UAB OB/GYN
Resident Research Expectations

12/14/2018
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PGY1 Educational Objectives

• Survive!
• Complete IRB certification in the Fall
• Think!
  • Brainstorm potential topics/areas of interest
  • Brainstorm possible mentors
PGY2 Educational Objectives

• Fall/Winter:
  • Identify a mentor and project and confirm with us (email by January PGY2)

• Conceptualize your research project
  • Define problem/purpose of study
  • Develop hypothesis
  • Define specific aims
  • Describe experimental design, statistical methods, & anticipated results
  • Identify potential problems & alternative plans
PGY2 Educational Objectives

• Update us on research idea and any problems
• Appraise & modify research idea based on feedback
• Obtain IRB Approval (Human Subject Protocol Committee approval – can take a few months)
• Submit manuscript draft of Introduction and Methods (by June PGY2)
• Get started!
PGY3 Educational Objectives

• Conduct research
• Identify pitfalls and ask for help and alternatives
• Incorporate abstract feedback after external (OB/GYN faculty) and internal (peer) review
• Submit an abstract for Resident Research Day (April PGY3)
PGY₄ Educational Objectives

• Continue conducting research
  • Results due by Jan PGY₄ for draft of full manuscript
• Identify pitfalls and ask for help and alternatives
• Formal presentation (April PGY₄)
• Complete manuscript (by June PGY₄)
Resident Research Day

• Annually in April

• All PGY3 class submits abstract (can be complete or interim) for abstract book
  • Award for best abstract

• All PGY4 class presents research presentation
  • Award for best presentation
RRD April 12, 2019

• Off cycle so....
• PGY3 abstract book
• Current PGY3 class presents research presentation (interim or complete) → will have to present again RRD 2020
• Current PGY4 who have not presented final presentations will also present
Introduction to Resident Research
Why do residents have research requirements?

• ACGME requirements to be “involved in scholarly activities”
• Helps you get a job one day
• Be able to critically assess quality and validity of a research study
• Introduction to research for your future career
• Improve your communication skills
What can a resident research project do?

- Posters at major meetings (SMFM, SGO, AUGS, ASRM, ACOG, APGO/CREOG)
- Orals at major meetings
- Publications
- Fellowship application
Brainstorming

• Sources of ideas:
  • L&D sign out
  • Tumor Board
  • Gyn case conference
  • Clinic
  • New guidelines (controversial ones)
  • Journal club
  • Anything we do that drives you crazy and you would like to fix
Finding a Mentor

- Identify some clinical areas of interest
- Evaluate mentors who have time and interest in mentoring resident research project
  - Previous mentors
  - Ongoing research areas
- Talk to anyone and everyone, including us if you have trouble
Choosing a Mentor

- Don’t be afraid to ask – everyone here wants you to succeed!
- Schedule an appointment
- Be prepared with:
  - Research question or interest
  - Timeline/deadlines (if you have them)
  - What you want out of the project
  - Always discuss: expectations, authorship
Good Mentors/Good Mentees

**Mentor**
- Has experience in research
- Has time to spend with you
- Has established their own research career
- Is clear in expectations & goals
- Provides guidance when you are “stuck”

**Mentee**
- Meets deadlines
- Stays in touch / keeps mentor updated on status of projects
- Keeps mentor in the loop on their own deadlines
- Tells mentor when they are “stuck”
Selecting a Project

• Do what you are interested in

• Fellowship/career path
  • Research gives you an opportunity to interact with people who will write you recommendation letters and to present at conferences in your area of interest

• I want to do research but I don’t know which fellowship I want to do… (that’s ok!)

• Nobody here does the research I’m interested in…(not true)

• Resident Research Directors are here to help!
Qualities of a Sound Resident Research Project

• Interesting
  • At least to you!

• Novel
  • Previously not well addressed?

• Important
  • What is the next step?

