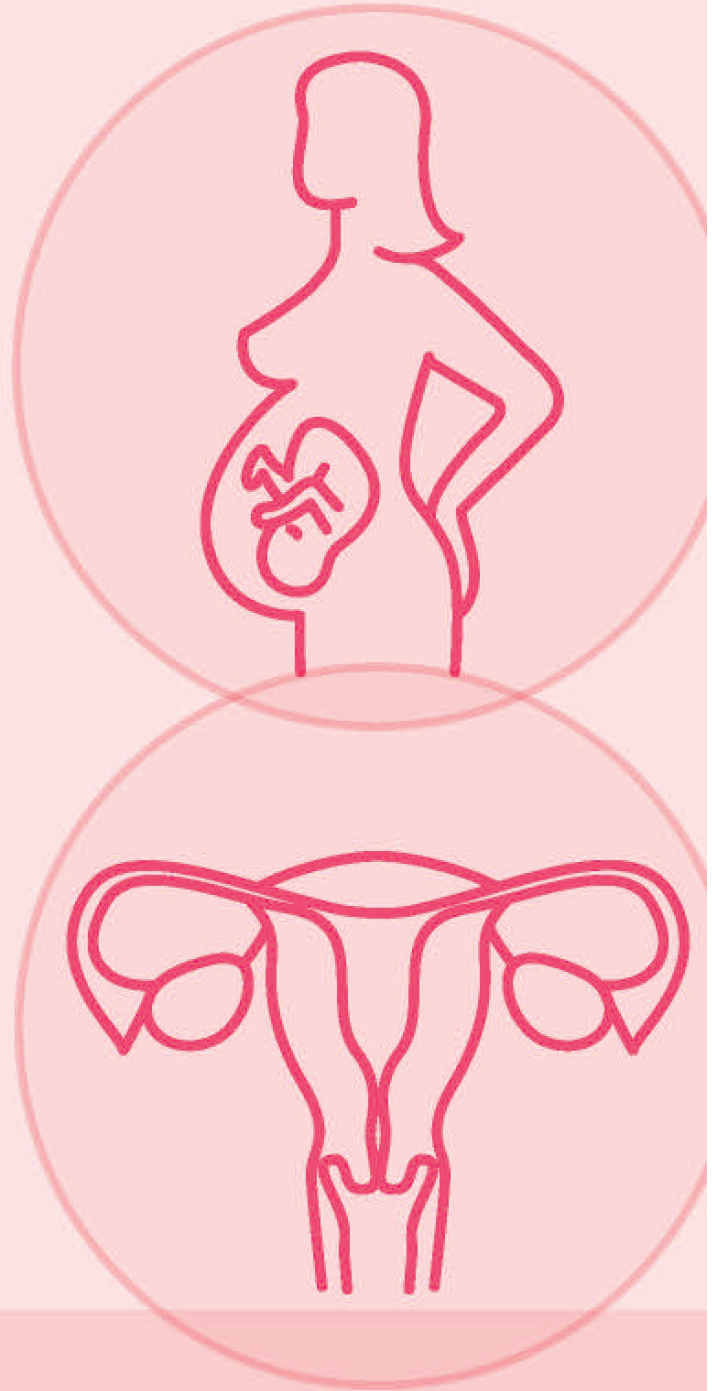


HARRY OXORN RESIDENT RESEARCH DAY



Études médicales
postdoctorales
Département d'obstétrique et gynécologie

Postgraduate
Medical Education
Department of Obstetrics and Gynecology

MAY 13, 2022

PROGRAM AND ABSTRACTS



DEPARTMENT OF
OBSTETRICS, GYNECOLOGY
& NEWBORN CARE

Dedicated to Excellence, Compassion and Innovation in Women's Health



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**DEPARTMENT OF OBSTETRICS, GYNECOLOGY, AND NEWBORN
CARE**

ANNUAL OBGYN PGME RESEARCH DAY

May 13, 2022

Co-CHAIRS:

Dr. Ash Clancy
Dr. Jenna Gale

GUEST FACULTY

Dr. Kate Walker

AWARDS FOR ORAL PRESENTATIONS

Paul Luc Gratton Award for Best Overall Resident Presentation

RESEARCH DAY ABSTRACT JUDGING COMMITTEE

Dr. Katie Walker
Dr. Jenna Gale
Dr. Aisling Clancy
Dr. Innis Chen

LEARNING OBJECTIVES

1. To describe new research findings from trainee projects of relevance to Obstetrics and Gynecology and related subspecialties
2. To appreciate and provide support and/or constructive feedback for clinical and basic research conducted by the trainees in the Department of Obstetrics and Gynecology
3. To further skills in supporting trainees (for staff) or in personally conducting (trainees) meaningful projects throughout residency training



