UCI School of Medicine Department of Obstetrics & Gynecology

Proudly presents the

39th Annual Residents Paper Day and 32nd Annual Philip J. DiSaia Society Symposium

Friday, May 7, 2021

Visiting Professor and Moderator

Richard J. Paulson, MD

Professor of Obstetrics & Gynecology, Alia Tutor Chair in Reproductive Medicine, Chief of the Division Reproductive Endocrinology and Infertility, and Director of USC Fertility, Keck School of Medicine of USC

Table of Contents

CME Activity Statement	3
Disclosure Statement	4
Welcomes Our Visiting Professor and Moderator	5
Previous Annual Residents Paper Day Visiting Professors and Moderators	6
Acknowledgements	7
Agenda	
Junior Residents	8
Senior Residents	9
JUNIOR RESIDENT CASE PRESENTATIONS	
Third Year Resident Case Presentations and Objectives	11
Alyssa Bujnak, MD	
Luke Green-Schmidt, MD	
Marie-Claire Leaf, MD	
Ariana Melendez, MD	
Jamie Miller, MD	
Griselda Reyes, MD	
Alice Sherman-Brown, MD	
Visiting Professor Symposium Lecture	
SENIOR RESIDENT RESEARCH PRESENTATIONS	23
Fourth Year Resident Research Presentations and Objectives	24
Blake Zwerling, MD, MSc	
Joyce Sutedja, MD	
Dana Senderoff, MD	
Bianca Rivas, MD, MBA	
Marielle Meurice, MD	
Carly Crowder, MD	



CME Activity Statement

Purpose: The purpose of this activity is to provide specific health care diagnostic and intervention guidelines in the field of Obstetrics and Gynecology. The guidelines presented by practicing experts and will be based upon the latest research in evidence-based medicine. In addition to a wide-ranging number of medical topics presented, the content of the presentations will address nationally-established competencies as pertaining to the field of Obstetrics and Gynecology. At the end of the activity, participants will have an up-to-date understanding of some of the best clinical approaches for Women's Health Care.

Target Audience: This activity is developed for practicing obstetricians and gynecologists, other physicians, allied health professionals, physicians in training, and other professionals who provide care for women.

Activity Objectives: At the conclusion of this activity, the participants should be able to:

- Determine the association between rectocele on defecography and physical examination
- Describe radiologic and 5 of 10 clinical predictors of surgical intervention for rectocele
- Discuss potential predictors of surgical outcomes for rectocele repair
- Discuss the linguistic challenges in our Spanish speaking patient population
- Analyze areas of improvement for language-discordant providers.
- Appraise need for medical Spanish attainment in residency
- Describe common factors associated with developing bowel obstruction after sacrocolpopexy
- Clarify the possible presenting symptoms of bowel obstruction after sacrocolpopexy.
- Explain the management options for bowel obstruction after sacrocolpopexy and describe some of the intraoperative findings when bowel obstruction is managed surgically

Accreditation Statement: The University of California, Irvine School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Designation Statement: The University of California, Irvine School of Medicine designates this live activity for a maximum of 5.5 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

California Assembly Bill 1195: This activity is in compliance with California Assembly Bill 1195, which requires continuing medical education activities with patient care components to include curriculum in the subjects of cultural and linguistic competency. For specific information regarding Bill 1195 and definitions of cultural and linguistic competency, please visit the CME website at http://www.meded.uci.edu/CME/.

Faculty:

Richard J. Paulson, MD

Professor of Obstetrics & Gynecology, Alia Tutor Chair in Reproductive Medicine, Chief of the Division Reproductive Endocrinology and Infertility, and Director of USC Fertility, Keck School of Medicine of USC Robert E. Bristow, MD, MBA, FACS

Professor and Chair of Obstetrics & Gynecology, UCI School of Medicine

Krishnansu S. Tewari, MD, FACOG, FACS

Professor, Director of Continuing Medical Education, Director, Philip J. DiSaia Chair of Gynecologic Oncology, Department of Obstetrics & Gynecology, UCI School of Medicine

Laura E. Fitzmaurice, MD

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Disclosure Statement

Friday, May 7, 2021

UCI OCME requires that the content of CME activities and related materials provide balance, independence, objectivity, and scientific rigor. Planning must be free of the influence or control of a commercial entity, and promote improvements or quality in healthcare. It is the policy of the UCI Office of Continuing Medical Education to ensure balance, independence, objectivity, and scientific rigor in all its educational activities. All faculty participating in UCI sponsored CME programs are expected to disclose to the activity participants any real or apparent conflict(s) of interest that may have a direct bearing on the subject matter of the continuing medical education activity. This pertains to relationships with pharmaceutical companies, biomedical device manufacturers, or other corporations whose products or services are related to the activity content. The intent of this policy is identifying potential conflicts of interest so participants can form their own judgments with full disclosure of the facts. It remains for the participants to determine whether the speaker's outside interests reflect a possible bias in either the exposition or the conclusions presented.

The following speakers/planners have indicated they have no relevant financial relationships to disclose:

Richard J. Paulson, MD	Alyssa Bujnak, MD	Blake Zwerling, MD, MSc
Robert E. Bristow, MD, MBA	Luke Green-Schmidt, MD	Paul Wadensweiler, MD
Krishnansu S. Tewari, MD	Marie-Claire Leaf, MD	Joyce Sutedja, MD
Laura E. Fitzmaurice, MD	Ariana Melendez, MD	Dana Senderoff, MD
Rachel A. Perry, MD, MPH	Jamie Miller, MD	Bianca Rivas, MD, MBA
Julia Mariorie Bregand-White, MD	Griselda Reyes, MD	Marielle Meurice, MD
Nkiruka Chuba, MD	Alice Sherman-Brown, MD	Carly Crowder, MD
Lena Nguyen		

All those in control of content have nothing to disclose, except the following:

Krishnansu S. Tewari, MD, as activity director, has disclosed that he is a member of the speakers' bureau for Merck, Astra Zeneca and Clovis. Dr. Tewari further discloses that he will submit the program's curriculum in advance for peer review, and will defer to Robert E. Bristow, MD, MBA in the planning of any content related to his disclosure information.

This educational activity may contain discussion of unlabeled and/or investigational uses of agents that are not approved by the FDA. Please consult the prescribing information for each product.

The views and opinions expressed in this activity are those of the faculty and do not necessarily reflect the views of the University of California, Irvine School of Medicine.



Welcomes Our Visiting Professor and Moderator



RICHARD J. PAULSON, MD

Professor of Obstetrics & Gynecology, Alia Tutor Chair in Reproductive Medicine, Chief of the Division Reproductive Endocrinology and Infertility, and Director of USC Fertility, Keck School of Medicine of USC

Dr. Richard Paulson holds the Alia Tutor Chair in Reproductive Medicine at the Keck School of Medicine of the University of Southern California. He is also Professor and vice-chair, Department of Obstetrics and Gynecology, and Chief of the Division of Reproductive Endocrinology and Infertility. Dr. Paulson received a BS degree in Physics from UCLA, followed by the MD degree, also from UCLA. He completed residency in Obstetrics & Gynecology at Harbor-UCLA Medical Center and fellowship in Reproductive Endocrinology and Infertility at LA County-USC medical center. He returned to graduate study six years later and obtained an MS degree in Biostatistics and Study Design from USC.