• Prior publication
  • Does this add to the literature?
  • Previously addressed but requiring validation? (i.e., different population, clinical setting)

• Answers a question – not just data mining
Feasibility of a Sound Resident Research Project

- Determine a sample size early –
  - Do we have that many patients with the exposure of interest?
  - How common is your outcome?
  - How much $$ do you need?

- Data collection is feasible but
  - It’s nice if there is an existing database

- RCTs are generally not feasible in the time-frame unless
  its already started or very small in scope
  - A small pilot project maybe on a resident scale
Research Takes Time

- IRB approval can take 1-2 months
  - Usually meets around the 20th of the month
- Chart review can take 3-12 months depending on size of study & length of data collection form
- Data entry, data cleaning – 1-2 months
- Statistician time is precious and rare (plan ahead!)
CWRH (Center for Women’s Reproductive Health) Resources

• IRB Submission
  • Assist with ALL IRB submissions through IRAP
  • Maintain IRB documents
  • Help with renewals

• Data Management/Statistical Analysis
  • Present proposal to weekly Wednesday meeting

• CWRH Contact Person
  • Lisa Dimperio (ldimperio@uabmc.edu)
  • Formal process guidelines are in development and will be shared when available
Abstract

• 250 word limit
• Resident name
• Faculty mentor(s)
• Title

• Sections for abstracts:
  • Objective (include background and hypothesis)
  • Methods (study design)
  • Results (can be anticipated or preliminary results)
  • Conclusion (can include anticipated future impact if do not have conclusion yet)
Presentation

• 8 minutes with 5 minutes for questions
• Should include:
  • Background (1-2 slides)
  • Hypothesis (1 slide)
  • Specific Aims (1 slide)
  • Experimental/Study Design
  • Results
  • Strengths and Limitations
  • Summary/Future Directions
Resident Research Didactics

• **December 14, 2018** at 2:30-3:30pm
  • Introduction to Resident Research - Expectations
  • How to Make an Abstract

• **March 29, 2019** at 1:30-3:30pm
  • How to Write a Manuscript
  • How to Make a Research Presentation
  • Abstract Review Session (for PGY3 and PGY4)
2018-2019 Deadlines

PGY1
Fall/Winter
☐ Confirm IRB certification completed (website below)
   http://www.uab.edu/research/administration/offices/IRB/Training/Pages/InitialIRBTraining.aspx
Spring/Summer
☐ Brainstorm potential research interests and topics
☐ Meet with potential mentors

PGY2
Fall/Winter
☐ Confirm research mentor and e-mail Co-Directors (Deadline: Friday February 15, 2019)
☐ Begin IRB submission process
Spring/Summer
☐ Complete IRB approval process
☐ Begin conducting research
☐ Submit draft of Introduction and Methods section of manuscript (Deadline: Friday May 30, 2019)

PGY3
Fall/Winter
☐ Submit draft of Research Abstract (Deadline: Friday February 15, 2019)
☐ External review of Research Abstract by 2 reviewers (February-March)
Spring/Summer
☐ Resident Research Day – Selection of Best Abstract and Best Presentation (Friday April 12, 2019)

PGY4
Spring/Summer
☐ Submit draft of manuscript (Deadline: Friday February 15, 2019)
☐ Complete and submit resident research manuscript (Deadline: Friday May 30, 2019)
Sample Abstract – Determining Predictors/Risk Factors

Impact of age on mid- to long-term outcomes of transvaginal native tissue repair for apical vaginal prolapse.

Kissane LM1, Meyer I1, Martin KD2, Tan JC1, Miller K3, Richter HE1

Abstract

AIMS: To compare surgical success rates in older versus younger women a minimum of 3 years post transvaginal native tissue repair for apical prolapse. Post-operative symptom severity and quality of life improvement, surgical complications and retreatment were also examined.

METHODS: Women who underwent transvaginal native tissue repair for apical prolapse between 2011 and 2013 were eligible. Subjects completed the pelvic floor distress inventory (PFDI-20), pelvic floor impact questionnaire (PFIQ-7), and patient global impression of improvement (PGI-I), and were categorized as “younger” (age <70) or “older” (age ≥70). The primary outcome of surgical success was defined as the absence of bulge symptoms and no re-treatment for prolapse.