**DEPARTMENT OF
OBSTETRICS, GYNECOLOGY
& NEWBORN CARE**

Dedicated to Excellence, Compassion and Innovation in Women's Health

**UNIVERSITY OF OTTAWA
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY
ANNUAL RESIDENT RESEARCH DAY - May 13, 2022**

GUEST LECTURER



Kate Walker, MD, FRCS

**Clinical Associate Professor in Obstetrics/Anne McLaren Fellow, University of Nottingham
Consultant Obstetrician and Induction of Labour Lead, Nottingham University Hospitals NHS
Trust**

I am currently a Clinical Assistant Professor in Obstetrics and Gynaecology, at the University of Nottingham. I work full time and divide my time equally between research and clinical work. My research work is based in Nottingham Clinical Trials Unit (NCTU). My clinical work is based at Queen's Medical Centre, Nottingham University Hospitals Trust.

Clinically I have an interest in high-risk pregnancy, labour ward management and obstetric ultrasound scanning.

My research work has focused on randomised controlled trials in obstetrics and neonatology.

For my PhD I conducted a randomised controlled trial of induction of labour at 39 weeks versus expectant management for women over 35 years of age - the "35/39 trial", I was co-applicant on the £250K Research for Patient Benefit grant and I was the first author of the paper which was published in the NEJM in 2016.

I am the Clinical Chief Investigator for an NIHR HTA funded cluster randomised trial with economic and acceptability evaluations to determine the clinical and cost-effectiveness of testing for Group B Streptococcus in late pregnancy (GBS3). This is the first RCT of routine GBS screening in the world.

I am the Chief Investigator of an NIHR HTA funded study to determine the feasibility of a randomised trial of different techniques for managing an impacted fetal head during emergency caesarean section. This study started in February 2019

**UNIVERSITY OF OTTAWA
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY
ANNUAL RESIDENT RESEARCH DAY
Canadian Museum of Nature
Hatch Salon
May 13, 2022**

PROGRAM AT A GLANCE

12:30 – 13:30 (60 mins)	Hatch Salon	Luncheon Buffet
13:20 – 13:30 (10 mins)	Hatch Salon	Opening Remarks Dept Chair Dr. Sukhbir Sony Singh
13:30 – 14:15 (NOTE: 3 Presentations) (45 mins – 15 mins for each)	Hatch Salon	Session 1 Co-Chair: Dr. Adam Garber Co-Chair: Dr. Clara Wu Page 5 Abstracts – Pages 10-12
14:15 – 15:00 (45 mins)	Hatch Salon	Guest Lecturer Dr. Kate Walker Moderator: Dr. Darine El-Chaar Page 6
15:00 – 16:00 (60 mins) (NOTE: 4 Poster Presentations) (10 mins each)	Queen's Lantern	POSTER PRESENTATIONS and COFFEE BREAK Page 6 Abstracts – Page 18-21
16:00 – 17:00 (NOTE: 4 Presentations) (60 mins – 15 mins for each)	Hatch Salon	Session 2 Co-Chair: Dr. Élise Farmer Co-Chair: Dr. Johanne Weberpals Page 6 Abstracts - Pages 13-16
17:00 – 17:10 (10 mins)	Hatch Salon	Closing Remarks Dr. Adam Garber/Dr. Constance Ling/Dr. Glenn Posner
17:10 – 18:30	Hatch Salon	Wine and Cheese Reception Awards Presentation Dr. Aisling Clancy/Dr. Jenna Gale/Dr. Kate Walker Final Remarks Dr. Sukhbir Sony Singh

**ANNOUNCING 2022-2023 RESIDENT RESEARCH DAY
May 19, 2023**

PROGRAM

12:30 Luncheon Buffet, Hatch Salon

13:20 **Opening Remarks:** Dr. Sukhbir Singh, Professor and Chair, Department of Obstetrics, Gynecology and Newborn Care, University of Ottawa, The Ottawa Hospital

SESSION 1

Co-Chairs:

Adam Garber, Assistant Professor, Associate Director ObGyn Residency Program, Director DIME/uOSSC Fellowship Program, Department of Obstetrics, Gynecology and Newborn Care, Division of General Obstetrics and Gynecology, University of Ottawa, The Ottawa Hospital

Clara Wu, Assistant Professor, Department of Obstetrics, Gynecology and Newborn Care, Division of Gynecologic Reproductive Endocrinology and Infertility, University of Ottawa, The Ottawa Hospital

13:30 Live birth rates after resolution of endometrial cavity fluid in frozen embryo transfer cycles

Vincent Nguyen (PGY2), Aaron Jackson, Jenna Gale

13:45 Mobile HEALTH tool to support people experiencing early pregnancy loss (MHEALTH-EPL)