Dr. Paulson is past president of the American Society for Reproductive Medicine, of the Pacific Coast Reproductive Society, the Society for Reproductive Endocrinology and Infertility and the Los Angeles Obstetrical and Gynecological Society. He is the Editor-in-Chief of "Fertility & Sterility Reports" and past deputy editor of "Fertility and Sterility." Dr. Paulson has authored over 200 scientific articles and chapters and has received more than 35 research awards for scientific publications. He is the editor of 2 textbooks and a lay book on infertility, "Rewinding Your Biological Clock." His major research interest is reproductive aging with a particular emphasis on human embryo implantation and fertility preservation.



Previous Annual Residents Paper Day Visiting Professors and Moderators

1983 *Jack Pritchard, MD* University of Texas, Dallas

1984 *Edward J. Quilligan, MD* University of Wisconsin

1985 *Leon Speroff, MD* Case Western Reserve, Ohio

1986 *William T. Creasman, MD* Duke University, North Carolina

1987 *Robert Resnik, MD* University of California, San Diego

1988 *Felix N. Rutledge, MD* University of Texas Cancer Center

1989 *Jennifer R. Niebyl, MD* University of Iowa

1990 **Byron J. Masterson, MD** University of Florida

1991 *William Droegemuller, MD* University of North Carolina

1992 *Norman F. Grant, MD* University of Texas, Dallas

1993 *John C. Hobbins, MD* University of Colorado

1994 *Daniel R. Mishell, Jr., MD* University of Southern California

1995 *Moon Kim, MD* Ohio State University 1996 Sergio Pecrelli, MD European Institute of Oncology, Italy 1997 Valerie M. Parisi, MD Stony Brook University, NY

1998 *Edward J. Quilligan, MD* University of California, Irvine

1999 **Yuji Murata, MD** Osaka University Medical School, Japan

2000 *Matthew F. Kohler, MD* Medical University of South Carolina

2001 *Steven L. Clark, MD* University of Utah Health Science Center

2002 **Patricia Braly, MD** Hematology and Oncology Specialist

2003 Charles J. Lockwood, MD Yale University School of Medicine

2004 *R. Jeffrey Chang, MD* University of California San Diego

2005 *Linda Brubaker, MD, FACOG, FACS* Loyola University Health Systems

2006 *Ray O. Bahado-Singh, MD* Wayne State University

2007 *Thomas J. Garite, MD* University of California, School of Medicine

2008 *Larry J. Copeland, MD* The Ohio State University College of Medicine 2009 *Philip Darney, MD, MSc* University of California, San Francisco

2010 **Robert Bristow, MD** The Johns Hopkins Hospital, Maryland

2011 *David F. Lewis, MD* University of Cincinnati, Ohio

2012 Gautam Chaudhuri, MD, PhD University of California, Los Angeles

2013 *Charles Nager, MD* University of California, San Diego

2014 *Pasquale Patrizio, MD* Yale University Medical Center

2015 Eve L. Espey, MD The University of New Mexico

2016 **Brian K. Iriye, MD** University of New Mexico, School of Medicine

2017 *Marlene Corton, MD* University of Texas Southwestern Medical Center 2018 *Dennis S. Chi, MD* New York University School of Medicine

2019 **Brigid K. McCue, MD** Albert Einstein College of Medicine

2020 Anne R. Davis, MD Columbia University Irving Medical Center



Acknowledgements

Richard J. Paulson, MD

Professor of Obstetrics & Gynecology, Alia Tutor Chair in Reproductive Medicine, Chief of the Division Reproductive Endocrinology and Infertility, and Director of USC Fertility Keck School of Medicine of USC

For serving as the Distinguished Visiting Professor and Moderator for the 39th Annual Residents Paper Day.

Dr. Julia Marjorie Bregand-White, Assistant Professor and Dr. Nkiruka Chuba, Assistant Professor, for serving as judges for the 39th Annual Residents Paper Day

Dr. Robert Bristow, Professor and Chair of the Department of Obstetrics and Gynecology, for instituting and supporting this program. We thank him for his continued support and encouragement of resident education and research.

Dr. Krishnansu Tewari, Professor and Division Director, and the faculty members who have supported, guided and encouraged the residents with the process of developing, conducting, evaluating, and finalizing the work that is presented by the residents today.

The residents, fellows, faculty, and community physicians for showing their support, attendance and recognition of the hard work demonstrated by the presentations.

Dr. Laura Fitzmaurice, Residency Program Director and Dr. Rachel Perry, Associate Residency Program Director, and their staff for the coordination of this program.



Agenda Junior Residents

Visiting Professor and Moderator: Richard J. Paulson, MD

7:45-7:55 AM	Welcome and Introductions – Dr. Robert Bristow and Dr. Krishnansu Tewari
8:00-8:08 AM	Alyssa Bujnak, MD
8:08-8:15 AM	Discussion/Q & A
8:15-8:23 AM	Luke Green-Schmidt, MD
8:23-8:30 AM	Discussion/Q & A
8:30-8:38 AM	Marie-Claire Leaf, MD
8:38-8:45 AM	Discussion/Q & A
8:45-8:53 AM	Ariana Melendez, MD
8:53-9:00 AM	Discussion/Q & A
9:00-9:08 AM	Jamie Miller, MD
9:08-9:15 AM	Discussion/Q & A
9:15-9:23 AM	Griselda Reyes, MD
9:23-9:30 AM	Discussion/Q & A
9:30-9:38 AM	Alice Sherman-Brown, MD
9:38-9:45 AM	Discussion/Q & A
9:45-10:30 AM	Richard J. Paulson, MD Symposium Lecture: "Assisted Reproduction in the 21st Century: an update"
10:30-10:45 AM	Q&A
10:45-11:00 AM	Evaluations and Break



Senior Residents

Visiting Professor and Moderator: Richard J. Paulson, MD

11:00-11:09 AM	Blake Zwerling, MD, MSc
11:09-11:16 AM	Discussion/Q & A
11:16-11:25 AM	Paul Wadensweiler, MD
11:25-11:32 AM	Discussion/Q & A
11:32-11:41 AM	Joyce Sutedja, MD
11:41-11:48 AM	Discussion/Q & A
11:48-11:57 AM	Dana Senderoff, MD
11:57-12:04 PM	Discussion/Q & A
12:04-12:13 PM	Bianca Rivas, MD, MBA
12:13-12:20 PM	Discussion/Q & A
12:20-12:29 PM	Marielle Meurice, MD
12:29-12:36 PM	Discussion/Q & A
12:36-12:45 PM	Carly Crowder, MD
12:45-12:52 PM	Discussion/Q & A
12:55-1:00 PM	Departmental Photo
1:00-1:15 PM	Evaluations and Adjournment



JUNIOR RESIDENT CASE PRESENTATIONS



Third Year Resident Case Presentations and Objectives

The University of California, Irvine School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The University of California, Irvine School of Medicine designates this educational activity for a maximum of 5.5 *AMA PRA Category 1 Credits*™. Each physician should claim only those credits that he/she actually spent in the activity. Drs. Alyssa Bujnak, Luke Green-Schmidt, Marie-Claire Leaf, Ariana Melendez, Jamie Miller, Griselda Reyes, and Alice Sherman-Brown have declared that they do not have a financial interest or other relationship with any manufacturer(s) of any commercial product or apparent conflict of interest related to the content of their presentation. They further state they will not be discussing the use of any unapproved/unlabeled drugs/devices.

