

**26th Annual
LSU School of Medicine
Department of Obstetrics & Gynecology**



**Resident Research Day
Friday, May 16, 2014**

**LSU Health Sciences Center
1542 Tulane Ave, 1st Floor Auditorium
New Orleans, LA**

Keynote Speaker:

Eve Espey, MD, MPH

The University of New Mexico Health Sciences Center

Professor & Chair, Department of Obstetrics & Gynecology
Chief & Fellowship Director, Family Planning Division

ABOUT OUR GUEST SPEAKER



Eve Espey, MD, MPH

Dr. Espey is a Professor of the Department of Obstetrics and Gynecology Division of Family Planning, Chairperson of the Department of OBGYN, and Family Planning Fellowship Director at the University of New Mexico. She is President-Elect of the Society of Family Planning and is the Medical Advisory Committee Chair for the National Campaign to Prevent Teen and Unplanned Pregnancy. She is the Chair of the American College of OBGYN's work group for Long Acting Reversible Contraception and Chair of the ACOG Underserved Women committee. She has won a number of teaching awards from medical students and has been recognized nationally as a mentor for Medical Students for Choice. She received the prestigious Rashbaum Award from Physicians for Reproductive Health in recognition of her impact on training and service in abortion provision. She has numerous publications in the area of contraception, abortion and medical education and has presented locally, regionally and nationally on these topics.

“IUDs and Implants: The Promise of Postpartum Contraception”

- Explain how contraception empowers women
- Describe trends in unintended pregnancy in the US
- Understand why greater use of LARC could help reduce unintended pregnancy
- Understand the rationale and techniques for immediate postpartum IUD and implant placement

**26th Annual LSU School of Medicine
Department of Obstetrics & Gynecology
Resident Research Day
Friday, May 16, 2014**



- 7:30-8:00** **Continental Breakfast & Sign-In**
- 8:00-8:15** **Welcome & Introduction of Guest Speaker**
Amy E. Young, MD, Chairman
LSUHSC Dept of OBGYN
- 8:15-9:00** ***IUDs and Implants: The Promise of Postpartum Contraception***
Eve Espey, MD, MPH
The University of New Mexico Health Sciences Center
- 9:00-9:10** **Break**
- 9:10-9:40** ***Resident Run Journal Club: A New Approach***

Anna Rybka, MD, House Officer IV
Advisor: Valerie Williams, MD, Dept of OBGYN
Discussant: F.A. Moore III, MD, Dept of OBGYN
- 9:40-10:10** ***Utilization of QR Reader to Provide Real Time Evaluation of Residents' Skills Following Surgical Procedures***

Kellin Reynolds, MD, House Officer III
Advisor: Danny Barnhill, MD, Dept of OBGYN
Discussant: John Morrison, MD, Dept of Surgery
- 10:10-10:40** ***Improving the Accuracy of Visual Estimations of Blood Loss through Simulation Training***

Brett Larson, MD, House Officer IV
Advisor: Asha Heard, MD, Dept of OBGYN
Discussant: Valerie Williams, MD, Dept of OBGYN
- 10:40-11:00** **Break**

**26th Annual LSU School of Medicine
Department of Obstetrics & Gynecology
Resident Research Day
Friday, May 16, 2014**



11:00-11:30 *Medical Student Education in the OB/GYN Clerkship: Increasing Student Knowledge, Satisfaction, and Interest in Obstetrics & Gynecology*

Jennifer Mury, MD, House Officer III

Advisor: Jaime Alleyn, MD, Dept of OBGYN

Discussant: Richard DiCarlo, MD, Dept of Medicine

11:30-12:00 *Umbilical Artery - The Small for Gestational Age Fetus and Single Cord Umbilical Arteries: A Retrospective Chart Study*

LaToya Clark, MD, House Officer IV

Advisor: Joseph Miller, MD, Dept of OBGYN

Discussant: Ann Chau, MD, Dept of OBGYN

12:00-12:30 *Hypoplastic Umbilical Artery: Is There a Need for Universal Fetal Echocardiography Referral?*

Ashley Hirsch, MD, House Officer III

Advisor: Joseph Miller, MD, Dept of OBGYN

Discussant: Asha Heard, MD, Dept of OBGYN

12:30-1:00 *Louisiana Obstetrician-Gynecologists' Opinion Concerning Home Screening for Cervical Cancer*

Megan Bina, DO, House Officer III

Advisor: Danny Barnhill, MD, Dept of OBGYN

Discussant: Michael Hagansee, MD, Dept of Medicine

1:00-2:00 **Lunch**

2:00-3:00 **Poster Viewings and Photos**

3:00-3:30 **Award Selections, Award Presentation, and Final Remarks**
Please follow us out to the front steps of 1542 for a group photo.

Resident Run Journal Club: A New Approach

Anna Rybka MD, Valerie Williams MD, Evrim Oral PhD

Louisiana State University Health Sciences Center – New Orleans
Department of Obstetrics and Gynecology

Objective: To evaluate the effectiveness of a resident-based format as measured by resident satisfaction.

Methods: A web-based survey was distributed to current residents to assess attitudes and satisfaction with journal club. The same survey was administered prior to and after implementation of a format focusing on defined goals and resident participation.

Results: Of nineteen residents, ten responded to the pre-implementation survey and eight responded to the post-implementation survey. One year after introduction of the new format 88% (7 of 8) agreed that journal club increased their medical knowledge. 100% of residents (8 of 8) agreed that journal club increased knowledge of biostatistics. 88% and (7 of 8) felt journal club helped them to interpret published review articles.

Conclusion: A method of conducting journal club has been described, which may be incorporated into other residency programs. Changes associated with the journal club resulted in improvement of interpreting clinical statistics and resident satisfaction.

Utilization of the QR Reader to Provide Real Time Evaluation of Residents' Skills Following Surgical Procedures

Kellin Reynolds MD, Danny Barnhill MD, Jamie Sias MD, Amy Young MD, Florencia Polite MD

Louisiana State University Health Sciences Center – New Orleans
Department of Obstetrics and Gynecology

Objective: A portable electronic method of providing instructional feedback and recording an evaluation of resident competency immediately following a surgical procedure has not previously been documented. This report presents and assesses utilization of a unique electronic format that documents resident competency and encourages verbal communication between the faculty member and the Obstetrics and Gynecology resident immediately following operative procedures.

Methods: The Microsoft tag® system and Survey Monkey® platform were linked by a 2-D QR code designed using Microsoft QR code generator. Each resident was given a unique code (TAG) embedded onto an ID card. An evaluation form was attached to each resident's file in Survey Monkey. After an operation, the supervising faculty scanned the resident's TAG with a smart phone and completed the brief evaluation on the smart phone screen. Each point of the evaluation was reviewed with the resident, and the evaluation was closed and automatically submitted electronically to the resident's educational file. The utilization of the electronic evaluation system was evaluated by comparing the number of evaluations completed per resident.

Results: The electronic system demonstrated improved utilization compared to paper evaluations. During the initial 6-month period of electronic evaluation usage, a total of 583 focused surgical assessments of competency were performed for 25 Ob-Gyn residents compared to the same six month period the previous year when 361 paper evaluations were filed for 26 residents. That represents a mean of 23 electronic evaluations per resident versus 14 paper assessments per resident.

Conclusion: Utilization of this portable streamlined electronic evaluation system was high among residents and faculty.

Improving the Accuracy of Visual Estimation of Blood Loss through Simulation Training

Brett Larson MD, Asha Heard MD, Joseph Miller MD, Evrim Oral PhD

Louisiana State University Health Sciences Center – New Orleans
Department of Obstetrics and Gynecology

Objective: To evaluate the effectiveness of a simulation exercise, implemented in the LSU OB/GYN residency program, for improving the visual estimation of blood loss (EBL) in vaginal deliveries.