Breanna Flynn (PGY2), Genevieve Tam, Megan Gomes, Roopan Gill

14:00 Exploring the implementation of a trauma-informed care curriculum in Obstetrics and Gynecology residency

Sarah Kanji (PGY3), Geneviève Horwood, Adam Garber

14:15

GUEST FACULTY

Kate Walker, MD, FRCSC
Clinical Assistant, Obstetrics and Gynecology
Faculty of Medicine, University of Nottingham, United Kingdom

Title of Lecture: Perinatal trials: testing for GBS, impacted fetal head and 35/39 trial

Moderator: Darine El-Chaar, Associate Professor, Associate Scientist, Department of Obstetrics, Gynecology and Newborn Care, Division of Maternal Fetal Medicine, University of Ottawa, The Ottawa Hospital

15:00 POSTER PRESENTATIONS in Queen's Lantern Area
Coffee Break with Refreshments

- Claudia Meloche (PGY1)
- Jocelyn Stairs (PGY6)
- Chelsie Warshafsky (PGY6)
- Justin White (PGY6)

SESSION 2

Co-Chairs:

Élise Farmer, Assistant Professor, Obstetrics and Gynecology, Urogynecology/Female Pelvic Medicine and Reconstructive Pelvic Surgery, University of Ottawa, Montfort Hospital

Johanne Weberpals, Associate Professor, Clinician Scientist (Translational research) Department of Obstetrics, Gynecology and Newborn Care, Division of Gynecology Oncology, University of Ottawa, The Ottawa Hospital

16:00 Individualized medicine using 3D printing technology in gynecology: A scoping review
Carly Cooke (PGY4), Teresa Flaxman, Lindsey Sikora, Sukhbir Singh

16:15 Infectious complications following posterior colporrhaphy with and without anal sphincteroplasty: An analysis of cases in the National Surgical Quality Improvement Program Database
Danielle Wuebbolt (PGY3), Shireen Hussein, Marie-Elisabeth Bouchard, Dante Pascali, Aisling Clancy

16:30 Enhanced recovery after surgery for Gynecologic Oncology patients undergoing laparotomy during the COVID-19 pandemic
Julia Boucher (PGY3), Innie Chen, Abdul Jamil Choudhry, Tien Le

16:45 Online patient information for hysterectomies: A systematic environmental scan of quality and readability
Mehr Jain (PGY1), Philip Chkipov, Dawn Stacey, Glenn Posner, Vanessa Bacal, Innie Chen

17:00 Closing Remarks:

Dr. Adam Garber¹, Assistant Professor, Associate Director OBGYN Residency Program, Director DIME/uOSSC Fellowship Program, Division of General Obstetrics and Gynecology

Dr. Constance Ling¹, Assistant Professor, OBGYN Residency Program Director, Baffin Outreach Program, Division of Urogynecology and Pelvic Reconstructive Surgery

Dr. Glenn Posner¹, Professor, Medical Director, University of Ottawa, Skills and Simulation Centre, Division of General Obstetrics and Gynecology

¹Department of Obstetrics, Gynecology and Newborn Care, University of Ottawa, The Ottawa Hospital

17:10 *Wine and Cheese Reception*

17:15 AWARDS PRESENTATION:

Dr. Aisling Clancy¹, Assistant Professor, Resident Research Co-Lead, Division of Urogynecology and Pelvic and Reconstructive Surgery

Dr. Jenna Gale¹, Assistant Professor, Resident Research Co-Lead, Division of Reproductive Endocrinology and Infertility

¹Department of Obstetrics, Gynecology and Newborn Care, University of Ottawa, The Ottawa Hospital

Dr. Kate Walker, Clinical Associate Professor in Obstetrics/Anne McLaren Fellow, University of Nottingham Consultant Obstetrician and Induction of Labour Lead, Nottingham University Hospitals NHS Trust

FINAL REMARKS: Dr. Sukhbir Singh, Professor and Chair, Department of Obstetrics, Gynecology and Newborn Care, University of Ottawa, The Ottawa Hospital

*Thank you to all who attended this year's ObGyn
PGME Research Day to support our postgraduate
trainees. Your support helps to make this day a
success. We hope to see you again on
May 19th, 2023*



CME INFORMATION

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, and approved by Continuing Professional Development, Faculty of Medicine, University of Ottawa. Each participant should claim only those hours of credit that he/she actually spent participating in the educational program.

Please ensure that you complete the Program Evaluation form before you leave for the day. To access the online version use the QR code or LINK below

<https://www.surveymonkey.com/r/PGMEResearchDay2022>



Scan the QR code to complete the Participant Evaluation form online.