Time	Presenter	Presentation	Objectives
8:00-8:15 AM	Alyssa Bujnak, MD <i>Krishnansu Tewari, MD</i>	"Epithelial Ovarian Cancer in Pregnancy: A Report of Three Cases"	 Recognize the incidence of high grade epithelial ovarian carcinoma in pregnancy. Describe the management of high grade epithelial ovarian carcinoma in pregnancy. Discuss the maternal and neonatal outcomes of high grade epithelial ovarian carcinoma in pregnancy.
8:15-8:30 AM	Luke Green-Schmidt, MD Brian Adam Crosland, MD Jennifer Jolley, MD Diana Pearre, MD Jill Tseng, MD	"Rapid Progression of Cervical Squamous Cell Carcinoma with Delayed Treatment in Pregnancy"	 Evaluate the prevalence of cervical cancer in pregnancy as more women delay childbearing Describe the role of imaging modalities in cervical cancer staging in pregnancy to plan best treatment Discuss patient autonomy in the informed consent process
8:30-8:45 AM	Marie-Claire Leaf, MD Fabio Cappuccini, MD Diana Pearre, MD Krishnansu Tewari, MD	"Lung Cancer Diagnosed on Pap Smear: A Case Report and Review of the Literature"	 Review risk factors for cervical cancer Highlight histologic findings of cervical cancer Discuss metastasis of extragenital malignancies to the uterine cervix
8:45-9:00 AM	Ariana Melendez, MD <i>Bill Yee, MD</i>	"A Tale of Two Cervices: Partial Septal Resorption in Uterine Didelphys"	 Review the types of female genital tract anomalies (upper and lower tract) Discuss the impact of Mullerian anomalies on fertility and pregnancy Describe intra-operative trouble shooting techniques for operative hysteroscopy, particularly in the setting of genital tract anomalies



9:00-9:15 AM	Jamie Miller, MD <i>Michael Nageotte, MD</i> <i>Maritza Ruiz, MD</i>	"A Case of Acute Promyelocytic Leukemia (APL) in a Pediatric Pregnant Patient"	 Recognize the clinical presentation of APL Review current treatment options for APL Discuss the safety profile of treatment options in pregnancy
9:15-9:30 AM	Griselda Reyes, MD <i>Jill Tseng, MD</i>	"Hypercalcemia and a large pelvic mass in pregnancy"	 Discuss differential diagnosis and management of pelvic masses arising in pregnancy Outline the presentation and potential effects hypercalcemia and hypercalcemic crisis in the maternal/fetal patient Describe the management of hypercalcemia and hypercalcemic crisis in setting of PTHrP producing mass in the pregnant patient
9:30-9:45 AM	Alice Sherman-Brown, MD Rachel Perry, MD, MPH	"The Challenge of Access – When the Cervix is a Barrier"	 Review the incidence and variable presentation of uterine incarceration Describe the management of uterine incarceration Discuss methods of second trimester abortion



"Epithelial Ovarian Cancer in Pregnancy: A Report of Three Cases"

Alyssa Bujnak, MD Krishnansu Tewari, MD

Department of Obstetrics and Gynecology University of California, Irvine-Medical Center, Orange, California, USA

Background: The incidence of epithelial ovarian cancer in pregnancy is rare (0.11 per 1000 deliveries) however due to the trend in increased age of pregnancy in the United States the incidence will potentially increase [1–3]. Most ovarian cancers in pregnancy are incidentally discovered on routine obstetrics ultrasound in asymptomatic women. The incidence of ovarian masses or cysts in pregnancy is 1-2%, approximately 2-3% of these masses or cysts are ovarian cancer [4]. Concentrations of tumor markers during pregnancy are altered and therefore not reliable for diagnosis. Furthermore, the effect of different imaging modalities on the fetus must be considered. The diagnosis of epithelial ovarian cancer in pregnancy is challenging but also imperative, as early diagnosis improves outcomes. Current management of epithelial ovarian cancer outside of pregnancy involves staging and debulking surgery with adjuvant chemotherapy or tissue diagnosis with neoadjuvant chemotherapy (NACT) followed by debulking surgery. The management of ovarian cancer in pregnancy is complex due to considerations of timing and appropriateness of surgical interventions, possible desired future fertility, and the relationship of chemotherapy with fetal and neonatal outcomes. In general options for management include termination followed by standard management, pregnancy-preserving surgery followed by chemotherapy with completion surgery following delivery, or NACT and surgery following delivery[5]. Here we report three cases of epithelial ovarian cancer in pregnancy with different management at a single institution.

Cases:

Case 1: A 32-year-old G1P0 with a new diagnosis of BRCA 1 germline mutation prior to becoming pregnant. At her initial obstetrics ultrasound, she was noted to have an enlarged right ovary measuring 6.4 x 3.0 x 3.7cm and a CA 125 of 453 U/mL. At gestational age (GA) 21w3d on repeat obstetrics ultrasound she had a 5 cm complex cyst. The patient decided to proceed without treatment or tissue diagnosis during pregnancy. At 40 6/7 weeks GA she underwent emergency cesarean section for fetal indications. She delivered a neonate without complications. Gynecology Oncology was consulted intraoperatively, and the patient underwent debulking surgery without hysterectomy for fertility sparing. Pathology showed stage IIIA1 high grade serous ovarian cancer. She was given adjuvant chemotherapy with carboplatin, paclitaxel, and bevacizumab. She was then started on Olaparib maintenance therapy. She was considering future pregnancy with donor eggs however she ultimately decided to undergo completion surgery and had a total abdominal hysterectomy.

Case 2: A 32-year-old G3P2002 with a pregnancy at 14 1/7 weeks GA was diagnosed with an 11cm adnexal mass at her initial obstetrics ultrasound. At 15 weeks GA she underwent on exploratory laparotomy and left ovarian cystectomy with her primary obstetrician/gynecologist. Histology showed high grade mixed epithelial carcinoma composed of 60% endometrioid and high-grade mucinous adenocarcinoma and 40% squamous cell carcinoma. At approximately 16 weeks GA the patient was started on chemotherapy and completed 5 cycles of carboplatin and paclitaxel. At 40 3/7 weeks GA via normal spontaneous delivery without neonatal complications. She subsequently underwent an interval debulk cytoreductive surgery. She was given 3 additional cycles of carboplatin and paclitaxel. On genetic testing the patient was found to have germline BRCA 2 mutation of variant of undetermined significance.



Case 3: A 30-year-old G2P1001 at 8 3/7 weeks GA was diagnosed with a 6.5 cm complex adnexal mass at her first obstetrics ultrasound. At 13 weeks GA she underwent a left salpingo-oophorectomy by her obstetrician/gynecologist. Pathology revealed a high grade serous ovarian carcinoma of the left ovary with positive peritoneal washings. She was started on chemotherapy at 18 weeks GA and completed 4 cycles carboplatin and paclitaxel. At 39 1/7 weeks GA she delivered via vacuum assisted vaginal delivery and the neonate had no complications. Following her delivery, the patient underwent completion cytoreductive surgery. The final pathology reported FIGO stage IIIA2 serous borderline ovarian carcinoma. She underwent 3 additional cycles of carboplatin and paclitaxel. Genetic testing revealed that the patient was BRCA wildtype.