RESULTS: Of 641 eligible patients, response rate was 51.0%. 62.7% of subjects had hysterectomy prior to index surgery. Surgical success was noted in 72.9% of younger and 82.2% of older subjects (Adjusted odds ratio [aOR] 1.72, 95% CI [0.93, 3.17]). Older women had greater improvement from baseline in PFDI-20 score (-87.5 [IQR 74.0] vs -54.2 [IQR 80.2], P = 0.01). Retreatment rate and surgical complication rates were similar between groups (both P > 0.05).

CONCLUSIONS: Older and younger women had similar surgical success rates a minimum of 3 years post-operative; however, older women had a greater overall symptom severity improvement. This information may be helpful in counseling older women regarding surgical expectations and decision-making.

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KEYWORDS: aging; geriatric; patient reported outcome measures; pelvic organ prolapse; quality of life

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Abstract
OBJECTIVE: The 2006 American Society for Colposcopy and Cervical Pathology consensus guidelines for management of abnormal cervical cytologic diagnosis made significant changes to referral recommendations for adolescent and pregnant populations. In this study, we sought to review the impact of these new guidelines on referral patterns, along with the incidence of cervical intraepithelial neoplasia 2/3 and cervical cancer in these 2 populations.

MATERIALS AND METHODS: After obtaining institutional review board approval, a retrospective chart review of 12,333 patients referred to a single colposcopy clinic between January 2004 and November 2009 was performed. This colposcopy clinic serves as a statewide referral center. All adolescent patients (<21 y) and pregnant patients were included for analysis. Patients were analyzed in 2 groups with respect to implementation of the 2006 guidelines. Statistical analysis was performed using χ² and Student t test.

RESULTS: Between 2004 and 2007, before implementation of the 2006 guidelines, 9,346 patients were referred to the colposcopy clinic. Overall, 1,398 adolescents and 958 pregnant patients were identified and included in the analysis. The mean age was 23.0 years (range = 10-60 y). Of the 1,398 adolescent patients, atypical squamous cells of undetermined significance (ASCUS) Pap smears accounted for 406 referrals (29.0%). Of the 958 pregnant patients, ASCUS cytologic diagnosis accounted for 284 referrals (29.6%). One case of squamous cell carcinoma (SCC) was identified in the pregnant population (0.1%), and no cases of SCC were diagnosed in the adolescent population. After implementation of the 2006 guidelines, between 2008 and 2009, a total of 2,967 patients were referred, including 113 adolescent patients and 188 pregnant patients. Mean age was 25.5 (range = 16-54 y), which was not significantly different from 2004 to 2007, p = .79. Atypical squamous cells of undetermined significance accounted for 6 referrals (5.3%) in the adolescent population and 15 referrals (8.9%) in the pregnant population. The decrease in the proportion of ASCUS cytologic diagnosis referrals in these populations was statistically significant at p < .001. No adolescent or pregnant patients were diagnosed with SCC during their colposcopic evaluation.

CONCLUSIONS: The 2006 American Society for Colposcopy and Cervical Pathology consensus guidelines decreased the number of ASCUS cytologic diagnosis referrals to colposcopy in the adolescent and pregnant populations. The overall number of patients with SCC in these populations is quite small, therefore practitioners can be reassured that the new screening guidelines are unlikely to miss this diagnosis. These guidelines provide an efficient, evidence-based approach to the cytologic evaluation of these special populations.
Effect of a multi-modal intervention on immunization rates in obstetrics and gynecology clinics.

Nezamie SE1, Brewer SE2, Pyznarowski JL3, Darbee MJ3, Dickinson LJH4, Barnard JG2, Dempsey AE2, Clycey ST2

Author Information

Abstract

BACKGROUND: There is increasing attention on immunizations by obstetrician-gynecologists and a need to improve vaccination rates for all women.