Methods: A simulation exercise, designed to improve the visual EBL, was implemented in the LSU OB/GYN residency program. A retrospective review of selected patient data was then performed; data prior to and following implementation of the simulation exercise were evaluated to compare the visual EBL to the change in hemoglobin (Hb) levels pre and post-vaginal delivery. LSU patients delivered at Touro Infirmary, from 3/1/2014 to 6/7/2014, with pre-delivery CBC were included in the study. Patients were excluded if they did not receive a postpartum CBC, had a single postpartum CBC <4 hours post-delivery or received a blood transfusion prior to follow-up CBC. Outcomes were evaluated using Shapiro-Wilk test and Spearman rank order correlation.

Results: Pre-intervention EBL compared to change in pre-delivery and post-delivery Hb level did not show a significant correlation, $Rho=0.092$ ($p=0.48$), while post-intervention EBL compared to change in pre-delivery and post-delivery Hb level showed a significant correlation with $Rho=0.37$ ($p=0.01$). Baseline characteristics were evaluated with regards to age, gestational age, birth weight, mode of delivery and pre-delivery Hb levels. Baseline characteristics were similar between groups with the exception of birth weight and pre-delivery Hb levels; the pre-intervention group had higher birth weight ($p=0.023$) and hemoglobin levels ($p=0.0267$).

Conclusion: Following the simulation exercise, a significant correlation of visual estimation of blood loss to change in post-delivery Hb levels in vaginal deliveries was found. There was no correlation seen in deliveries prior to simulation exercise.

Medical Student Education in the OB/GYN Clerkship: Increasing Student Knowledge, Satisfaction, and Interest in Obstetrics and Gynecology

Jennifer Mury MD, Jaime Alleyn MD, Asha Heard MD, Joseph Hagan ScD, Amy Young MD

Louisiana State University Health Sciences Center – New Orleans
Department of Obstetrics and Gynecology

Objective: The medical student interest in OBGYN as a profession has been decreasing over the years. In an attempt to counteract this trend, LSUHSC has redeveloped the third year medical student clerkship curriculum to increase student interest and satisfaction, as well as medical knowledge in the field of OBGYN. Several studies have looked at novel approaches to student education, including preceptors and team-based learning. The new LSUHSC curriculum includes assigned preceptors, a weekly team-based learning (TBL) session, mandatory weekly uWISE quizzes, and culminates with a NSBME shelf exam. All aspects of the curriculum are used to calculate final clerkship grades and the students are evaluated by faculty, preceptors, residents, and fellow students. The prior curriculum included more lecture-based teaching, no assigned preceptors, no TBL, optional uWISE quizzes, and ended with the shelf exam. In this study, we will attempt to evaluate the effectiveness of the new curriculum, especially TBL sessions, in terms of student satisfaction, performance on the NSBME shelf exam, overall course grade, and interest in OBGYN as a career choice.

Methods: The grades and evaluations of the 189 LSUHSC 3rd year medical students from the OBGYN clerkship from the 2011-2012 academic year, just prior to the new curriculum implementation, are compared to the 185 students from the 2012-2013 academic year. Grades were calculated in a similar fashion but without evaluations from fellow students for the 2011-2012 group. Both groups of students were given the option to fill out anonymous end of rotation evaluations on how the clerkship met their expectations. Scores for clerkship expectations were reported on a 5-point Likert scale ranging from 1 indicating not at all and 5 indicating very well. Students were also asked if the team based learning sessions were helpful. Students' t-test was used to compare the raw shelf exam scores and overall course grades of medical students, and average Likert scores between students exposed to the old versus the new curriculum. A p-value of <0.05 was considered statistically significant.

Results: The average raw shelf exam score from the 2011-2012 academic class was 74.5 +/- 8.33 (95% CI 73.19 - 75.74) compared to the 2012-2013 class average of 73.9 +/- 9.45 (95% CI 72.65-75.23, p = 0.570). There was no difference in the final course grade average for the 2011-2012 class (89.6 +/- 4.27, 95% CI 88.97- 90.32) and the 2012-2013 class (90.2 +/- 5.17, 95% CI 89.54 to 90.91, p=0.23). The clerkship was given an average of 3.89 +/- 0.997 (95% CI 3.72-4.06) on a 5 point scale in terms of meeting expectations by the 2011-2012 and an average of 4.10 +/- 0.94 (95% CI 3.72-4.34) by the 2012-2013 class (p=0.14). When students from the 2012-2013 class were asked if the team-based learning sessions were helpful in terms of their education, of 86 total responses, 89.53% were positive. Out of 189 students in the 2011-2012 class, 12 students designated OBGYN as their specialty of choice (6.35%) compared to 16 of 185 students from the 2012-2013 class (8.65%). According to the 2013 NRMP data, 5.91% of U.S. seniors designated OBGYN as their specialty of choice.

Conclusion: With a new OBGYN clerkship curriculum, we were unable to show a significant increase in the average NSBME shelf exam scores or the overall clerkship grades in the first year of implementation. In terms of student satisfaction, the students' expectations of the clerkship remained statistically unchanged; however, a majority of the students found the TBL aspect of the new curriculum helpful to their education. We were also able to increase the percentage

Umbilical Artery Doppler The Small for Gestational Age Fetus and Single Umbilical Arteries A Retrospective Cohort Study

LaToya Clark, MD, Evrim Oral, PhD, Joseph Miller, MD

Louisiana State University Health Sciences Center – New Orleans
Department of Obstetrics and Gynecology

Objective: The objective of this study is to evaluate the relationship of umbilical artery Doppler study in fetuses with an isolated SUA to (A) fetal growth status at the end of pregnancy and (B) normative values for gestational age at time of study.

Methods: A retrospective record review of ultrasound data done thru the LSUMFM Network was conducted. Studies were done between September 2005 and July 2013. Gender, medical complications, birth weight, gestational age at time of study and at delivery was recorded for singleton gestations with isolated SUA. Only the first study done at 24 weeks or greater was included for this analysis. The recorded systolic to diastolic ratio (S/D) and resistance index (RI) were noted. All SUA were confirmed by review of pathology reports, delivery notes or identification by 2 independent observers. SGA status was defined as a birth weight (BWT) for gestational age of <10% (9). Relative birth weight (RELBWT) was calculated by dividing BWT by the median BWT for gestational age at delivery (9). The relationship of the RI and S/D to expected values was evaluated by Fisher exact test and binomial distribution. Comparison of Doppler S/D and RI was compared to SGA status using Fisher exact test. A receiver operating curve comparing the difference in RI from the expected 50th centile value for gestational age was developed and the area under the curve generated. Significance was set at $p < .05$. This cohort study complied with STROBE guidelines and received IRB approval thru LSUHSC.

Results: 89 singleton fetuses with isolated SUA were identified. Initial reported study was done between 24 0/7 and 38 5/7 weeks, median = 27 3/7 weeks. Birth weight ranged from 210 g to 4508 g, median = 2977 g. RELBWT varied from 0.529 to 1.176, median = .906. Gender was male in 47 and female in 42. Racial make-up included 59 white, 23 Black, 4 Hispanic, 2 mid-eastern and 1 Vietnamese. 3 patients had pre-gestational diabetes and 3 had gestational diabetes. 3 patients had chronic hypertension. SGA status was present in 33 subjects, with 2 fetuses being large for gestational age. Umbilical artery S/D values were abnormal using criteria of Ulm (>4 if 30 weeks or less and > 3 if >30 weeks) in 6 subjects, 2 of them having absent end diastolic flow (AEDF). Elevated umbilical artery Doppler values, using the 95th centile as the cut point, was seen in only 2 studies, both being AEDF. When RI was compared to median values corrected for gestational age, the median value was -0.03, ranging from +0.32 to -0.18. A ROC for RI (observed) - 50th centile value (delta RI) and SGA status was developed, the area under the curve was 0.55, $p = n.s.$

Conclusion (1) SGA status for isolated SUA is high (37%). The RELBWT for the study group was 0.906; a 9.4% reduction is the expected median weight. Attention to fetal growth in the presence of isolated SUA appears needed. (2) S/D and RI values are substantially less with an isolated SUA as opposed to normative values based on a di-arterial cord. (3) S/D and RI values did not correlate with newborn SGA status.

