washington, DC

JOURNAL OF
Women's Health

ACADEMY OF
WOMEN'S
HEALTH

best practices for better outcomes

VCU Institute for Women's Health
Virginia Commonwealth University
A National Center of Excellence

35. MATERNAL HUMAN PAPILLOMAVIRUS INFECTION IS ASSOCIATED WITH PREGNANCY-INDUCED HYPERTENSION

Amaya Cotton-Caballero, Donald Dudley, James Ferguson, Annelee Boyle

University of Virginia School of Medicine, Charlottesville, Virginia

Background: Some work indicates that human papillomavirus (HPV) could affect trophoblast implantation. Observational studies are conflicted about the association between maternal HPV infection and pregnancy-induced hypertension (PIH).

Objective(s): To determine if there is an association between maternal HPV infection and PIH and to assess whether there is interaction between maternal HPV infection and concurrent genital infection.

Material/Methods: We conducted a retrospective cohort study of singleton deliveries from 2010 to 2015. Variables were abstracted from electronic medical records. HPV infection was based on cervical cytology or HPV genotyping within 3 years. PIH included gestational hypertension and preeclampsia. Analysis included chi-squared tests and logistic regression. Interaction between HPV infection and other concurrent bacterial and viral genital infections was assessed.

Results: 1,811 women were included. The prevalence of HPV and PIH was 38.9% and 5.6%, respectively. HPV, ethnicity, age, chronic hypertension, and nulliparity were independently associated with PIH ($p < 0.05$). History of preeclampsia and concurrent genital infection ($p < 0.05$) were included a priori. HPV infection was associated with PIH (OR = 1.70, 95% CI: 1.10-2.64) adjusting for ethnicity, age, nulliparity, history of preeclampsia, and concurrent genital infection. Other covariates associated with PIH included ethnicity, age, and nulliparity ($p < 0.05$). HPV infection and concurrent genital infection ($p = 0.91$) had no interaction. HPV infection was borderline associated with gestational hypertension ($p = 0.08$) and mild preeclampsia ($p = 0.09$), but not other forms of PIH.

Conclusions: HPV infection increases the risk of PIH. A larger sample size could elucidate whether this is due to gestational hypertension or preeclampsia. We confirmed expected risk factors for PIH, including ethnicity, increased age, and nulliparity.

36. A RANDOMIZED CONTROLLED MULTICENTER TRIAL OF AN INVESTIGATIONAL LIQUID NUTRITIONAL FORMULA IN WOMEN WITH CYCLIC BREAST PAIN ASSOCIATED WITH FIBROCYSTIC BREAST CHANGES

Tapas Das¹, Robert Mansel², Geraldine Baggs¹, Michael Noss³, William Jennings³, Jay Cohen⁴, David Portman⁵, Mario Cohen⁶, Anne Voss¹

¹Abbott Nutrition, Abbott Laboratories, Columbus, Ohio

²Cardiff University, Wales, United Kingdom

³Radiant Research, Cincinnati, Ohio

⁴All Women's HealthCare of West Broward, Plantation, Florida

⁵Sermonix Pharmaceuticals, Columbus, Ohio

⁶Greater Hartford Women's Health Association, West Hartford, Connecticut

Background: Fibrocystic breast changes (FBC) is a benign disorder of breast physiology that can result in lumpiness or

nodule formation; approximately 50 to 60% women experience nodularity. Nodularity is often associated with cyclic menstrual related breast pain, or cyclic mastalgia, giving rise to patient fear of breast cancer and discomfort severe enough to affect quality of life. Current treatment options for FBC are limited and not fully effective. Over-the-counter pain medication may be treatment options for breast pain. Prescription hormonal treatment medications are expensive, have adverse side effects. Results of studies suggested benefits from nutritional interventions for treatment of cyclic mastalgia; dietary intake of gamma-linolenic acid (GLA) and iodine were reported to reduce breast pain. In the present study, the hypothesis tested was that GLA and iodine may complement each other in providing relief from nodularity and mastalgia by modulating pathways associated with estrogen and/or thyroid hormone metabolism. Selenium was added to help minimize potential adverse effects of increased iodine intake on the thyroid. Support for the proposed combination of these ingredients comes from in vitro studies that show a synergistic effect of GLA, iodine, and selenium to help maintain breast tissue integrity by improving cellular tight junctions thus preventing tissue swelling and edema, the etiology of breast nodularity.