ABSTRACTS
For
ORAL
PRESENTATIONS

Live birth rates after resolution of endometrial cavity fluid in frozen embryo transfer cycles

Vincent Nguyen, MD¹; Aaron Jackson MD, FRCSC^{1,2}; Jenna Gale MD, MSc, FRCSC^{1,2}

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²Ottawa Fertility Centre, 100-955 Green Valley Crescent, Ottawa, ON, Canada, K2C 3V4

Objective: To evaluate whether live birth rates are equivalent between patients undergoing frozen embryo transfer who had endometrial cavity fluid (ECF) which resolved spontaneously compared to those in whom ECF was never observed.

Methods: The first cycle of reproductive aged women who underwent frozen blastocyst transfer between January 1st, 2016 and December 31st, 2019 were included in this retrospective cohort study at an academic fertility center. The presence or absence of endometrial cavity fluid detected on initial ultrasound and at time of transfer was recorded. Patients who had persistent ECF at time of transfer were excluded from the study. The primary outcome was live birth rates in the group with resolved ECF and the group without ECF. Secondary outcomes included rate of positive serum human chorionic gonadotropin (hCG), clinical intrauterine pregnancy, miscarriage, ectopic and stillbirth pregnancy.

Results: A total of 1034 frozen blastocyst transfer cycles were included, 54 with resolved ECF and 980 without ECF. Adjusted analyses were performed using a log-binomial regression model. Live birth rates were 35.2% and 34.2%, adjusted risk ratio 1.00 [95% CI 0.70-1.50] in the two groups, respectively. Rates of positive hCG were 48.2% vs. 55.9% (aRR 0.9 [95% CI 0.70-1.20]), clinical intrauterine pregnancy 38.9% vs. 46.9% (aRR 0.8 [95% CI 0.60-1.20]), miscarriage 7.7% vs. 19.9%, and ectopic pregnancy 0% vs. 1.9% for both groups respectively.

Conclusion: Live birth rates in frozen embryo transfer cycles are equivalent between patients with resolved endometrial cavity fluid compared to those who never had endometrial cavity fluid to begin with. Our findings suggest that the presence of endometrial cavity fluid likely does not pose a threat if the fluid spontaneously resolves by the time of embryo transfer.

Mobile HEALTH tool to support people experiencing Early Pregnancy Loss (MHEALTH-EPL)

Breanna Flynn, MD^{1,2}, Genevieve Tam, MD MSc³, Megan Gomes, MD MSc^{1,2}, Roopan Gill, MD MPH^{3,4}

¹ University of Ottawa, Department of Obstetrics and Gynecology

² The Ottawa Hospital, Department of Obstetrics and Gynecology

³ Vitala Global Foundation

⁴ University of Toronto, Department of Obstetrics & Gynecology

Objectives: Early pregnancy loss (EPL) occurs in 1 in 4 clinically recognized pregnancies. Despite the staggering frequency, people who experience EPL often do not receive patient-centered supportive care. This study aims to determine if a mobile health (mHealth) tool is feasible and acceptable to support care during and/or after EPL by 1) understanding the experiences of people who miscarry, 2) how they access health information, and 3) determine their preferences in content and design of a mHealth tool.

Study Methods: This is a mixed-methods study. Individuals (aged 18-45) residing in Canada who self-reported to have experienced EPL up to 12+6 weeks gestation in the preceding two years of the study were recruited using social media and hospital posters. Eligible participants completed an online survey and optional follow-up interview between September 2021 and April 2022. Survey responses were analyzed using descriptive statistics. Key-informant interviews with healthcare providers who regularly care for individuals who experience EPL were also conducted. Participant and key-informant interviews were analyzed with NVivo using thematic analysis. Local ethics approval was obtained.

Results: Results from 190 survey respondents revealed that 28% are somewhat or very dissatisfied with the overall healthcare they received for their miscarriage. 39% are somewhat or very dissatisfied with how their mental/emotional health was addressed by their provider. 80% support the idea of a mHealth tool to assist in care during/after EPL. 91% use the internet to access information about their health. Preliminary results from 14 participant interviews reveal preference for a mHealth tool that is user-friendly and provides medically accurate information for physical and emotional support during/after EPL. Preliminary results from 7 key-informant interviews demonstrate that healthcare providers view a mHealth tool for EPL as valuable and would recommend it to their patients.

Conclusions: Initial findings support existing research that many individuals are dissatisfied with their care following EPL. The vast majority are interested in a mHealth tool to better support their care. These findings will assist in the development and testing of the desired mHealth tool.

Keywords: Early pregnancy loss; Miscarriage; Mobile health; Digital health; Pregnancy support; User-centered design

Exploring the Implementation of a Trauma-Informed Care Curriculum in Obstetrics and Gynecology Residency

Sarah Kanji, MD¹, Genevieve Horwood, MD, MSc¹, Adam Garber, MD, FRCSC¹

¹Department of Obstetrics and Gynecology and Newborn Care, The Ottawa Hospital, University of Ottawa, Ontario, Canada

Objectives: The purpose of this research is to evaluate the current knowledge and understanding of trauma-informed care (TIC) amongst OBGYN residents in Canada and establish whether there is a need for formal educational programming in TIC for OBGYN residents.