Hypoplastic Umbilical Artery: Is There a Need for Universal Fetal Echocardiography Referral?

Ashley Hirsch, MD, Asha Heard, MD, Ashley Veade, Joseph Miller MD

Louisiana State University Health Sciences Center – New Orleans
Department of Obstetrics and Gynecology

Objective: To evaluate the association between hypoplastic umbilical artery and cardiac malformations in singleton pregnancies and determine the need for referral for fetal echocardiography.

Methods: A cohort of fetuses diagnosed with hypoplastic umbilical artery by obstetrical ultrasonography was conducted between October 2005 and October 2013. Singleton fetuses with hypoplastic umbilical artery were identified and evaluated for cardiac defects by detailed obstetrical ultrasonography performed by a maternal-fetal medicine specialist. Referral for screening fetal echocardiography was offered to patients with suspected CHD detected by targeted fetal ultrasound or unsatisfactory cardiac imaging by obstetrical ultrasonography.

Results: Routine second-trimester ultrasonography identified 187 singleton fetuses with a hypoplastic umbilical artery during the eight year period. Of these, 26 were found to have cardiac abnormalities on either neonatal examination or necroscopy (13.9%). In 23 of 26 cases, congenital heart disease (CHD) was detected by detailed obstetrical ultrasonography. For the 3 fetuses with CHD not identified by obstetrical ultrasonography, 2 fetuses had septal defects (one fetus with Atrial septal defect and Ventricular septal defect (VSD) and one fetus with VSD alone) and one fetus with transposition of the great vessels. Of the 26 with CHD, 19 were found to have additional malformations (73.1%). Karyotypic abnormalities were found in 10 of these 26 fetuses (38.5%). The sensitivity, specificity, positive and negative predictive values of prenatal ultrasound for the detection of CHD were 88.5%, 100%, 100% and 98.2% respectively.

Conclusion: Although the rate of CHD associated with hypoplastic umbilical artery is significant, the majority of these are detected on mid-trimester obstetrical ultrasonography by maternal fetal medicine specialists. Universal fetal echocardiography in the setting of hypoplastic umbilical artery may not be necessary when normal four-chamber and outflow tract views of the heart are obtained. Referral can be reserved for those fetuses with detected abnormalities and/or those with unsatisfactory imaging on obstetrical ultrasonography.

Louisiana Obstetrician-Gynecologists' Opinion Concerning Home Screening for Cervical Cancer

Megan Bina DO, Danny Barnhill MD, Jonathan Finney, Amy Young MD, Donna Williams PhD,
Michael Hagansee MD, Joseph Hagan ScD

Louisiana State University Health Sciences Center – New Orleans
Department of Obstetrics and Gynecology

Objective: The purpose of this study is to determine the opinion of Louisiana Obstetrician-Gynecologists concerning the institution of wide scale home testing for cervical cancer.

Methods: A data base containing names and addresses of 796 Louisiana Ob-Gyn's was created from listings in telephone directories, internet sites, professional organizations, hospital roles, academic programs, and residency lists. A brief survey was sent by U.S. mail to all identifiable currently active Louisiana Ob-Gyns, including residents in training. The surveys were returned by an enclosed stamped self-addressed envelope.

Results: Out of 796 surveys sent out, 235 returned. Median age 47; 54% male respondents. 50% of respondents had OB/GYN practice. 53% said they think instituting home cervical cancer screening would decrease their clinic visits. When asked if a female relative, friend or female partner had no GYN symptoms, would you consider recommending home cervical cancer screening, 60% responded no. When asked if they believe patients should still undergo pelvic exam, 88% respondents answered yes

Conclusion: Those surveyed, do not favor home cervical cancer screening.

Poster Presentations

David Goodyear V MD, House Officer II, LSUHSC New Orleans

The Pregnancy Outcomes in Patients Carrying Fetuses with Thickened Nuchal Translucency in a Diverse United States Population

David Goodyear V MD, Ann Chau MD

Kimberly Hodge MD, House Officer II, LSUHSC New Orleans

Clinical Staff Acceptability of Manual Vacuum Aspirator for Treatment of Incomplete Abortion in the Emergency Room Setting

Valerie Williams MD, Kimberly Hodge MD, Evrim Oral PhD

Iroque Igbinosa MD, House Officer III, LSUHSC Baton Rouge

A Comparison of Rapid Immunoassays for the Detection of Ruptured Membranes

Iroque Igbinosa MD, F.A. Moore III MD

Traci Iwamoto MD, House Officer II, LSUHSC New Orleans

Electrosurgery: Does Interactive Training Increase Level of Safety When Operating?

Traci Iwamoto MD, Jaime Alleyn MD, LaToya Clark MD

Andrew Jones MD, House Officer II, LSUHSC New Orleans

Prenatal and Postnatal Course of Isolated Ventricular Septal Defects Diagnosed by Color Doppler Sonography

Ann Chau MD, Christian Lilje MD, Nancy Ross-Asciutto MD, Andrew Jones MD

Delaura Patel MD, House Officer II, LSUHSC New Orleans

Accuracy of Bacterial Vaginosis Among Obstetrics and Gynecology Residents

Valerie Williams MD, David Martin MD, Delaura Patel MD

Michelle Schussler Taheri MD, House Officer III, LSUHSC Baton Rouge

Knowledge of Postpartum Depression in At Risk Patients and Their Families

Michelle Schussler Taheri MD, Amy Young MD, F.A. Moore III MD, Hilary Thompson PhD, Katherine Vignes

Amanda Thomas MD, House Officer II, LSUHSC New Orleans

The Use of Vaginal Packing at the Time of Surgery for Pelvic Organ Prolapse and Incontinence: A Retrospective Chart Review

Lisa Peacock MD, Amanda Thomas MD, Evrim Oral PhD, Caitlyn Louviere



The Pregnancy Outcomes in Patients Carrying Fetuses with Thickened Nuchal Translucency in a United States Diversified Population

Department of
Obstetrics and
Gynecology

David Goodyear V MD, Ann Chau MD
Louisiana State University Health Sciences Center - New Orleans

Background and Introduction

Nuchal translucency (NT) is the subcutaneous fluid collection within the posterior fetal neck that is typically measured between 10 and 14 weeks gestational age. Fetuses with abnormally increased NT (>95th for given crown rump length) have been shown to have increased risk of aneuploidy, abnormal genetic syndromes, and structural defects. Adverse outcomes such as intrauterine growth restriction (IUGR), miscarriage, intrauterine fetal demise (IUFD), and preterm delivery may increase with thickened NT. Most of the previous studies concerning thickened NT have been performed in homogenous populations in the United Kingdom, Amsterdam, and Israel, etc. In contrast, the United States population is very ethnically diversified. Due to this ethnic diversity, we have different abnormal genetic syndromes, different structural defects due to a myriad of etiologies, including varying viral congenital infections. In addition, our patients rarely proceed with elective terminations in contrast to other populations. Hence, we need better prognostic information representing our diversified population to hopefully reassure the patients in cases of fetuses having normal karyotype and no detectable structural defects on detailed fetal anatomy survey.

Objectives

1. To study the pregnancy outcomes in patients with fetuses with thickened NT (>95th percentile for given crown rump length) at 10-14 weeks gestational age in a diverse U.S. population
2. To provide helpful information to the parents concerning fetal prognosis in cases of fetuses having thickened NT with normal karyotype and a normal fetal anatomy survey

Materials and Methods

Chart review of pregnancy outcomes (IUGR, IUFD, preterm delivery, miscarriage, successful and uncomplicated delivery, etc) of all patients with fetuses having thickened nuchal translucency from 1/2011 through 12/2014 at the Perinatology offices at East Jefferson Hospital and Touro Infirmary. The maternal age, ethnic background, medical history, fetal anatomy survey, fetal karyotype, family history, and exposure to teratogens will be analyzed. Multiple

Expected Results

There will be no increased risk of adverse pregnancy outcomes in patients with thickened NT who also have normal karyotype and no detectable structural defects noted on detailed fetal anatomy survey at 18-20 weeks gestational age.