Conclusion: Epithelial ovarian cancer in pregnancy is rare but is likely to become more relevant given the increased age of pregnancy in the United States. Standard management guidelines for epithelial ovarian cancer in pregnant patients has yet to be established. Cases of epithelial ovarian cancer in pregnancy should be reported in order to help continue to define guidelines for management.



"Rapid Progression of Cervical Squamous Cell Carcinoma with Delayed Treatment in Pregnancy"

Luke Green-Schmidt, MD Adam Crosland, MD, MPH, Jennifer Jolley, MD Diana Pearre, MD, Jill Tseng, MD

Department of Obstetrics and Gynecology University of California, Irvine-Medical Center, Orange, California, USA

Background: Cervical cancer is the leading gynecologic cancer in pregnancy, complicating 1.4 to 4.6 per 100,000 pregnancies. Women with early stage macroscopic invasive cervical carcinoma diagnosed prior to fetal viability have historically been recommended to terminate the pregnancy for immediate definitive cancer treatment. However, patient-centered care requires discussing the full-spectrum of reproductive options, which includes pregnancy continuation and concurrent treatment delay. Recognizing the complex cultural, ethical, religious and sometimes personal dilemmas patients face can aid in the provision of compassionate and nonjudgmental counseling. Furthermore, while patients may delay or decline recommended treatment, it is still not definitively known how this decision will affect disease progression due to limited data. We present a case of a patient with International Federation of Gynecology and Obstetrics (FIGO) stage IB1 squamous cell carcinoma (SCC) of the cervix diagnosed at 8 weeks' gestation who declined neoadjuvant chemotherapy and was managed expectantly under close surveillance. She ultimately underwent a Cesarean radical hysterectomy at 32 weeks' gestation following rapid progression of the tumor to FIGO stage IB3.

Case: A 31-year-old Hispanic primigravida first presented to her primary care physician due to post-coital bleeding. Atypical squamous cells of undetermined significance (ASCUS) were detected on Pap smear at time of her first prenatal visit. Subsequent cervical biopsies ultimately confirmed squamous cell carcinoma (SCC) of the cervix. At her initial gynecologic oncology consultation at 8 week's gestation, a speculum exam revealed an approximately 2 cm fungating cervical mass without parametrial induration or vaginal lesions. Magnetic resonance imaging (MRI) of the pelvis demonstrated an exophytic cervical mass involving the anterior lip measuring 1.6 x 1.8 x 1 cm without extracervical extension or lymphadenopathy. Based on the clinical exam and MRI the tumor was ultimately classified to be FIGO stage 1B1 and a multidisciplinary discussion between Maternal Fetal Medicine and Gynecologic Oncology providers ensued. The patient was advised that pregnancy termination and immediate radical hysterectomy with lymphadenectomy, or neoadjuvant chemotherapy with radical hysterectomy at time of Cesarean delivery, were considered standard treatment recommendations. The patient declined either recommended treatment options and a plan was made to move forward with close surveillance including serial MRI imaging every 6 weeks and monthly pelvic examinations. On follow up visit at 20 weeks' gestation, pelvic examination revealed concern for progression, which was corroborated by pelvic MRI demonstrating tumor size progression to 1.8 x 3 x 1 cm. Chemotherapy was again recommended; however, the patient deferred chemotherapy due to her concerns surroundings the potential side effect profile on the fetus. She stated she would feel like she is "punishing" the infant for her mistakes of not undergoing routine cervical cancer screening earlier. Because the patient continued to decline chemotherapy, observation with serial MRI and examinations were continued. Repeat pelvic and abdominal MRI at 29 weeks' gestation demonstrated continued tumor growth, now measuring 3.2 x 4.2 x 1.8 cm without parametrial, nodal, or abdominal involvement. With these new clinical and radiologic findings concerning for disease progression to stage IB3, the patient elected to proceed with a Cesarean delivery. She was then admitted to labor and delivery for administration of antepartum steroids for fetal lung maturity and neonatology consultation. During the examination under anesthesia, the cervical tumor was noted to be exophytic with a 1 cm border of normal-appearing cervix proximal



to the lesion. Therefore, the decision was made to proceed with an exploratory laparotomy, cesarean-radical hysterectomy, bilateral salpingectomy, bilateral pelvic lymphadenectomy, ovarian transposition, and cystoscopy. Following the uncomplicated delivery of a healthy male infant, intraoperative pelvic survey was unremarkable and there was no evidence of parametrial or vaginal invasion nor any extra-cervical spread of disease. The hysterectomy specimen revealed a grade 3 poorly differentiated invasive squamous cell carcinoma, with lymphovascular invasion present and all resection margins free of carcinoma. The patient was diagnosed with a non-occlusive deep vein thrombosis of left common femoral vein on postoperative day 1 in setting of mild symptomatic SARS-CoV-2 infection. She with discharged on postoperative day 6 on therapeutic enoxaparin sodium.

Conclusion: Reports of progression of stage IB cervical cancer in pregnancy are rare. The paucity of data complicates our ability to fully discuss prognosis for those electing treatment delay in pregnant patients with stage IB disease. We report a case that of disease progression from stage IB1 to IB3 SCC of the cervix in a pregnant patient who delayed treatment. This case also offers providers useful insight on navigating management, surveillance techniques, and comprehensive counselling in the setting of lengthy treatment delays, including the unmeasurable effects of cultural competency, complex multidisciplinary counseling, uniquely dynamic treatment recommendations, and non-invasive close surveillance.



"Lung Cancer Diagnosed on Pap Smear: A Case Report and Review of the Literature"

Marie-Claire Leaf, MD¹ Diana Pearre, MD², Fabio Cappuccini, MD², Krishnansu Tewari, MD²

- 1. Department of Obstetrics and Gynecology, University of California, Irvine-Medical Center, Orange, California, USA.
- 2. Division of Gynecology Oncology, Department of Obstetrics and Gynecology, University of California, Irvine-Medical Center, Orange, California, USA.

Background: Conventional cytology was initially invented for cervical cancer screening. Improvements in the technique with liquid-based cytology have allowed to expand its application to the detection of lung cancer. This case is the first reported case of lung adenocarcinoma diagnosed from cervical cells.

Case: This is the case of a 53 year-old woman with abdominal bloating and difficulty voiding who was diagnosed with lung cancer from a pap smear for cervical cancer screening. The pap smear showed atypical glandular cells (AGC) and she underwent a colposcopy with endocervical curettage which showed atypical cells, suspicious for malignancy. A loop electrosurgical excision procedure (LEEP) was subsequently performed which demonstrated malignant cells positive for Napsin-A and thyroid transcription factor (TTF-1), concerning for adenocarcinoma originating from the lung. She underwent a PET/CT scan showing multiple pulmonary nodules, the largest being 3 cm in size. A CT-guided biopsy with interventional radiology (IR) of the lung nodule was performed and pathology confirmed moderately differentiated adenocarcinoma of the lung. Additionally, cervical malignant cells were compared to the lung biopsy and had similar histology, confirming adenocarcinoma of the lung.