Methods: This is a cross-sectional survey-based study assessing OBGYN residents' knowledge, opinions, self-perceived competence, practices, and education needs/preferences for TIC. Our study uses an anonymous web-based survey. The survey was distributed to 17 residency programs across Canada. The survey was developed by adapting a widely used and previously published tool called the TIC Provider Survey. Adaptations were made based on literature review and content validation. Additional adaptations were made to assess educational needs and interest in TIC.

Results: A total of 38 individuals from 11 OBGYN residency programs across Canada filled out the survey to completion as of March 2022. Estimated response rate is about ~10% assuming the survey reached all residents. The average knowledge score based on the TIC provider survey was reasonably high at 46.5 out of a maximum score of 60. The score for opinions favourable to trauma informed care was 18.6 (out of a maximum score of 24). Self-rated competence score was low at 7.3 (out of a maximum of 20) and trauma informed practice score was low at 3.2 (maximum score of 7). Most participants felt they did not have adequate training in trauma informed care at any point in their educational career and the majority agreed that it is important to have a trauma informed care curriculum in OBGYN residency. Lastly, individuals felt open to a range of learning methods including didactic sessions, small group learning and experiential or simulation training. With more data we hope to explore relationships between component scores and individual characteristics.

Conclusions: Our study data supports the implementation of a trauma informed care curriculum in OBGYN residency programs with the main goal of improving residents' comfort and competence in trauma informed care.

Individualized medicine using 3D printing technology in gynecology: a scoping review

Cooke, Carly, MD¹; Flaxman, Teresa, PhD²; Sikora, Lindsey³; Miguel, Olivier, MASc⁴, Singh, Sukhbir

Sony MD, FRCSC^{1,2}

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Objective: Developments in 3-dimensional (3D) printing technology has increased production of high quality, affordable 3D printed models, and the investigation of 3D printing in the medical literature. The objective of this study was to outline the clinical applications of individualized 3D printing in gynecology through a scoping review.

Methods: Four medical databases (Medline, Embase, Cochrane CENTRAL, Scopus) and grey literature were searched for publications meeting eligibility criteria up to May 2021. Publications were included if they were published in English, had a gynecologic context, and involved production of patient specific 3D printed product(s). Studies were manually screened and assessed for eligibility by two independent reviewers (CC, TF) and data was extracted using pre-established criteria.

Results: Overall, 32 studies (15 abstracts, 17 full text articles) were included in the scoping review. Most studies were either case reports (12/32, 38%) or case series (15/32, 47%). Gynecologic sub-specialties in which the 3D printed models were intended for use included: gynecologic oncology (21/32, 66%), benign gynecology (6/32, 19%), pediatrics (2/32, 6%), urogynecology (2/32, 6%) and reproductive endocrinology and infertility (1/32, 3%). Twenty studies (63%) printed 5 or less models, 6/32 (19%) printed greater than 5 (up to 50 models). Types of 3D models printed included: anatomical models (11/32, 34%), medical devices, (2/32, 6%) and template/guide/cylindrical applicators for brachytherapy (19/32, 59%). Type of 3D printer, software used, and printing materials varied across studies. Cost, time of production, and surgical outcomes related to patient specific 3D printed models were reported inconsistently.

Conclusion: Our scoping review has outlined novel clinical applications for individualized 3D printed models in gynecology. To date, they have mainly been used for production of patient specific 3D printed brachytherapy guides/applicators in patients with gynecologic cancer. However, individualized 3D printing shows great promise for utility in surgical planning, surgical education, and production of patient specific devices, across gynecologic subspecialties. Data on the topic of individualized 3D printing in gynecology is limited by low quality study design, small sample size and nonstandardized reporting, which should be the focus of future studies.

Infectious complications following posterior colporrhaphy with and without anal sphincteroplasty: An analysis of cases in the national surgical quality improvement program database

Wuebbolt, Danielle, MD¹; Hussein, Shireen, MD¹; Bouchard, Marie-Elisabeth, MD, FRCSC²; Pascali, Dante, MD, FRCSC²; Clancy, Aisling A, MD, MSc, MPH, FRCSC²

¹The Ottawa Hospital, Department of Obstetrics & Gynaecology and Newborn Care, University of Ottawa, Ottawa, ON, Canada.

²The Ottawa Hospital, Department of Obstetrics and Gynecology Division of Urogynecology and Pelvic Reconstructive Surgery

Objective: We aimed to compare postoperative complications for patients undergoing posterior colporrhaphy with or without sphincteroplasty in order to better inform and counsel patients considering these procedures concurrently.