Thickened Nuchal Translucency



References

- Ayras O, Tikkanen M, Eronen M, Paavonen J, Stefanovic V. Increased nuchal translucency and pregnancy outcome: a retrospective study of 1063 consecutive singleton pregnancies in a single referral institution. *Prenat Diagn.* 2013; 33(9): 856-62.
- Bilardo CM, Muller MA, Pajkrt E, Clur SA, Van Zalen MM and Bijlsma EK. Increased nuchal translucency thickness and normal karyotype: time for parental reassurance. *Ultrasound Obstet Gynecol* 2007; 30: 11-18.
- Bijok J, Ziara-Jakutowicz K, Linicka A, Pawlowska B, Jozwiak A, Dangel J, Jakiel G, Roszkowski T. Increased nuchal translucency in chromosomally normal fetuses and pregnancy outcomes. *Ginekol Pol* 2013; 84(3):172-9.
- Goldstein I, Weizman B, Nizar K, Weiner Z. The nuchal translucency examination leading to early diagnosis of structural fetal anomalies. *Early Human Dev* 2014; 13: 327-37.
- Pandya PP, Kondylios A, Hilbert L, Snijders RJM, Nicolaidis KH. Chromosomal defects and outcome in 1015 fetuses with increased nuchal translucency. *Ultrasound Obstet Gynecol* 1995; 5:15-19.



Clinical Staff Acceptability of Manual Vacuum Aspiration for Treatment of Incomplete Abortion in the Emergency Room Setting

Valerie Williams MD, Kimberly Hodge MD, Evrim Oral PhD
Louisiana State University Health Sciences Center - New Orleans

Department of
Obstetrics and
Gynecology

Literature Review

Patients with incomplete abortion often present to the emergency room complaining of vaginal bleeding and/or pain. Treatment options include expectant, medical, or surgical management [1,2]. Surgical management can be accomplished via electric vacuum aspiration (EVA) in the operative suite or manual vacuum aspiration (MVA) in the outpatient setting. MVA is known to be a safe and effective alternative for management of incomplete abortions [3]. However, there are reservations among clinical staff to offer this form of management to patients. Some barriers noted in other studies include unfamiliarity with the device and the emotional aspect of surgical management being similar to management of induced abortions [6]. There is limited data assessing ED staff perception of the MVA for treatment of incomplete abortions. In this study, we plan to use a survey to assess clinical staff acceptability of the MVA for treatment of incomplete abortions in the ED setting before and after introduction of the procedure in the ED.

Hypothesis

One year after implementation of a protocol utilizing MVA in the ED, we anticipate the clinical staff will be more accepting of the procedure.

Methods and Materials

A survey adapted from the Residency Training Initiative in Miscarriage Management (RTI-MM) will be administered to emergency room nurses, physicians, and support staff. The MVA procedure will then be offered to all patients with incomplete abortion, less than 8 weeks gestation, presenting to the emergency room with vaginal bleeding and an open cervical os. The survey will then be re-administered one year after implementation. Results will be analyzed to see whether attitudes towards use of the device changed after experience and exposure to the procedure.

Survey

1. Do you personally treat miscarriages? In what setting?
2. How do you counsel your patients regarding management of miscarriages?
3. Do you refer patients out needing surgical management?
4. Have you ever received training in miscarriage management?
5. What miscarriage methods have you received training in?
 - Expectant management?
 - Medical management?
 - Surgical management? EVA, MVA, both?
6. Are you interested in learning how to use an MVA?
7. Are you familiar with the MVA?
8. Have you ever used the MVA?
9. Have you ever received training in MVA?
10. What is the likelihood of you performing miscarriage management via MVA in the ED?



References

1. Trinder, J. et al. *Management of miscarriage: expectant, medical or surgical? Results of randomized controlled trial (miscarriage treatment trial)*. *BMJ*, doi:10.1136/bmj.38828.593125.55. 17 May 2006.
2. Zhang, J. et. al. *A comparison of Medical Management with Misoprostol and Surgical management for Early Pregnancy Loss*. *N Engl J Med* 2005;353:761-9.
3. Gazvani, R. et. al. *Manual vacuum aspiration (MVA) in the management of first trimester pregnancy loss*. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 2004. 112:197-200.
4. Kinariwala, M. *Manual vacuum aspiration in the emergency department for management of early pregnancy failure*. *American Journal of Emergency Medicine*. 2013;31(1):244-47.
5. Darney, BG. et. al. *The family medicine residency training initiative in miscarriage management: impact on practice in Washington State*. *Fam Med*. 2013 Feb;45(2):102-8.
6. Darney, BG. et al. *"One of those areas that people avoid" a qualitative study of implementation of miscarriage management*. *BMC Health Services Research*. 2013 Apr 3;13:123.



A Comparison of Rapid Immunoassays for the Detection of Ruptured Membranes

Iroque Igbinosa MD, F. A. Moore III MD, Cheri Johnson
Louisiana State University Health Sciences Center - Baton Rouge

Department of
Obstetrics and
Gynecology

Introduction and Background

Premature rupture of membranes (PROM), defined as spontaneous rupture of membranes (ROM) before the onset of uterine contractions, is a common diagnostic dilemma in contemporary obstetrical practice. Premature rupture of membranes can occur at any gestational age, and preterm PROM (PPROM, defined as PROM before 37 weeks) is responsible for 20-40% of preterm births¹. Early and accurate diagnosis of PROM would allow for gestational age-specific obstetrical interventions designed to optimize perinatal outcome and minimize serious complications such as cord prolapse, preterm delivery, fetal distress and infectious morbidity (chorioamnionitis, neonatal sepsis).^{2,3} Alternatively, a false-positive diagnosis of PROM may lead to unnecessary obstetric interventions, including hospitalization, administration of antibiotics and corticosteroids, and even induction of labor.⁴ The accurate diagnosis of ROM is critical to the clinician because PROM and PPRM may be associated with serious maternal and neonatal consequences.

Objective

The study includes a comparison of immunoassays *ROM plus*[®] and *Amnisure*[®] to conventional methods of determining ruptured membranes such as sterile speculum exam, nitrazine, and ferning.

Materials/Methods

A prospective observational clinical trial. *ROM plus*[®] detects placental protein 12 and Alpha-fetoprotein, whereas *Amnisure*[®] detects placental alpha 1 macroglobulin.

Selection Criteria :

•150 Healthy pregnant women greater than 15 weeks of gestation undergoing evaluation for rupture of membranes will be enrolled in the study.

Exclusion criteria:

- 1)known placenta previa
- 2)active vaginal bleeding.

Women who have discrepant results between the two immunoassays performed will undergo a sterile speculum exam (SSE) (if not previously done) and an ultrasound evaluation to determine the amniotic fluid index (AFI).

Statistics

	Gold Standard CLIN-ASSESS	
	+	-
New test ROM PLUS [®]	a	b
	c	d
Total	a+c	b+d

The study will be determined successful, concluding ROM PLUS[®] is substantially equivalent to Amnisure[®], if both sensitivity and specificity are statistically significantly greater than a stated minimally acceptable value, or substantial equivalence bound. The sample size determined for this to be demonstrated is 150 patients.

Indication	Test Characteristic	Test criteria for substantial equivalence
PROM, <34 weeks gestation	Sensitivity (%)	H0: Sn ≤ 90% vs H1: Sn > 90%
	Specificity (%)	H0: Sp ≤ 90% vs H1: Sp > 90%
PPROM, <34 weeks gestation	Sensitivity (%)	H0: Sn ≤ 90% vs H1: Sn > 90%
	Specificity (%)	H0: Sp ≤ 90% vs H1: Sp > 90%

$$\text{sensitivity (\%)} = 100\% \times a / (a+c)$$

$$\text{specificity (\%)} = 100\% \times d / (b+d)$$

Conclusions

The criteria assessed include the results of the initial *Amnisure*[®] test, *ROM plus*[®] test, sterile speculum exam, number of hours from the initial exam to delivery (≤48 hours will be considered suggestive of ROM) and evidence of chorioamnionitis and/or endomyometritis.