Conclusion: Metastatic lung cancer to the uterine cervix is rare. To date, there are only six reported cases of lung cancers with metastases to the cervix, all being adenocarcinoma type. Cervical cancers are often p16 positive while lung adenocarcinoma are Napsin-A and TTF-1 positive. This case emphasizes the importance of immunostaining in determining the primary cancer site as the misdiagnosis of extragenital metastasis to the cervix could lead to a delay in the correct treatment.



"A Tale of Two Cervices: Partial Septal Resorption in Uterine Didelphys"

Ariana Melendez, MD¹ Bill Yee, MD²

1. Department of Obstetrics and Gynecology, University of California, Irvine-Medical Center, Orange,

California, USA

2. Reproductive Partners Medical Group, Inc.

Background: Congenital anomalies of the female genital tract are varied and multifactorial with unclear effects on fertility. Regarding congenital uterine anomalies specifically, existing data is largely inconclusive regarding the impact on fertility, with prior analyses showing no causal relationship to a potential twenty-one-fold increase in rates of infertility. Furthermore, despite the existence of multiple classification systems, there does not exist an exhaustive list of all possible reproductive tract anomalies.

To underscore the range of anomalies, review contributing embryologic factors, and discuss options for evaluation, we present a case of a patient undergoing evaluation for infertility who has a uterine didelphys with communicating uterine horns, two cervices, and a longitudinal vaginal septum.

Case: The patient is a 36 year old nulligravida who presented with an 18 month history of infertility in the setting of regular menses. Her anti-Mullerian hormone level was zero, other labs were unremarkable. An hysterosalpingogram was significant for two uterine horns. In-office hysteroscopy revealed a longitudinal vaginal septum, suspected uterine didelphys, and likely endometrial polyps in both horns. Given in-office limitations, patient was planned for hysteroscopy polypectomy in the operating room.

Examination under anesthesia revealed the presence of a thick, transverse vaginal septum extending from the level of the cervices approximately 5cm distally. The right cervix was normal in appearance with a smaller, rudimentary left cervix, not easily accessible given the dominance of the right vagina and cervix. At baseline, the septum occluded the opening to the left vagina. On hysteroscopic evaluation, the right uterine horn was easily accessible via the right cervix. Upon entry via the left cervix, there was a clear communication at the level of the lower uterine segment between the two uterine horns. Entry to the left uterine horn was initially obscured given presence of the uterine septum. Polypectomy of the bilateral uterine horns was performed without complication.

Post-procedure, the patient underwent renal sonogram, revealing normal kidneys bilaterally with duplication or partial duplication of the right renal collecting cyst and a normal urinary bladder. At the time of this report, patient has not achieved pregnancy.

Conclusion: Anomalies of the female genital tract can have numerous implications for pregnancy and, depending on the anomaly, may affect fertility. Many of these anomalies do not fit clearly within the most recognized classification systems, and thus the data on implications of various anomalies is minimal, highlighting the value of using classification systems as frameworks rather than exhaustive lists. This case underscores the importance of a thorough evaluation for infertility, even in the setting of a clear primary source. Should this patient achieve pregnancy, risks include those associated with assisted reproductive technology and advanced maternal age as well as those associated with uterine anomalies, including, but not limited to, increased rates of fetal malpresentation, cesarean delivery, spontaneous abortion, stillbirth, abnormal placentation, fetal growth restriction, and pregnancy-induced hypertension.



"A Case of Acute Promyelocytic Leukemia (APL) in a Pediatric Pregnant Patient"

Jamie Miller, MD¹ Maritza Ruiz, MD² Michael Nageotte, MD³

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Background: Acute promyelocytic leukemia (APL) is a rare subtype of acute myeloid leukemia (AML), making up approximately 5% of AML patients. APL in non-pregnant patients is exceptionally responsive to a chemotherapy-free approach using a combination of all-trans retinoic acid (ATRA) and arsenic trioxide (ATO). Occurrence of APL during pregnancy is not only rare, but also presents additional unique challenges to treatment. Some additional considerations include the teratogenic effects of therapy options, and the increased fetal and maternal risks associated with diagnosis and treatment. Furthermore, APL in adolescent pregnancy is exceedingly rare, and scant literature is currently available regarding treatment options particular to APL in this circumstance. We present a case of a pediatric patient with newly diagnosed APL in the second trimester of pregnancy who underwent successful treatment with ATRA monotherapy per adult guidelines.

Case: A 16 year old G2P0010 at 27w2d presented to the hospital for evaluation of persistent epistaxis for approximately one month. She was otherwise asymptomatic and her past medical history was significant for iron deficiency anemia and depression. She was found to have pancytopenia, with a WBC of 1.1, Hgb of 8.9, and a platelet count of 31. A peripheral smear revealed circulating blasts with features characteristic of abnormal promyelocytes. She immediately underwent a bone marrow biopsy with pediatric Hematology Oncology, which confirmed the diagnosis of acute promyelocytic leukemia (APL). As the patient was underage, consent was obtained by her legal guardian for treatment. With careful consideration of teratogenic effects in pregnancy, the decision was made to proceed with a modified chemotherapy-free regimen of all-trans retinioic acid (ATRA) by omitting arsenic trioxide (ATO) from her therapeutic regimen. As the treatment and presence of APL increases the risk of various fetal and maternal complications including preterm labor, hemorrhage, DIC, placental abruption, and fetal growth restriction, the patient remained in the hospital for close surveillance during treatment. An additional risk to therapy is a serious and sometimes life-threatening complication called Differentiation syndrome (DS), which is an effect of a cytokine release storm. As a preventative measure, she was started on prophylactic steroid dosing of Prednisone while undergoing ATRA induction. On treatment day 13, she developed symptoms concerning for mild DS, which responded well to a treatment course of Dexamethasone. She continued her induction therapy and showed significant improvement in her blast count and peripheral blood PCR tests which were obtained every two weeks. Shortly before her scheduled induction, she was found to have achieved hematologic remission. At 36w6d, the patient underwent an uncomplicated SVD of a healthy female infant weighing 2410g with apgars of 8 and 9 at 1 and 5 minutes of life, respectively. She had an uncomplicated postpartum course, and was discharged home with her newborn in stable condition on PPD #2. A bone marrow biopsy obtained postpartum confirmed hematologic remission, and she then proceeded with consolidation therapy (ATRA + ATO) according to adult treatment guidelines. She completed her therapy seven months postpartum, and is in ongoing complete remission nearly a year later.

Conclusion: This case demonstrates that APL in a pediatric pregnant patient can be successfully treated with ATRA monotherapy following adult protocols, as well as highlights the importance of close surveillance for adverse fetal or maternal outcomes during treatment. Additional challenges exist in cases of APL presenting in adolescent pregnancy, including obtaining appropriate consent, ensuring a thorough understanding of the disease and treatment options available, and maintaining a strong patient-physician relationship during and after treatment.



"Hypercalcemia and a large pelvic mass in pregnancy"

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Background: The reported incidence of adnexal masses in pregnancy is from 0.05 to 2.4 percent with approximately 1 to 6 percent of these masses being malignant. In pregnancy, the prevalence of uterine fibroids varies between 1.6 and 10.7 with the prevalence increasing with maternal age and is higher in Black women compared to White or Hispanic women.