Methods: A retrospective cohort of women undergoing posterior colporrhaphy with or without anal sphincteroplasty was completed using the National Surgery Quality Improvement Program Database (2012-2019). The primary outcome was a composite of important surgical complications including: wound complications, blood transfusion, hospital stay >48 hours, reoperation, readmission, or urinary tract infection. Multivariate logistic regression was used to adjust for important potential confounders.

Results: A total of 5079 patients were included and 82 of these underwent a sphincteroplasty at the time of posterior colporrhaphy. The primary composite outcome occurred in 10.4% of patients having rectocele repair versus 19.5% having concurrent sphincteroplasty with an odds ratio of 2.09 (95% CI 1.20, 3.63, p=0.01). On multivariable analysis after adjusting for age, body mass index, diabetes and anterior prolapse surgery, there was no increased odds of complication associated with concomitant anal sphincteroplasty (OR 1.58, 95% CI 0.89, 2.90, p=0.12).

Conclusion: Overall there are higher surgical complication rates among women who have posterior colporrhaphy with anal sphincteroplasty. However, higher complication rates may be due to patient factors since the effect was not observed on multivariable analysis adjusting for patient factors. Sphincteroplasty can be offered with rectocele repair in select women to limit risk of persistent or future fecal incontinence.

Enhanced recovery after surgery for gynecologic oncology patients undergoing laparotomy during the COVID-19 pandemic

Boucher, Julia¹; Chen, Innie^{1,2}; Choudhry, Abdul Jamil²; Le, Tien^{1,2}

¹University of Ottawa, Dept of Obstetrics and Gynecology and Newborn Care, Ottawa, Canada

²Ottawa Hospital Research Institute, Ottawa, Canada

Objective: Enhanced recovery after surgery (ERAS) is an evidence-based surgical quality improvement program that been shown to improve patient outcomes, while reducing overall resource costs. The aim of this study was to evaluate the impact of implementation of ERAS for gynecologic oncology patients undergoing laparotomy at the Ottawa Hospital (TOH) during the COVID-19 pandemic.

Methods: We conducted a pre-post study of data from TOH Data Warehouse. The study included women 18 years or older admitted in TOH for gynecological oncology abdominal surgery at TOH. The pre-ERAS implementation period was from June 2019 to June 2020 and the post-ERAS implementation period was July 2020 to June 2021. Outcomes of interest included post-operative length of stay (LOS), 30-day mortality, total cost, readmission, and return to ED. Outcomes were compared for the pre and post intervention periods, using Chi-square for categorical variables and t-test for continuous variables.

Results: A total of 364 patients with abdominal hysterectomy for gynecologic malignancies were included in the study, among whom 217 were admitted in the pre-ERAS implementation period and 147 were admitted in post-ERAS implementation period. It was observed that patients were slightly younger ($p=0.39$), had higher BMI ($p<0.01$), higher ASA category ($p=0.71$), and higher Charlson comorbidity index ($p=0.07$) in the post-ERAS implementation period compared with pre-implementation period. There was a trend towards decreasing mean postoperative hospital stay from 104.1 to 91.4 hours ($p=0.12$). However, there was a slight non-significant increase in hospital readmission within 30 days of discharge from 6.0% to 8.2% ($p=0.42$), with no notable differences in ED visits within 30 days of discharge (13.8% to 12.9%, $p=0.81$). Preliminary data from a patient-reported questionnaire demonstrated overall satisfaction with care.

Conclusion: Despite the challenges associated with the COVID-19 pandemic, including delays in surgical care access and associated increase in patient morbidity, we were able to successfully design and implement the ERAS pathway. A major successful outcome of our project was the formal adoption of the ERAS pathway as routine medical care for gynecologic oncology patients. Future directions include monitoring compliance and in-depth cost analysis.

Online patient information for hysterectomies: a systematic environmental scan of quality and readability

Mehr Jain, MD¹, Philip Chkipov, MD², Dawn Stacey, RN, PhD, FCAHS, FAAN, FCAN^{3,4}, Glenn Posner, MDCM, FRCSC, Med^{1,5}, Vanessa Bacal, MD, MSc, FRCSC⁶,
Innie Chen, MD, MPH, FRCSC^{1,3}

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⁴ School of Nursing, University of Ottawa

⁵ Department of Innovation in Medical Education, University of Ottawa, Ottawa, ON, Canada

⁶ Department of Obstetrics and Gynecology, University of Toronto, Toronto, ON, Canada

Objective: Hysterectomy is a common gynaecological procedure, and therefore available online information is highly valuable to patients. The objective was to evaluate the quality, readability, and comprehensiveness of online patient information on hysterectomies.