The aforementioned criteria and extensive chart review combine to form the CLIN-ASSESS. A statistical review which will serve as the gold standard for purpose of this study.

It is anticipated that the sensitivity and specificity for *ROM plus*[®] will be high and the substantial equivalence to *Amnisure*[®] will be comparable. Data Collection for this project remains in progress.

References

- Mercer BA, Goldenberg RL, Meis PJ, Moawad AH, et al., The Preterm Prediction Study: prediction of preterm premature rupture of membranes through clinical findings and ancillary testing. The NICHD Maternal-Fetal Medicine Units Network. *Am J ObstetGynecol* 2000;183:738-45.
- Marlowe SE, Greenwald J, Anwar M, et al., Prolonged rupture of membranes in the term newborn. *Am J Perinatol* 1997;14:483-6.
- Azathi CV, Dyelase Y, Srinivas H, et al., Preterm premature rupture of membranes, intrauterine infection and oligohydramnios: risk factors for placental abruption. *ObstetGynecol* 2004;104:71-7.
- Garite TJ. Management of premature rupture of membranes. *ClinPerinatol* 2001;28:837-47.
- Gordeski G, Halmovits L, Bahari CM. Reevaluation of the pH, ferning and Nile blue sulphate staining methods in pregnant women with premature rupture of the fetal membranes. *J Perinat Med.* 1982;10:286-292.
- Friedman M, McElm T. Diagnosis of ruptured fetal membranes. *Am J Obstet Gynecol.* 1969;104:544-550.
- De Haan HH, Offermans PM, Smits F, et al. Value of the fern test to confirm or reject the diagnosis of ruptured membranes in modest in nonlaboring women presenting with nonspecific vaginal fluid loss. *Am J Perinatol.* 1994; 11:45-50.
- Erdemoglu E, Mungan T. "Significance of detecting insulin-like growth factor binding protein-1 in cervicovaginal secretions: comparison with nitrazine test and amniotic fluid volume assessment" *ActaObstetGynecolScand* 83:622-626;2004.
- Gaucherand P, Salle B, Sergeant P, Galbaud S, Bran J, Bizillon CA, Rudigoz RC. "Comparative study of three vaginal markers of the premature rupture of membranes: insulin like growth factor binding protein-1, diamine-oxidase, pH." *ActaObstetGynecolScand* Jul 76(6):536-40; 1997.
- Smith RP. A technique for the detection of rupture of the membranes: A review and preliminary report. *ObstetGynecol* 1976;48:172-176.
- Lee SI, Park JS, Norwitz ER et al. Measurement of placental alpha-microglobulin-1 in cervicovaginal discharge to diagnose rupture of membranes. *ObstetGynecol* 2007;109:634-40.
- Albayrak M, Ozdemir I, Koc D, Arkanal H, Ozem O. "Comparison of the diagnostic efficacy of two rapid bedside immunoassays and combined clinical-conventional diagnosis in prelabor rupture of membranes" *European J ObstetGynecolReprod Bio*; 156: 179-182; 2011.



Electrosurgery: Does Interactive Training Increase Level of Safeness When Using Electrosurgery to Operate?

Traci Iwamoto MD, Jaime Alleyn MD, Latoya Clark MD, Joseph Hagan ScD
Louisiana State University Health Sciences Center – New Orleans

*Department of
Obstetrics and
Gynecology*

Literature Review/Introduction

Electrosurgery is a surgical technique in which high frequency electric current is used to cut, coagulate, dessicate and fulgurate biological tissue. Electrosurgery offers an array of benefits including less bleeding, precise cuts, faster healing, less postoperative pain and in some cases it is less expensive. However, electrosurgery is not without its safety concerns. The ultimate goal of this project is to examine and educate the residents of LSU OBGYN in order to increase the level of safeness when using electrosurgery.

Hypothesis

Interactive training courses in electrosurgery will be more effective in increasing medical students and resident's level of knowledge compared to lecture series.

Methods and Materials

We will examine the medical student's level of knowledge of safety when using electrosurgery by using pre and post lecture tests and interactive lab training courses. The students will be randomized into two separate groups. One group will be given a lecture series and knowledge base will be assessed using pre and post written tests. The second group will attend an interactive skills lab and will be administered the same pre and post test as the lecture group. The outcome will be based on both final tests scores and a comparison between the improvements of the separate groups. In order to not withhold information from trainees, the group receiving lecture only will be given the opportunity to complete the interactive course after taking the post test.

Expected Results

We expect that the both groups of students will demonstrate some level of improvement, however, we expect that the group of students that participates in the interactive course will show a greater improvement.



References

Brill AI. Bipolar electrosurgery: convention and innovation. Clin Obstet Gynecol 2008;51(1):153-158.

Brill AI. Energy-based techniques to ensure hemostasis and limit damage during laparoscopy. OGB Management. 2003;15(5).

http://www.obgmanagement.com/article_pages.asp?AIID=3125&UID

APGO Educational Series on Women's Health Issues: Electrosurgery: Principles and Practice.



Prenatal and Postnatal Course of Isolated Ventricular Septal Defects Diagnosed by Color Doppler Sonography

Ann Chau MD, Christian Lilje MD,
Nancy Ross-Asciutto MD, Andrew Jones MD
Louisiana State University Health Sciences Center - New Orleans

*Department of
Obstetrics and
Gynecology*

Lit Review/Justification

Fetal anatomic survey (specifically the nuchal translucency) screening is becoming increasingly popular in the low and high risk obstetric populations using high resolution ultrasonography; therefore, more isolated VSDs were diagnosed in utero by ultrasound. Hence, counseling the patients carrying fetuses with isolated VSDs has become more clinically important. The prenatal course of isolated VSDs has not been widely studied, especially in low risk populations. The prenatal resolution frequency of isolated VSDs has been reported with a wide range of variation (12.5%-46.8%) in previous studies. The incidence of reported aneuploidy ranged from 6.25% to 46.8%. There is also an unanswered question concerning whether or not the inlet or outlet perimembranous defects close spontaneously in utero since the same closure is very rare in postnatal life.

Objectives

To study the prevalence of isolated VSDs diagnosed in utero at East Jefferson General Hospital and Touro Infirmary, incidences of aneuploidy and of extracardiac anomalies in these fetuses, frequency of prenatal closure of these isolated VSDs, and postnatal outcomes.

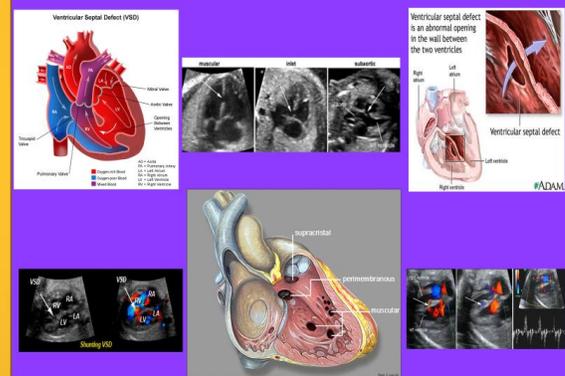
Materials and Methods

We will investigate the prenatal and postnatal course of all fetuses diagnosed with isolated VSDs by color Doppler sonography between January 2011-December 2014 via chart review process. Affected fetuses had serial echocardiograms performed by either Dr. Chau or pediatric cardiologists until delivery. These infants subsequently had echocardiograms performed postnatally regardless of the presence or absence of the in utero spontaneous closure of VSDs. Their karyotypes were obtained by either CVS or amniocentesis or postnatal evaluation according to the standardized protocols of both hospitals. The incidence of aneuploidy and of extracardiac anomalies, the locations and sizes of VSDs, the rate of prenatal spontaneous closure of the defects, and the rate of postnatal spontaneous closure of the defects up to 1 year of life will be analyzed anonymously.

Expected Results

An observational chart review will be performed on 200 patients from both hospitals. We expect to be able to provide our pregnant patient with more accurate prognosis concerning fetuses having isolated VSDs diagnosed in utero.