Hypercalcemia in the third trimester of pregnancy is defined as a serum calcium level >9.0 mg/dL where severe hypercalcemia is defined as a level over 14 in a symptomatic patient. Severe hypercalcemia is rare in pregnancy, however, when present can pose significant risks to mother and fetus. In pregnancy, hypercalcemia is mostly associated with primary para-hyper-thyroidism. Hypercalcemia in conjunction with low parathyroid hormone (PTH) and elevated PTH-related peptide levels are concerning for malignancy. We present the case of a patient with hypercalcemia and a pelvic mass in late second trimester of pregnancy

Case: A 33-year-old G3P0020 at 21 weeks and 4 days presented with mild lower abdominal pain and elevated blood pressures in clinic. Fetal status was reassuring, labs showed Calcium level 16.7 and elevated PTH-rP while PTH was normal. Imaging showed a complex pelvic mass measuring 24 x 20 x 12 cm with no lymphadenopathy, no free fluid or nodularity outside of the uterus. These findings were concerning for malignancy, however, the evidence was not strong enough to counsel regarding termination of pregnancy to hasten maternal therapy. Hypercalcemia was managed with IV fluid hydration. Plan was made for cesarean delivery at 37 weeks for placenta previa and underlying chronic versus gestational hypertension with pelvic mass removal or hysterectomy at time of delivery or delayed postpartum. At 36 weeks and 4 days, the patient presented with vaginal bleeding and underwent primary classical cesarean section with midline vertical skin incision without resection of mass, by this time, the hypercalcemia had resolved. At approximately 5 months postpartum, she underwent aborted abdominal myomectomy, total abdominal hysterectomy and bilateral salpingectomy. The final pathology demonstrated uterine leiomyoma.

Conclusion: We report the case of a patient with a large pelvic mass and hypercalcemia. Leiomyoma as a cause of hypercalcemia should be included in the differential diagnosis of a patient who presents with these findings in pregnancy. The surgical removal of leiomyoma is curative and can be life-saving, particularly in the setting of pregnancy where treatment options may be limited.



"The Challenge of Access – When the Cervix is a Barrier "

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Background: Uterine incarceration is a rare pregnancy complication when the retroverted uterine fundus become trapped beneath the sacral promontory. As the gravid uterus grows there is an increase of pressure on the pelvic organs, complicating attempts at reduction. A continuing pregnancy with uterine incarceration is at risk of severe maternal complications, including uterine rupture and compressive injury to the genitourinary system. The thinning of the uterus, known as sacculation, places the patient at risk of uterine rupture and surgical complications during evacuation of the uterus due to the severe distortion of pelvic anatomy. In this case, uterine incarceration prevented standard preoperative cervical preparation for a patient requiring dilation and evacuation.

Case: We present the case of a 30 year old G1 at 18 weeks and 0 days with a pregnancy complicated by trisomy 18 seeking pregnancy termination. Maternal Fetal Medicine scans prior to her visit were notable for fetal findings consistent with trisomy 18, a 9cm fundal uterine fibroid, and a documented cervical length of 3.8cm. Upon speculum exam to place preprocedural cervical preparation, no cervix was identified and a firm mass was noted to occupy the posterior fornix. Outpatient bimanual exam and bedside ultrasonography was also unable to clearly identify a cervix. The patient was given 600mcg of misoprostol in the preoperative area. Once in the operating room, repeat examination with ultrasonography was consistent with an incarcerated uterus. An attempt was made to reduce the uterus first without anesthesia in the hands and knees position via an abdominal and vaginal approach without success. Next the patient was placed under monitored anesthesia care was induced with Propofol and the bladder was decompressed with a foley catheter. The patient was placed in lithotomy and both vaginal and rectal attempts were made to reduce the incarceration. Next, general anesthesia was induced with sevoflurane and attempts were then made to reduce, which were again unsuccessful. The uterus was then successfully reduced with the additional of 50mcg of nitroglycerin. After reduction, the fibroid was noted to be anterior. The placenta was also noted to be posterior and far from the cervical os. She then underwent serial manual dilation, followed by uncomplicated uterine evacuation.

Conclusion: We present a case of woman desiring abortion care when the cervix was inaccessible during standard means of preoperative cervical preparation. A careful exam under anesthesia demonstrated that the cervix was inaccessible due to an unusual case of second trimester uterine incarceration. The case demonstrates a unique presentation of uterine incarceration, namely this patient was asymptomatic, and her only sign was detected on bimanual exam. This case reviews the management strategies available for reduction of the incarcerated uterus and the importance of collaboration with anesthesia in care of advanced family planning procedures.



Visiting Professor Symposium Lecture

"Assisted Reproduction in the 21st Century: an update" RICHARD J. PAULSON, MD

Professor of Obstetrics & Gynecology, Alia Tutor Chair in Reproductive Medicine, Chief of the Division Reproductive Endocrinology and Infertility, and Director of USC Fertility Keck School of Medicine of USC

Objectives:

- 1. Describe the current status of assisted reproduction in the context of fertility treatment
- 2. Distinguish between available treatments and preventive measures for fertility preservation
- 3. Counsel patients about appropriate fertility treatments and therapeutic options for fertility preservation



SENIOR RESIDENT RESEARCH PRESENTATIONS



Fourth Year Resident Research Presentations and Objectives

The University of California, Irvine School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The University of California, Irvine School of Medicine designates this educational activity for a maximum of 5.5 *AMA PRA Category 1 Credits*™. Each physician should claim only those credits that he/she actually spent in the activity. Drs. Marielle Meurice, Bianca Rivas, Dana Senderoff, Joyce Sutedja, Paul Wadensweiler, and Blake Zwerling have declared that they do not have a financial interest or other relationship with any manufacturer(s) of any commercial product or apparent conflict of interest related to the content of their presentation. They further state they will not be discussing the use of any unapproved/unlabeled drugs/devices.

Time	Presenter	Presentation	Objectives
11:00-11:16 AM	Blake Zwerling, MD, MSc Tabetha Harken, MD, MPH Heike Thiel de Bocanegra, PhD, MPH	"It's a horrible assignment": a qualitative study of labor and delivery nurses' experience caring for patients undergoing labor induction for fetal anomalies or fetal demise"	 Explore the experience of labor and delivery nurses in caring for patients with intrauterine fetal demises or undergoing induction terminations for fetal anomalies Analyze To parse out nursing moral objection to abortion care versus general unease with perinatal loss Identify To detail factors that may contribute to nurse discomfort in providing perinatal loss care
11:16-11:32 AM	Paul Wadensweiler, MD Taylor Brueseke, MD Noelani Guaderrama, MD Emily Whitcomb, MD	"Bowel Obstruction After Sacrocolpopexy – A Descriptive Case Series"	 Describe common factors associated with developing bowel obstruction after sacrocolpopexy. Clarify the possible presenting symptoms of bowel obstruction after sacrocolpopexy. Understand the management options for bowel obstruction after sacrocolpopexy and describe some of the intraoperative findings when bowel obstruction is managed surgically
11:32-11:48 AM	Joyce Sutedja, MD Kenneth Chan, MD Adam Crosland, MD	"Do Pregnancies Affected by Complicated Gastroschisis Have More Complicated Deliveries?"	 Outline the diagnosis of gastroschisis and define complicated versus uncomplicated cases Determine whether complicated gastroschisis is more likely to result in delivery via cesarean section than uncomplicated cases