Objective(s): A randomized, multi-center, controlled double-blind trial was performed in women with cyclic breast pain (mastalgia) associated with fibrocystic breast changes (FBC) to determine whether a nutritional formula reduced breast pain and/or nodularity.

Material/Methods: Women received experimental (1g gamma-linolenic acid [GLA], 750 mcg iodine, 70 mcg selenium) or control formula (without GLA, iodine, selenium) daily for three cycles. Women recorded breast pain, medications, and menstrual signs daily using interactive voice-response system. Nodularity was determined by physical breast exam.

Results: Breast pain scores decreased similarly in the experimental (-32.2%) and control (-33.1%) groups ($p = 0.64$). Nodularity was reduced in the experimental but not the control group ($p = 0.03$). Among women who continued pain medication, the amount was reduced in the experimental relative to controls ($p = 0.02$).

Conclusions: Women with FBC using the formula containing GLA, iodine, and selenium experienced reduced nodularity and in those women who took OTC breast pain medication, a decrease in the quantity was observed.

37. ANTIBIOTIC PROPHYLAXIS IN BREAST CANCER SURGERY-RANDOMIZED CLINICAL TRIAL

Rubens Murilo de Athayde Prudencio¹, Fabiola Campos¹, Ivanildo Archangelo Jr¹, Yara Juliano¹, Lydia Masako Ferreira¹, Daniela Francescato Veiga²

¹Universidade do Vale do Sapucaí (UNIVAS), Pouso Alegre, Brazil,

²Department of Plastic Surgery, Universidade do Vale do Sapucaí and Department of Plastic Surgery, Universidade Federal de São Paulo, São Paulo, Brazil

Background: Breast cancer is the second most frequent malignant neoplasm in the Brazilian female population, after non-melanoma skin cancer, and the most common cause of death by cancer among women. Surgical site infections (SSI) are defined as wound infections that occur after invasive procedures. Oncologic surgeries of the breast are classified, by their potential of contamination, as clean. However, antibiotics prophylaxis is routinely used in patients undergoing these surgeries, despite there is insufficient evidence to support their use.

Objective(s): To evaluate the influence of antibiotic prophylaxis on SSI rates (ISC) after breast cancer surgery.

Material/Methods: This was a randomized clinical double blind trial, conducted in a teaching hospital (Hospital São Cristóvão). Sample size calculation resulted in 124 patients, which were recruited from the hospital's breast cancer outpatient unity. All the patients underwent breast cancer surgical treatment. Patients who had undergone neoadjuvant chemotherapy and those who were going to undergo breast reconstruction were excluded. Patients were randomly allocated into two groups: antibiotic (AG; n=62), which received intravenously 2g of ce-fazolin prior to anesthetic induction or placebo (PG; n=62), which received saline 0.9%, in the same way. Patients were assessed weekly regarding SSI occurrence, for four weeks. Criteria and classification of CDC were adopted for SSI.

Results: Both groups were similar with regard to age (mean 63.5 and 62.6 years old in PG and AG, respectively; $p=0.50$), body mass index (mean 27.3 and 26.3 kg/m² in PG and AG, respectively; $p=0.16$), duration of surgery (mean 63.9 and 61.7 minutes in PG and AG, respectively; $p=0.15$) and localization of tumors (both more prevalent on QSL; $p=0.48$). Only one patient, in placebo group, developed SSI ($p=0.49$).

Conclusions: The SSI rate was low (0.008%), and there was no statistical difference between groups, supporting a minimal need for antibiotics. This trial was registered in Clinical-Trials.gov (NCT02809729).

38. FAMILY FACTORS RELATED TO MAJOR PSYCHIATRIC DISORDERS IN LATINA AMERICANS NATIONWIDE

Amy Ai, Megan Deichen, Cara Pappas

Florida State University, Tallahassee, Florida

Background: Despite a rapidly growing Latina/o American population, little is known about modifiable factors that could protect Latinas against major psychiatric disorders.