Methods: The first 25 consecutive patient-directed websites on hysterectomy, identified using five online search engines (Google, Yahoo, AOL, Bing, Ask.com) and clinical professional society, were assessed using validated tools for quality (DISCERN, JAMA benchmark), readability (FKLG, Gunning FOG, SMOG, FRES) and completeness of information.

Results: We identified 50 websites for inclusion. Overall, websites were of good quality (DISCERN score median 53 out of 80, interquartile range [47-61]; JAMA score 3 out of 4 [1-4]). Most websites described surgical risks (n=39, 78%), benefits (n=45, 90%), and types of hysterectomies (n=48, 96%). Content readability corresponded to Grade 11 using FKGL (11.1[10.2-13.0]) and SMOG (10.9[10.2-12.4]), or 15 years education using Gunning FOG (14.7[13.8-16.4]). Websites were assessed as difficult to read using FRES (45.6 out of 100 [37.9-50.9]). No differences were observed in readability scores when we compared websites from clinical professional societies, government, healthcare, or academic organizations, versus others (p>0.05).

Conclusion: Online patient information on hysterectomy is of good quality and comprehensive. However, the content is above the American Medical Association's recommended grade six reading level. Website authors should consider readability to make their content more accessible to patients.

ABSTRACTS
For
POSTER
PRESENTATIONS

ASSOCIATION BETWEEN GESTATIONAL WEIGHT LOSS IN WOMEN WITH OBESITY AND FETAL GROWTH: A POPULATION-BASED RETROSPECTIVE COHORT STUDY

Meloche, Claudia^{1,2}; Muldoon, Katherine¹; Corsi, Daniel^{1,3,4,5}; Rennicks White, Ruth^{1,6}; Harvey, Alysha¹; Walker, Mark^{1,3,4,6,7}; Wen, Shi-Wu^{1,3,6,7}; El-Chaar, Darine^{1,6,7}; Gaudet, Laura^{1,3,8,9}; Guo, Yanfang^{1,3,4,5}

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⁷Department of Obstetrics and Gynecology, University of Ottawa, Ottawa, Ontario; ⁸Department of Obstetrics and Gynecology, Queen's University, Kingston, Ontario; ⁹Department of Obstetrics and Gynecology, Kingston Health Sciences Centre, Kingston, Canada

Objectives: The impact of gestational weight loss (GWL) on fetal growth in women with obesity remains controversial. Our study aims to examine the respective associations of GWL (net weight loss from pre-pregnancy to delivery) with small for gestational age (SGA <10th percentile) and large for gestational age (LGA >90th percentile) neonates among women with obesity.

Methods: We conducted a population-based retrospective cohort study of women with obesity (pre-pregnancy body mass index ≥ 30 kg/m²) who had a singleton birth between 2012 and 2017 in Ontario. Adjusted risk ratios (aRRs) and 95% confidence intervals (CIs) for the association between GWL and fetal growth were estimated by using multivariate regression models. Interaction effects were examined to determine whether the impact of GWL on fetal growth varied by obesity classes (I: 30–34.9 kg/m², II: 35–39.9 kg/m² and III: 40 kg/m² or higher).

Results: Among 89,835 eligible women, 5,276 (5.9%) women with obesity experienced GWL during pregnancy. Overall, GWL in women with obesity had an increased risk of SGA (aRR: 1.43, 95% CI 1.24–1.64) and a decreased risk of LGA (aRR: 0.84, 95% CI 0.74–0.94), compared to the recommended gestational weight gain group. There were significant interaction effects between GWL and obesity classes on SGA (Wald $p < 0.01$) and LGA (Wald $p < 0.01$). GWL in women with obesity was significantly associated with increased risk of SGA neonates for all obesity classes, contrasting with decreased risk of LGA neonates in obesity class III.

Conclusions: Our study demonstrated GWL in women with obesity was significantly associated with increased risk of SGA neonates. GWL should not be recommended in this population.

The Association Between Obstetrical Anal Sphincter Injury and Postpartum Urinary Retention: A Contemporary Nationwide Cohort Study

Jocelyn Stairs¹, Daniel Rolnik², Dante Pascali¹, Aisling Clancy¹

1. Division of Urogynaecology, Department of Obstetrics and Gynaecology, The Ottawa Hospital, Ottawa, ON, Canada
2. Department of Obstetrics and Gynaecology, Monash University, Melbourne, Australia

Introduction:

Postpartum urinary retention is a common consequence of vaginal delivery. Identification and prompt management is essential to minimize the risk of long-term morbidity. Obstetrical anal sphincter injury (OASIS) has been identified as a possible risk factor for urinary retention. Characterization of this relationship will guide surveillance and counselling.

Objective:

The objective of this study was to estimate the association between OASIS and postpartum urinary retention.