			3. Compare indications for cesarean delivery in a cohort of complicated gastroschisis pregnancies with uncomplicated gastroschisis
11:48-12:04 PM	Dana Senderoff, MD Kenneth Chan, MD Emily Seet, MD	"Application of a Proposed Algorithm to Cesarean Deliveries for Nonreassuring Fetal Heart Rate Tracing"	 Discuss incidence of cesarean delivery for fetal distress Review current management strategies for category II FHR tracings including the Clark et. al. algorithm Discuss findings of retrospective application of the algorithm in our cohort and what these findings suggest regarding management of category II fetal heart rate tracings
12:04-12:20 AM	Bianca Rivas, MD, MBA <i>Rachel Perry, MD, MPH</i>	"Feasibility of Medical Spanish Acquisition for UC Irvine Obstetrics and Gynecology Residents"	 Discuss the linguistic challenges in our Spanish speaking patient population Analyze areas of improvement for language-discordant providers. Appraise need for medical Spanish attainment in residency
12:20-12:36 AM	Marielle Meurice, MD <i>Rachel Perry, MD, MPH</i>	"Contraception Choice Among Those Seeking Abortion for Fetal Indication or Management of Pregnancy Loss"	 Describe contraception choices among those seeking abortion for fetal indication. Compare contraception choices between fetal indication and other indication. Assess interest in long-acting reversible contraception (LARC).
12:36-12:52 AM	Carly Crowder, MD Noelani Guaderrama, MD Emily Whitcomb, MD	"Rectocele: Correlation between defecography and physical examination"	 Determine the association between rectocele on defecography and physical examination Describe radiologic and clinical predictors of surgical intervention for rectocele Discuss potential predictors of surgical outcomes for rectocele repair



"It's a horrible assignment": a qualitative study of labor and delivery nurses' experience caring for patients undergoing labor induction for fetal anomalies or fetal demise"

Blake Zwerling, MD, MSc¹

Julie Rousseau, PhD CNM RN^{1,2}, Kelly Ward, MPA, PhD³, Ellen Olshansky, PhD, RN, FAAN², Alyssa Lo, MD¹, Heike Thiel de Bocanegra, PhD, MPH¹, Tabetha Harken, MD, MPH¹

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- 3. University of Wisconsin Madison, Departments of Gender & Women's Studies and Sociology

Objectives: This study sought to explore labor and delivery (L&D) nurses' experiences caring for women undergoing induction for intrauterine fetal demise (IUFD) or termination for fetal anomalies, and to characterize reluctance towards participation in abortion care or - conversely - the commitment to provide services.

Study Design: Researchers conducted a qualitative study that consisted of open-ended, semi-structured interviews with 15 registered nurses who care for women on L&D at a large metropolitan hospital. We analyzed these data for content and themes.

Results: Labor and delivery nurses struggle emotionally, logistically, and morally with bereavement care, whether their patients are experiencing an IUFD or termination for fetal anomalies. The analysis generated the following themes: the emotionally intense work of perinatal loss, feelings of incompetence in bereavement care, ethical conflicts, and judgment of both termination and IUFD patients. In addition, nurses who chose to provide care for patients undergoing induction termination for fetal anomalies described a duty to care for all patients despite the increased logistic and emotional burden.

Conclusions: Much of the discomfort L&D nurses reported caring for patients undergoing induction termination stems from the emotional toll, lack of skills, and bureaucratic burden of bereavement care rather than a moral objection to abortion. Instituting interventions to improve staffing, simplify paperwork, augment bereavement training, and improve support for the emotional burden of caring for these patients may therefore increase access to competent and compassionate abortion care.



"Bowel Obstruction After Sacrocolpopexy: A Descriptive Case Series"

Paul Wadensweiler, MD¹

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2. Southern California Permanente Medical Group

Objectives: To delineate clinical and surgical factors associated with bowel obstruction after sacrocolpopexy (SC) and to describe its presentation, management, and sequelae.

Study Design: We performed a retrospective case series of patients who underwent open, laparoscopic or robotic SC within a large health maintenance organization and a single academic medical center between 1/1/2009 and 12/31/2019.

Results: Of 3,231 patients who underwent SC, 32 (1.0%) experienced a bowel obstruction. Of the 32 cases, SC had been performed laparoscopically or robotically in 19 (59.4%) and abdominally in 13 (40.6%). The mean time to bowel obstruction was 1.9 years (SD 2.5, range 3 days to 8.8 years). In patients who experienced bowel obstruction, medical management was undertaken in 19 (61.3%) cases. Eight of the 13 (61.5%) surgically managed cases underwent bowel resection, and 3 cases (23.1%) reported partial mesh excision. Recurrent obstruction was seen in 2 (10.5%) of the medically managed and 2 (15.4%) of the surgically managed cases respectively.

Conclusions: Bowel obstruction is a rare complication of SC and our rate of 1.0% corroborates the rates in the literature. Obstruction occurs from days to years after SC. Non-surgical management was effective in the majority of cases, with low rates of recurrent obstruction. In surgically managed cases, the majority included bowel resection or mesh excision, however mesh excision was not associated with a subsequent identifiable procedural intervention for recurrent prolapse. This descriptive data informs patient counseling and surgical planning before SC, and aids in diagnosis and management of bowel obstruction after SC.



"Do Pregnancies Affected by Complicated Gastroschisis Have More Complicated Deliveries?"

Joyce Sutedja, MD¹ Adam Crosland, MD¹, Kenneth Chan, MD²

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- 2. Long Beach Memorial Miller Children's and Women's Hospital, Division of Maternal Fetal Medicine, Department of Obstetrics and Gynecology, Long Beach, California, USA

Background: Gastroschisis is a para-umbilical abdominal wall defect typically involving evisceration of bowel and sometimes other organs, and affects approximately 4 per 10,000 births. In pregnancies affected by gastroschisis, the prevalence of preterm birth and cesarean birth remain high for unclear indications. One contributing factor may be severity of disease: complicated gastroschisis is characterized postnatally as involving any of the following: bowel stricture, bowel atresia, ischemic bowel, or pulmonary hypoplasia, diagnosed postnatally. Uncomplicated gastroschisis, on the other hand, typically involves only evisceration of bowel without significant clinical consequences. This study aims to determine whether complicated gastroschisis is more likely to result in more complicated deliveries.

Methods: A data set of deidentified cases of gastroschisis collected by the University of California Fetal-Maternal Consortium at their five sites (UCfC: UC Davis, UC Irvine, UC Los Angeles, UC San Diego, UC San Francisco) between 2007 and 2012 was reviewed. A retrospective cohort study was performed, with cases classified into uncomplicated and complicated gastroschisis. The primary outcome was to determine whether rates of cesarean delivery were higher in pregnancies affected by complicated gastroschisis compared to those with uncomplicated gastroschisis. Secondary outcomes were to determine whether rates of cesarean delivery performed for fetal heart rate abnormalities were higher in complicated versus uncomplicated gastroschisis. Additional secondary outcomes included term versus preterm deliveries and survival between the two groups. We hypothesized that complicated gastroschisis would result in higher rates of cesarean delivery, higher rates of cesarean delivery for fetal distress, higher rates of preterm delivery, and higher rates of neonatal demise.