Tables/Graphs



References

- Paladini D, Palmieri S, Lamberti A, Teodoro A, Martinelli P, Nappi C. Characterization and natural history of ventricular septal defects in the fetus. *Ultrasound Obstet Gynecol* 2000;16(2):118-22. PubMed PMID: 11117079.
- Axt-Fliedner R, Schwarze A, Smrcek J, Germer U, Krapp M, Gembruch U. Isolated ventricular septal defects detected by color Doppler imaging: evolution during fetal and first year of postnatal life. *Ultrasound Obstet Gynecol* 2006;27(3):266-73. PubMed PMID: 16485323.
- DeVore, Gregory E. Fetal Echocardiography: Color doppler examination of the Heart. <http://www.fetal.com/FetalEcho/05%20Color.html>
- Ventricular Septal Defects. Stanford Children's Health. <http://www.stanfordchildrens.org/en/topic/default?id=ventricular-septal-defect-vsd-90-P01829>
- Ventricular Septal Defect. <http://www.adamimages.com/illustration/SearchResult/1/ventricular%20septal%20defect>



Accuracy of Clinical Diagnosis of Bacterial Vaginosis Among LSU OB-Gyn Residents

Department of
Obstetrics and
Gynecology

Valerie Williams MD, David Martin MD, Delaura Patel MD
Louisiana State University Health Sciences Center - New Orleans

Literature Review/Justification

Bacterial vaginosis (BV) is one of the most commonly diagnosed diseases in Ob-Gyn clinics. Although considered a common annoyance infection, untreated bacterial vaginosis has been linked to increased susceptibility to sexually transmitted infections such as HIV, premature rupture of fetal membranes, premature labor, chorioamnionitis, and post operative infection. Accurate diagnosis of this disease is crucial, yet challenging in a busy clinical setting.

The current practice of diagnosis of BV at the LSU Ob Gyn clinic is a modified version of the Amsel criteria. However, this technique may result in inter observer reliability and is time consuming. Improving the consistency of BV diagnosis would improve patient care and residency education.

Hypothesis

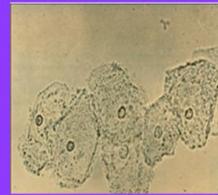
The accuracy of clinical diagnosis of Bacterial Vaginosis among LSU ObGyn residents is lower as compared to diagnosis using the gold standard Nugent's score.

Materials and Methods

All LSU Ob-Gyn residents will be approached and consented prior to the study. If a resident suspects that a patient might have BV, the resident would perform a pelvic examination and wet mount preparation as per established standard of care. The resident then makes a diagnosis and offers treatment. The resident will collect an additional vaginal specimen for the study. The vaginal swab will be sent to the Infectious Disease department for a laboratory diagnosis based on the Nugent criteria. The resident will fill out a short study worksheet about how the diagnosis was made. These two diagnoses will be compared to determine the accuracy of BV diagnosis.

Expected Results

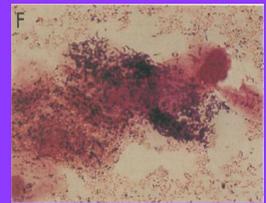
The accuracy of clinical diagnosis will be low as compared to diagnosis using Nugent's Score.



Clue cells on microscopy



Normal vaginal flora
Nugent Criteria 0



Nugent Criteria 10

References

- Bradshaw CS, Morton AN, Hocking J, et al: High recurrence rates of bacterial vaginosis over 12 months after metronidazole therapy and factors associated with recurrence. *J Infect Dis.* 2006; 193: 1478.
- Sha BE, Chen HY, Wang QJ, Zariffard MR, Cohen MH, Spear GT. Utility of Amsel criteria, Nugent score, and quantitative PCR for *Gardnerella vaginalis*, *Mycoplasma hominis*, and *Lactobacillus* spp. for diagnosis of bacterial vaginosis in human immunodeficiency virus-infected women. *J Clin Microbiol.* 2005; 43(9): 4607-12.
- Swidsinski A, Mendling W, Loening-Baucke V, Ladhoff A, Swidsinski S, Hale LP, Lochs H. Adherent biofilms bacterial vaginosis. *Obstet Gynecol.* 2005; 106(5): 1013-23.
- Sha BE, Zariffard MR, Wang QJ, Chen HY, Bremer J, Cohen MH, Spear GT. Female genital-tract HIV load correlates inversely with *Lactobacillus* species but positively with bacterial vaginosis and *Mycoplasma hominis*. *J Infect Dis.* 2005; 191(1):25-32.
- Spear GT, Sikaroodi M, Zariffard MR, Landay AL, French AL, Gillevet PM. Comparison of the diversity of the vaginal microbiota in HIV-infected and HIV-uninfected women with or without bacterial vaginosis. *J Infect Dis.* 2008; 198(8):1131-40.
- Turovskiy Y, Noll KS, Chikindas ML. The Etiology of Bacterial Vaginosis. *J Appl Microbiol.* 2011; 110(5): 1105-1128.
- Nam KH, Kim TY, Kim SR, Kim SW, Kim JW, Lee MK, Nam EJ, Jung YW. Association between bacterial vaginosis and cervical intraepithelial neoplasia. *J Gynecol Oncol.* 2009; 20(1): 39-4.
- Nugent RP, Krohn MA, Hillier SL. Reliability of Diagnosing Bacterial Vaginosis Is Improved by a Standardized Method of Gram Stain Interpretation. *J of Clinical Micro.* 1991; 29(2): 297-301.



Knowledge of Postpartum Depression in At-Risk Patients and Their Families

Michelle Schussler Taheri MD, Amy Young MD, F.A. Moore III MD, Hilary Thompson PhD, Kathryn Vignes
Louisiana State University Health Sciences Center - Baton Rouge

Department of
Obstetrics and
Gynecology

Literature Review and Justification

Postpartum depression occurs in 10-15% of postpartum patients, and its duration can last months, with significant costs to the patient, baby, her family, and society as a whole. Despite its wide-spread effects, there is little that we know about the etiology of this illness. There are effective screening tools to diagnose postpartum depression and excellent medications for treatment; however, limited mental health resources and a lack of routine screening by physicians lead to missed opportunities to diagnose and treat postpartum depression. With a better understanding of the knowledge that our patients and their families have about postpartum depression, we will be able to better approach education and intervention in a way that best addresses their needs.

Hypothesis

Pregnant patients and their families have limited knowledge about postpartum depression and its symptoms, as well as inadequate prenatal exposure about the effects and severity of postpartum depression.

Materials and Methods

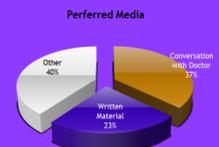
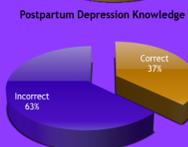
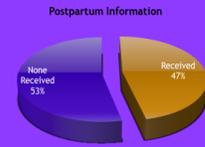
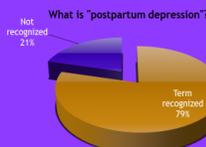
Pregnant patients of any gestational age and their family members, significant others, or accompanying support will be offered a population-based survey about postpartum depression. Possible participants will be approached upon arrival for their appointment. Participants will receive an envelope with a description of the project and the survey. Participants will return the surveys to a designated receptacle in the clinic in the unmarked envelope. An anonymous log of patients declining to participate with their reason will be collected. For all potential participants approached, an educational handout will be provided. Data will be entered into an Excel spreadsheet and analyzed by a statistician.

Expected Results

Knowledge about postpartum depression among at-risk patients and their families is inaccurate or limited, not determined only by demographics, and not effectively addressed by physicians.