Objective(s): The present study explored psychosocial risk (Negative Interaction) and protective factors (Family Cohesion, Social Support, Religious Involvement, Racial and Ethnic Identity) for major depressive disorder (MDD), general anxiety disorder (GAD), and suicidal ideation (SI) among Latinas participating in the first national mental health epidemiological survey of Latina Americans.

Material/Methods: We conducted three sets of logistic regressions, predicting outcomes for 1,427 Latinas identified in the National Latino and Asian American Study (NLAAS), the first nationally representative, epidemiological study of Latino and Asian Americans living in the United States. These analyses followed preplanned steps: Model 1 used known predictors as controls and Model 2 added psychosocial risk and predictive factors beyond the known predictors.

Results: For each outcome examined, psychosocial risk and protective factors produced a significantly better model fit in Model 2 than sociodemographic and acculturation variables known to predict mental health outcomes in Model 1 (x_{2mdd} change=14.62; $df=5$; $p<.05$; x_{2gad} change=21.41; $df=5$; $p<.01$; x_{2SI} change=18.97; $df=5$; $p<.01$). Negative Interactions were associated with increased likelihood of GAD (OR=1.5, 95% CI: 1.02,2.22, $p<.05$) and SI (OR=2.30, 95% CI: 1.489,3.538, $p<.0001$), whereas Family Cohesion seemed to be protective against GAD (OR=0.8, 95% CI:0.68,0.93, $p<.01$). No psychosocial factors predicted MDD.

Conclusions: Differential protective and risk factors for major psychiatric disorders suggest that health care providers may need certain family dynamic related components in order to improve assessment and prevention for Latinas.

39. DOES PERCEIVED SLEEP QUALITY CONTRIBUTE TO POSTPARTUM DEPRESSIVE SYMPTOMATOLOGY AMONG AFRICAN AMERICAN AND WHITE WOMEN?

Sammy Dhaliwal, Jessica Mandell, Huynh-Nhu Le, Jennifer Keller

George Washington University, Washington, District of Columbia

Background: Postpartum depression affects between 10–15% of all women, and may disproportionately affect ethnic minority women. Self-reported poor sleep quality predicts mood symptoms during the perinatal period. However, the extent to which perceived sleep quality contributes to depressive symptoms among lower socioeconomic status and ethnic minority women remains understudied.

Objective(s): To determine the extent to which subjective ratings of sleep quality contribute to postpartum depressive symptoms and to examine demographic factors associated with this relationship.

Material/Methods: Retrospective review of electronic medical records of 409 randomly selected women (48.6% African American, 51.4% White) seen at an urban OB/GYN setting during a one-year period (2014–2015) yielded data on the Edinburgh Postnatal Depression Scale (EPDS), and demographic variables. The sleep item of the EPDS was used as a predictor for remaining depressive symptoms. Covariates included race, age, breastfeeding status, SES (education and employment), and number of children.

Results: Poorer sleep quality significantly predicted greater depressive symptoms (.75, $p<.01$), even after adjusting for race, breastfeeding, income, and education. The effect was attenuated when adjusting for the number of children in the household. Race also significantly predicted depressive symptom severity. A significant interactive effect ($p=.041$) was found between race and sleep quality whereby African Americans who perceived their sleep to be worse experienced significantly more depressive symptoms than Whites.

Conclusions: Perceived sleep quality may contribute to depression symptom severity during the perinatal transition. This effect seems to be greater among African American women. Socioeconomic status also significantly predicted the relationship between sleep quality and depressive symptoms after adjustment for other demographic factors. Findings from this study extend previous research on the association between sleep and postpartum mood by suggesting that African American women may be at particular risk for postpartum mood disturbance in the context of poorer sleep quality.

40. UNDERSTANDING OBESITY AND HYPERTENSION IN AFRICAN-AMERICAN WOMEN IN ATLANTA, GA IN A COMMUNITY-BASED SCREENING PROGRAM

Molly Dunham-Friel, Kristan Langdon, Gina Lundberg

Emory University, Atlanta, Georgia