Results: There were 73 neonates born with uncomplicated gastroschisis and 96 neonates with complicated gastroschisis identified in the UCfC consortium during the time period. Demographics between the two groups were similar. There was no significant difference found between the groups with respect to rates of cesarean delivery versus vaginal delivery, nor for rates of cesarean delivery for fetal distress versus for other indications. There was no significant difference in rates of term and preterm deliveries or rates of survival between the two groups.

Conclusion: Complicated gastroschisis in this study was not associated with higher rates of cesarean delivery or intrapartum fetal distress when compared with uncomplicated gastroschisis, despite more significant clinical consequences in those neonates. This may be reassuring for families impacted by an antenatal diagnosis of complicated gastroschisis. It is important to note, however, that this was a retrospective data review and thus, was not sufficiently powered to answer this clinical question. Counseling families impacted by this antenatal diagnosis remains a complex and evolving process which requires significant clinical flexibility to manage expectations.



"Application of a Proposed Algorithm to Cesarean Deliveries for Nonreassuring Fetal Heart Rate Tracing"

Dana Senderoff, MD¹

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Objectives: To evaluate how current management of Category II fetal heart rate tracings compares with that suggested by a published algorithm and whether these differences lead to disparate neonatal outcomes.

Study Design: This is a retrospective observational study from the resident service at an academic-community tertiary care center from 2013-2018. We reviewed archived fetal heart rate tracings from patients with cesarean delivery performed for nonreassuring fetal heart rate tracing and interpreted tracings against the algorithm. We assigned tracings to one of three categories: Group A-consistent; Group B—inconsistent too early (algorithm permits the patient to labor longer); Group C—inconsistent too late (algorithm suggests performing the cesarean delivery sooner). Maternal demographics, features of labor, and neonatal outcomes were compared.

Results: Of the 110 cases, 27 (24.5%) had a cesarean delivery performed in group A, 49 (44.5%) in group B, and 34 (30.9%) in group C. Baseline characteristics were similar. Of the 49 in group B, 46 (93.9%) violated the algorithm at the same branchpoint. In group C, cesarean deliveries would have been performed on average 244 minutes earlier had the algorithm been used. Neonatal outcomes were not significantly different among the groups, including 5-minute Apgar <7, pH < 7.1, and NICU admit.

Conclusions: Our retrospective application of the algorithm showed that 44.5% of patients who have cesarean delivery for nonreassuring fetal heart rate tracing may be able to labor longer and that violation at a common decision point on the algorithm (moderate variability or accelerations, but a lack of recurrent decelerations) is responsible for nearly all such cesarean deliveries. More studies are needed to evaluate if cesarean delivery rates for nonreassuring fetal heart rate tracing can be reduced without impacting neonatal outcomes using the algorithm.



"Feasibility of Medical Spanish Acquisition for UC Irvine Obstetrics and Gynecology Residents"

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Background: Language and cultural barriers are well established deterrents to equitable and quality health care. Currently 68.6% of UC Irvine Obstetrics and Gynecology residents identify as Spanish-speaking, but only 14.2% identify as advanced or Native Spanish-speaking. In the setting of a predominantly Spanish-speaking with limited English proficiency patient population, there is a lack of advanced or fluent Spanish proficient providers in our UC Irvine Obstetrics and Gynecology residency program.

Intervention: Implementation of a pilot medical Spanish curriculum to limited Spanish proficiency OB/GYN residents to aid in medical Spanish acquisition over the course of their residency training. The objective is to increase Spanish proficiency by one level (Basic, Intermediate, Advanced or Fluent) over the course of the curriculum.

Methods: A pilot Spanish language curriculum was developed tailored to the practice of Obstetrics and Gynecology and demanding schedules of our residents. The curriculum was developed by students at the UC Irvine School of Medicine who are advanced to native Spanish speakers with the aid of bilingual OB/GYN resident physicians. It was implemented in August 2020, and over the course of eight months, eight lessons consisting of vocabulary and phrases pertinent to common OB/GYN patient encounters, complying with the most recent American College of Obstetrics and Gynecology (ACOG) recommendations, were offered to all OB/GYN residents. The participants were asked to self-assess their level of Spanish proficiency in speaking, writing and comprehension as either Basic, Intermediate, Advanced or Fluent on a survey before starting the curriculum and were again assessed after completion of the majority of the curriculum. A qualitative analysis based on the resident's experience and self-assessment was then performed.

Results: A total of eight residents enrolled in the curriculum. Prior to starting the curriculum 75% of participants identified as having Basic Spanish speaking proficiency, 12.5% identified as intermediate and 12.5% as advanced. By April 2021, half of the participants were able to complete 62.5% of the curriculum. After, only 22.2% of participants identified as Basic Spanish proficiency, 44.4% now identified as intermediate and 33.3% as advanced Spanish proficiency.

Conclusions: Medical Spanish acquisition in residency is challenging, complex, but feasible. Our assessment is limited by partial completion of the curriculum by half of the participants, attrition of participants and a qualitative self-assessment of Spanish proficiency. Improving the care of Spanish-speaking and limited English proficiency patients requires a multi-factorial approach including increased recruitment of Spanish-proficient providers, timely access to interpreters and support for providers with limited Spanish proficiency.



"Contraception Choice Among Those Seeking Abortion for Fetal Indication or Management of Pregnancy Loss"

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https://journals.lww.com/greenjournal/Fulltext/2021/04000/Contraception Choice Among Those Seeking Abortion.7.aspx

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Meurice ME, Lovio M, Chang JJ, Perry R. Contraception Choice Among Those Seeking Abortion for Fetal Indication or Management of Pregnancy Loss. Obstet Gynecol. 2021 Apr 1;137(4):606-611. doi: 10.1097/AOG.000000000004315.

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"Rectocele: Correlation between defecography and physical examination"

Carly Crowder, MD

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Objectives: Our primary objective was to determine the association between rectocele on defecography and physical examination. Our secondary objectives were to describe radiologic and clinical predictors of surgical intervention and outcomes, de32fined by postoperative symptoms, physical examination findings, and retreatment.

Methods: This was a retrospective cohort study of female patients who underwent defecography and were examined by a FPMRS surgeon within 12 months of imaging from 2005 to 2019. The electronic medical record was reviewed for demographic and clinical variables, including prolapse and defecatory symptoms, physical examination, and treatment. All documentation regarding interventions for rectocele were reviewed for 12 months after initial FPMRS examination, as well as 12 months after surgery.

Results: Of 186 subjects, 168 (90.3%) patients had a rectocele on defecography, and 136 (73.1%) patients had a rectocele on exam. Rectocele size on defecography and rectocele stage on physical examination were poorly correlated (Spearman 0.18). Patient symptoms of splinting, digitation, and stool trapping were associated with surgical intervention for rectocele (OR 4.24,95% CI 1.59-11.34, p<0.01). More advanced rectocele stage was associated with surgical intervention (p<0.01), while rectocele presence and size on defecography were not associated with surgery. Larger rectoceles on defecography were correlated with increased risk of postoperative failure, based on persistent defecatory symptoms (p=0.02).

Conclusions: We report a poor correlation between rectocele size on defecography and rectocele stage on POP-Q examination. Defecatory symptoms (splinting, digitation, stool trapping) and more advanced rectocele stage on POP-Q were more predictive of surgical intervention than rectocele on defecography.



Thank you for attending the Thirty-Ninth Annual Residents Paper Day and the Thirty-Second Annual Philip J. DiSaia Society Symposium