Community Awareness of Postpartum Depression

Jessica Rinaldo MD and Amy Young MD
Louisiana State University Health Sciences Center - New Orleans
2012



References

1. Bauer, Mark S., MD, Suppes, Patricia, MD, PhD, Thase, Michael E., MD. American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision. Washington, D.C., American Psychiatric Association, 2000.
2. Regier D, Narrow W, Rae D, et al: The de facto mental and addictive disorders service system, Epidemiologic Catchment Area prospective 1 year prevalence rates of disorders and services. *Arch Gen Psychiatry* 50:85, 1993.
3. Bloch M, Schmidt PJ, Danaceau M, Murphy J, Nieman L, Rubinow DR. Effects of gonadal steroids in women with a history of postpartum depression 2000 Jun. (*The Cochrane Controlled Trials Register (CENTRAL)*). In: *The Cochrane Library*, Issue 1, 2012. Oxford: Update Software. Updated quarterly.
4. Wisner, Katherine L., Sit, Dorothy K.Y., et al. Psychiatric Disorders. In: Gabbe, Steven G., MD, Nelbyl, Jennifer R., MD, Simpson, Jo Leigh, MD. *Obstetrics: Normal and Problem Pregnancies*. 5th ed. Philadelphia, PA: Churchill Livingstone, 2007: 1251-1256.
5. Gavin, Norma I., PhD, Gaines, Bradley N., MD, MPH, Lohr, Kathleen N, PhD, et al. Perinatal Depression: A Systematic Review of Prevalence and Incidence. *Obstetrics & Gynecology* 2005 Vol. 106, No. 5, Part 1, pp 1071-1083.
6. Gregoire A.J, Kumar B, Everitt B, Henderson AF, Studd JW. Transdermal estrogen for treatment of severe postnatal depression 1996 Apr. (*The Cochrane Controlled Trials Register (CENTRAL)*). In: *The Cochrane Library*, Issue 1, 2012. Oxford: Update Software. Updated quarterly.
7. Yonkers, Kimberly Ann, MD; Vigod, Simone, MD; FRCP; Ross, Lori, PhD. Diagnosis, Pathophysiology, and Management of Mood Disorders in Pregnant and Postpartum Women. *Obstetrics and Gynecology* 2011 Vol. 117, NO. 4 pp 961-977.
8. http://www.acog.org/Resources_And_Publications/Patient_Education_Pamphlets/Files/Postpartum_Depression
9. <http://pdlnetwork.org/state/louisiana/louisiana-perinatal-depression-project-or-healthy-and-happy-moms-and-babies-program>
10. <http://www.govtrack.us/congress/bills/110/s1375/text>



The Use of Vaginal Packing at the Time of Surgery for Pelvic Organ Prolapse and Incontinence: A Retrospective Chart Review

*Department of
Obstetrics and
Gynecology*

Lisa Peacock MD, Amanda Thomas MD, Evrim Oral PhD, Caitlyn Louviere
Louisiana State University Health Sciences Center - New Orleans

Literature Review

Vaginal packing is widely used after many common gynecologic surgeries. There is a paucity of data regarding the use of vaginal packing after vaginal surgery. The first study addressing this common medical practice was published in December 2013. A randomized control trial; it evaluated postoperative pain, bleeding, and infection after the use of vaginal packing. This study concluded that there was a trend towards increased hematoma formation and complications that was not statistically significant. There are no other studies directly evaluating the use of vaginal packing after reconstructive surgery. Additional studies are needed to further investigate its use.

Hypothesis

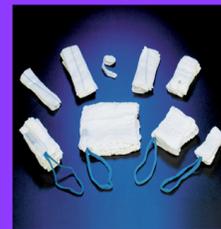
The use of vaginal packing after pelvic floor surgery for pelvic organ prolapse and stress urinary incontinence can affect postoperative blood loss, postoperative pain scores, duration of catheterization, febrile morbidity, and postoperative pelvic infections.

Methods and Materials

A retrospective chart review of all pelvic floor surgery for pelvic organ prolapse and stress urinary incontinence will be performed from January 1, 2009 to December 31, 2013. The clinical sites will include The Interim Hospital of Louisiana, Touro Infirmary, and East Jefferson General Hospital. The factors to be evaluated will include demographics, perioperative blood loss, postoperative pain scores, need for catheterization, febrile morbidity, and postoperative pelvic infections.

Expectations

The expected outcome of this research is to further clarify the effect of the use of vaginal packing at the time of surgery for pelvic organ prolapse and incontinence.



Assortment of vaginal packing material

References

1. Dildy, G. A., Scott, J. R., Saffer, C. S., & Belfort, M. A. (2006). An Effective Pressure Pack for Severe Pelvic Hemorrhage. *Obstetrics & Gynecology*, 108(5), 1222-1226.
2. Glavind, K., Mårup, L., Madsen, H., & Glavind, J. (2007). A prospective, randomized, controlled trial comparing 3 hour and 24 hour postoperative removal of bladder catheter and vaginal pack following vaginal prolapse surgery. *Acta Obstetrica et Gynecologica Scandinavica*, 86(9), 1122-1125.
3. Koyama, S., Maeda, M., Kobayashi, M., Tanaka, Y., Kubota, S., Nakamura, R., et al. (2013). Angiographic findings after vaginal gauze packing: New insight into an old technique. *Journal of Obstetrics and Gynecology Research*, 39(6), 1212-1216.
4. Ramsewak, S., Sohan, K., Ramdass, M. J., & Naraynsingh, V. (2004). Gauze packing for aspirin-induced hemorrhage in vaginal hysterectomy. *International urogynecology journal and pelvic floor dysfunction*, 15(1), 59-60.
5. Thiagamoorthy, G., Khalil, A., Cardozo, I., Srkirishna, S., Leslie, G., & Robinson, D. (2014). The Value of Vaginal Packing in Pelvic Floor Surgery. *Obstetrical & Gynecological Surgery*, 69(3), 140-141.

LSU OB/GYN Resident Research Day Presentations

2013

Amanda Lemoine Alleyn, MD, House Officer IV

Advisor: Joseph Miller, MD

Umbilical Cord Coiling and Maternal Diabetes

*****Kira Clement, MD, House Officer III*****

Advisor: Joseph Miller, MD

*Second Trimester Cord Coiling Index and Its Relationship to
Small for Gestational Age Fetuses*

*****Natasha Goss-Voisin, MD, House Officer IV*****

Advisor: Joseph Miller, MD

Does Ultrasound Identify Fetal Karyotype Abnormalities?

Nicole Pino Harper, MD, House Officer IV

Advisor: Karen Soules, MD

*Mesh Exposure Following Pelvic Organ Prolapse Repair with
Gynecare Prosima System*

Christy Hartmann, MD, House Officer IV

Advisor: Stacey Holman, MD

*Evaluation of Follow-Up Protocols of Clinical Breast Findings
In the LSU Obstetrics & Gynecology Clinic*

Tara Morse, DO, House Officer III

Advisor: Joseph Miller, MD

*The Relationship between Umbilical Cord Diameter of
Free Floating Cord Segments Compared to Relative Fetal Birth Weight*