Methods:

We conducted a population-based, retrospective cohort study of pregnant persons delivering singleton fetuses via vaginal delivery using the Agency for Healthcare Research and Quality National Inpatient Sample (NIS) database. This is the largest all-payer inpatient database in the United States. Logistic regression models adjusting for maternal age, prolonged second stage, operative vaginal delivery, large for gestational age infants, epidural use, shoulder dystocia, constipation, and grand multiparity, defined as ≥ 5 prior deliveries, were used to estimate the odds ratio (OR) for the association between OASIS and postpartum urinary retention overall and by grade of perineal tear.

Results:

2,024,021 delivery admissions were included in this cohort which was representative of a population size of 10,120,098 utilizing the complex sampling design of the NIS database. 47,192 (2.33%) admissions sustained an OASIS and 5,486 (0.27%) of admissions experienced overt urinary retention. After adjusting for potential confounders, vaginal deliveries where an OASIS occurred had 3.57 times the odds of postpartum urinary retention compared to vaginal deliveries where an OASIS was not sustained (95% CI 3.24-3.94).

Postpartum urinary retention was associated with a mean increased length of stay (3.06 days vs 2.30 days, $p=0.04$) and 1.4 times the mean total cost of admission (\$23,854.73 USD vs \$16,891.44 USD, $p<0.01$).

When patients with urinary tract infection (UTI) were excluded ($n=6,034$), the odds of urinary retention following vaginal delivery that sustained OASIS were 3.58 times that of vaginal deliveries who did not sustain OASIS (95% CI 3.24-3.95) in multivariable models.

Conclusion:

OASIS is associated with increased risk of postpartum urinary retention compared to vaginal deliveries where OASIS did not occur. Close surveillance of postpartum voiding and interventions in the early postpartum period in this high-risk population may avoid long-term complications associated with unrecognized urinary retention.

Preventing isthmocele after Cesarean section (PICS): a pilot randomized controlled trial

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Objective:

An isthmocele is a defect at the cesarean section scar site with a depth of $>2\text{mm}$. Presence of this can lead to both obstetric and gynecologic complications. The primary objective of this study is to evaluate the feasibility of a study protocol amongst our own patient and physician population, with the ultimate goal of a larger scale randomized controlled trial. Secondary objectives include determining: (a) the incidence of isthmocele formation; (b) isthmocele measurements identified on postoperative transvaginal ultrasound; and (c) adverse surgical outcomes related to suture technique.

Study Methods:

A single-centre parallel-group pilot RCT is being conducted. Fifty subjects will be recruited, with 25 per arm. All term pregnant patients >18 years old undergoing a primary caesarean section are eligible. Exclusion criteria includes previous uterine hysterotomy, known uterine anomalies, active labour, known bleeding disorder, and maternal connective tissue disorders. Subjects are randomized to locked vs. unlocked uterine closure. They will undergo an outpatient transvaginal ultrasound to evaluate isthmocele formation six months postoperatively.

Results:

At time of submission 31 subjects have been recruited. Data will be analyzed on an intention-to-treat basis. Demographic data will be reported using descriptive statistics. Rates of isthmocele will be compared between groups using chi-square analysis; subgroup analysis of the variable suture material will be performed. Other outcomes will be assessed using a t-test (continuous variables) or chi-square test (categorical variables) as appropriate.

Conclusions:

This study design appears to be feasible at this time. Further outcome data will be reported once the study is completed.

Key Words:

Cesarean section
Isthmocele
Pilot study

Retrospective review of reproductive outcomes comparing vaginal progesterone to intramuscular progesterone as luteal support in frozen embryo transfer cycles

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Objective: Recent literature suggests that progesterone in oil (PIO) for endometrial preparation is superior to vaginal progesterone (VP; Prometrium) in frozen embryo transfer cycles (FET), improving live birth rate and, reducing miscarriage rate. PIO has disadvantages including its cost, pain and stress of administration. The objective of this study was to evaluate whether VP is non-inferior to PIO for FET cycles.

Methods: We present a retrospective analysis of pregnancy, miscarriage and live birth rates following medicated FET cycles, comparing PIO (50 mg/mL daily) and VP (Prometrium 200 mg PV TID) from 2017-2020 at a single fertility clinic, including 745 patients. Univariable and multivariable binary and ordinal logistic regression analyses were performed to compare the odds of pregnancy, miscarriage rate and live birth between VP and PIO.

Results: Our data demonstrated no difference in pregnancy (51 vs. 53%), miscarriage (20 vs. 18%) or live birth (31 vs. 34%) between PIO and VP ($p>0.05$). For participants taking PIO, the odds of pregnancy were 0.93 [95% CI (0.70, 1.25), $p=0.65$] that of participants on VP.

Conclusion: Vaginal progesterone was noninferior to PIO for endometrial preparation in FET cycles our single-centre study.

NOTES