OBJECTIVE: To evaluate the effect of a multimodal intervention on rates of immunization with tetanus, diphtheria, and acellular pertussis (Tdap), human papillomavirus (HPV), and influenza in outpatient obstetrics and gynecology clinics.

STUDY DESIGN: Immunization rates at 2 clinics were compared pre- and post-implementation of multiple interventions at a public integrated health-care system. Study interventions began on June 6, 2012 and concluded on May 31, 2014. The preimplementation time period used was June 6, 2010 to June 5, 2012. Interventions included: (i) stockpiling all necessary vaccinations; (ii) revising policies on standing orders; (iii) creating an immunization champion to identify and notify providers of vaccine opportunities; (iv) expanding immunization education; (v) and providing feedback to providers based on vaccine stock levels and immunization rates.

STUDY OUTCOMES: Immunization rates at the Tdap cohort (1248 pre- and 1493 post-intervention) and the HPV cohort (7966 pre- and 4478 post-intervention). Our population was largely Hispanic, English-speaking, and publicly insured. The rate of influenza vaccination increased from 36.4% pre-intervention to 46.0% post-intervention (P < .001). The overall rate for Tdap vaccination increased from 87.6% pre-intervention to 94.5% post-intervention until the recommendation to vaccinate during each pregnancy was implemented (z = 4.58, P < .0001). The average Tdap up-to-date rate after that recommendation was 75.0% (z = 5.77, P < .0001). The overall rate of HPV vaccination with an eligible visit increased from 7.1% before to 23.7% after the intervention.

CONCLUSION: Using evidence-based practices largely established in other settings, our intervention was associated with increased rates of influenza, Tdap, and HPV vaccination in outpatient underserved obstetrics and gynecology clinics. Integrating such evidence-based practices into routine obstetrics and gynecology care could positively impact preventive health for many women.
Feasibility of Complete Salpingectomy Compared With Standard Postpartum Tubal Ligation at Cesarean Delivery: A Randomized Controlled Trial.

Subramaniam A¹, Blanchard CT, Erickson BK, Szczkowski J, Leath CA, Biggio JR, Huh WK

Abstract

OBJECTIVE: To evaluate the feasibility of salpingectomy compared with standard bilateral tubal ligation at the time of cesarean delivery in women with undesired fertility.

METHODS: We included women at 35 weeks of gestation or greater desiring permanent sterilization at the time of cesarean delivery. Patients were randomized after skin incision to bilateral salpingectomy or bilateral tubal ligation by a computer-generated scheme. If salpingectomy could not be completed on one or both sides, bilateral tubal ligation was attempted. Primary feasibility outcomes were total operative time and bilateral completion of the randomized procedure. Secondary outcomes included clinically estimated blood loss and surgical complications up to 6 weeks postpartum. We estimated that 80 patients (40 per group) would provide greater than 80% power to identify a 10-minute difference in the primary outcome (time) with a SD of 15 minutes and a two-sided α of 0.05. Analysis was by intent to treat.

RESULTS: Of 221 women screened from June 2015 to April 2017, 115 (52%) consented to the study; 80 were randomized-40 to salpingectomy and 40 to bilateral tubal ligation. Groups were similar at baseline. A total of 27 bilateral salpingectomies were successfully completed compared with 38 bilateral tubal ligations (68% compared with 95%, P=.002). Total operative time was on average 15 minutes longer for salpingectomies (75.4±29.1 compared with 60.0±23.3 minutes, P=.004). No adverse outcomes directly related to the sterilization procedure were noted in either group. Although estimated blood loss of only the sterilization procedure (surgeon estimate) was greater for the salpingectomy group (median 10 [interquartile range 5-25] compared with 5 [interquartile range 5-10] cc, P<.001), total estimated blood loss and safety outcomes were similar for both groups.

CONCLUSION: Adding 15 minutes to total operative times, salpingectomy can be successfully completed in approximately two thirds of women desiring permanent contraception at cesarean delivery.

CLINICAL TRIAL REGISTRATION: Clinicaltrials.gov, NCT02374827.