Aishawarya Sarkar, MD, House Officer IV

Advisor: Joseph Hagan, ScD

Biostatistics Needs Assessment Survey

*****Jamie Sias, MD, House Officer IV*****

Advisor: Danny Barnhill, MD

Faculty Assessment of Competency Using QR Reader

**LSU OB/GYN Residents and Faculty
Presented and/or Published Research**

2010 – 2014

1. Barnhill D, Ismailjee M, Goss N, Ruiz B, Young A. *Low-grade Fibromyxoid Sarcoma of the Vulva*. J La State Med Soc, 164:95, 2012.
2. Barnhill D, Smith M, Spears R, Ruiz B, Nolan T: *Granular Cell Tumor of the Vulva*. J La State Med Soc, 162:199, 2010.
3. Bergeron LM, Maupin RT Jr, Washington GP, Miller JM Jr. *Hypoplastic Umbilical Artery in Twins*. Central Association of Obstetricians and Gynecologists, Chicago, Illinois, October 2012 (Poster).
4. Buckner LR, Schust DJ, Ding J, Nagamatsu T, Beatty WL, Chang TL, Greene SJ, Lewis ME, Ruiz, B, Holman S, Spagnuolo, RA, Pyles, RB and Quayle, AJ. *Innate immune mediator profiles and their regulation in a novel polarized immortalized epithelial cell model derived from human endocervix*. J Reprod Immunol, 92 (2011).
5. Clement K, Miller JM Jr, Hagan J. *Is the coiling property of the umbilical cord related to small for gestational age newborns?* Central Association of Obstetricians and Gynecologists, Napa, California, October 2013 (Poster).
6. Federico C, Alleyn J, Dola C, Tafti S, Galandak J, Jacob C, Bhuiyan A, Cheng J. *Relationship Among Age, Race, Medical Funding and Cervical Cancer Survival*. Journal of the National Medical Association 102(3): 199-205, March 2010.
7. Ghafar M, Bedestani A, Nolan TE, Velascoc P, Slocum C, Winters JC, Chesson RR. *Levator contraction strength as risk factor for voiding dysfunction after anti-incontinence procedures and pelvic prolapse repair*. American Urogynecology Society, Long Beach, California, 2010.
8. Ghafar M, Bedestani A, Soules K, Nolan TE, Velasco C, Chesson RR. *POPQ point "C is not equal to Point D after Hysterectomy*. Society of Gynecologic Surgeons, San Antonio, Texas, 2011.
9. Hallner B, Polite F, Hagan J, Castellano T. *Comparing Initial Endocervical Curettage Pathology To Final Endocervical Pathology of Loop Electrosurgical Excision and Cold Knife Cone Procedures*. American College of Obstetrics and Gynecology, New Orleans, Louisiana, May 2013 (Poster).
10. Holman S, Erickson S, Magrane, D, Polite F, Hagan J, Young, A. *Teaching Quality Improvement: A Needs Assessment for OBGYN Resident Education*. Annual Meeting Association of Professors in Gynecology & Obstetrics and Counsel on Resident Education in Obstetrics & Gynecology, Academic Scholars & Leaders Program, Phoenix, Arizona, 2013.
11. Jones D, Miller JM Jr. *Antenatal Significant of a Single Umbilical Artery*. Central Association of Obstetricians and Gynecologists, Nassau, Bahamas, October 2010 (Poster).
12. Koski M, Chow D, Bedestani A, Togami J, Chesson R, Winters J. *Colpocleisis for advanced Pelvic Organ Prolapse*. American Urogynecology Association Annual Meeting, May 2011.

13. Leon I, Polite F, Karpinski A, McRaney A. *Signs of Improvement? Impact of a Novel Initiative on CREOG Outcomes*. Annual Meeting Association of Professors in Gynecology & Obstetrics and Counsel on Resident Education in Obstetrics & Gynecology, Atlanta, Georgia, February 2014.
14. Miller JM Jr. *Mid-trimester Umbilical Cord Coiling is Associated with Small for Gestational Age Newborns*. Central Association of Obstetricians and Gynecologists, Nassau, Bahamas, October 2011.
15. Morse T, Miller JM Jr, Hagan J. *Umbilical Cord Diameter of Free Floating Cord Segment at 28-34 Weeks of Gestation to Relative Fetal Birth Weight*. Central Association of Obstetricians and Gynecologists, Napa, California, October 2013 (Poster).
16. Mury J, Alleyn J, Hagan J, Heard A, Young A. *Medical Student Education in the OB/GYN Clerkship: Increasing Student Knowledge, Satisfaction, and Interest in Obstetrics and Gynecology*. Annual Meeting Association of Professors in Gynecology & Obstetrics and Counsel on Resident Education in Obstetrics & Gynecology, Atlanta, Georgia, February 2014 (Poster).
17. Navas, J, Nguyen L, Hoxsey R. *Performance and Retention Skills Amongst Novice and Experienced Residents on a Virtual-Reality Hysteroscopy Training Simulator*. Annual Meeting Association of Professors in Gynecology & Obstetrics and Counsel on Resident Education in Obstetrics & Gynecology, Orlando, Florida, March 2012.
18. Paige J, Yang T, Suleman R, Chauvin S, Alleyn J, Brewer M, Hoxsey R. *Role of Instruction Method in Novices' Acquisition of Minimally Invasive Surgical (MIS) Basic Skills*. Journal Laparoendoscopy & Advanced Surgical Techniques, 2011; 21(8): 1-5.
19. Reynolds K, Barnhill D, Sias J, Young A, Polite F. *Utilization of QR Reader to Provide Real Time Evaluation of Residents' Skills Following Surgical Procedures*, Accreditation Council on Graduate Medical Education, Annual Educational Conference, Maryland, March 2014.
20. Scholl J, Durfee SM, Russell MA, Heard AJ, Iyer C, Alammari R, Coletta J, Craigo SD, Fuchs KM, D'Alton M, House M, Jennings RW, Ecker J, Panda B, Tanner C, Wolfberg A, Benson CB. *First trimester cystic hygroma: relationship of nuchal translucency thickness and outcomes*. Obstet Gynecol 2012; 120(3): 551-559.
21. Sias J, Barnhill D, Reynolds K, Young A, Polite F, Hagan J. *FAC 2.0: The Future of Resident Evaluation, Faculty Assessment of Competency Using OR Reader*. Annual Meeting Association of Professors in Gynecology & Obstetrics and Counsel on Resident Education in Obstetrics & Gynecology, Phoenix, Arizona, February 2013 (Poster). Best Student/Resident Research.
22. Washington GP, Lewis PL, Miller JM Jr. *Obstetric Intensive Care Admission to a Tertiary Center*. Central Association of Obstetricians and Gynecologists, Chicago, Illinois, October 2012 (Poster).
23. Washington GP, Maupin RT Jr, Miller JM Jr. *Single Umbilical Artery – Left or Right: It May Matter*. Central Association of Obstetricians and Gynecologists, Chicago, Illinois, October 2012 (Poster).

**LSU OB/GYN Residents and Faculty
Presented Research at the LSU School of Medicine
1st Annual Quality Improvement Patient Safety Forum**

2013

1. Clark L, Sias J, Reynolds K, Jones, A, Holman S. Placental Protocol: Establishing a Systematic Review of Placental Pathology. LSU School of Medicine 1st Annual Quality Improvement Patient Safety Forum, New Orleans, Louisiana, May 2013 (Poster).
2. Clement K, Goss N, Hirsch A, Sarkar A, Thomas A, Barnhill D, Williams V. *Enhancing Efficiency and Staff Education in LSU OBGYN Clinic*. LSU School of Medicine 1st Annual Quality Improvement Patient Safety Forum, New Orleans, Louisiana, May 2013 (Poster).
3. Hartmann C, Bisgaard E, Hagan J, Holman S. *Evaluation of Follow-Up Protocols of Clinical Breast Findings in the LSU Obstetrics & Gynecology Clinic*. LSU School of Medicine 1st Annual Quality Improvement Patient Safety Forum, New Orleans, Louisiana, May 2013 (Poster).
4. Hartmann C, Pino N, Larson B, Bina M, Jones J, Iwamoto T, Winfield F, Yockey S. *Implementation of a Protocol to Decrease Perioperative Transfusion Rates at ILH*. LSU School of Medicine 1st Annual Quality Improvement Patient Safety Forum, New Orleans, Louisiana, May 2013 (Poster).
5. Holman S, Erickson S, Magrane, D, Polite F, Hagan J, Young, A. *Teaching Quality Improvement: A Needs Assessment for OBGYN Resident Education*. LSU School of Medicine 1st Annual Quality Improvement Patient Safety Forum, New Orleans, Louisiana, May 2013.
6. Lemoine A, Rybka A, Luciano A, Hodge K, Patel D, Maupin R, Chau A. *Methods to Decrease Anemia in Pregnancy Prior to Delivery*. LSU School of Medicine 1st Annual Quality Improvement Patient Safety Forum, New Orleans, Louisiana, May 2013 (Poster).
7. Morse T, Washington G, Leon I, Mury J, Goodyear D, Alleyn J, Polite F. *Enhancing Obstetrical Resources in the Clinic Setting for Improved Patient Education*. LSU School of Medicine 1st Annual Quality Improvement Patient Safety Forum, New Orleans, Louisiana, May 2013 (Poster).