

Resident Education Curriculum in Pediatric and Adolescent Gynecology: The Short Curriculum

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ABSTRACT

The degree of exposure to Pediatric and Adolescent Gynecology (PAG) varies across academic programs in Obstetrics and Gynecology, Pediatrics, and Adolescent Medicine. Nevertheless, these programs are responsible to train residents and provide opportunities within their training programs to fulfill PAG learning objectives. To that end, North American Society for Pediatric and Adolescent Gynecology has taken a leadership role in PAG resident education by disseminating the Short Curriculum with specific learning objectives and list of essential resources where key concepts in PAG can be covered.

Key Words: Pediatric and adolescent gynecology, Postgraduate medical education, Education curriculum, Resident education, Accreditation

Introduction

Pediatric and Adolescent Gynecology (PAG) is an important and required aspect of training for Ob/Gyn, Pediatrics and Adolescent Medicine training programs. The degree of exposure in PAG is variable across academic programs in North America. Furthermore, PAG is an integral part of Ob/Gyn, Pediatrics and Adolescent Medicine licensing exams in Canada and US. Specific PAG learning objectives, like those found in CREOG (Council on Resident Education in Ob/Gyn in US),¹ ABP (American Board of Pediatrics),² and RCPSC (Royal College of Physicians and Surgeons of Canada),³ must be fulfilled so that these post graduate training programs can receive their accreditation.

To date, the number of training programs with PAG expertise in North America is limited. Barriers to formalized training include: lack of trained and dedicated faculty, limited opportunity to evaluate and treat pediatric patients and absence of formalized teaching curriculum in PAG. Programs without this expertise or curriculum may have difficulty fulfilling the training requirements and therefore risk losing their accreditation. Residents have indicated that they do not feel they get enough exposure to PAG topics and have expressed a desire to learn more about this

population during their training.⁴ A study by Wagner et al found that programs in Michigan which have attending staff with PAG expertise provided on average 3 hours of dedicated PAG teaching in the entire residency.⁵ Another study by Nayak *et al*, which surveyed Ob/Gyn Program Directors in the US, revealed that only 37.5% of training programs had exposure to PAG specialists. The interaction with trainees included those in the clinical setting or didactic lectures; only 4 of 54 (7.4%) programs surveyed had a subspecialty rotation in PAG as part of core Ob/Gyn curriculum.⁶ Another cross sectional prospective study by Solomon *et al* surveying 242 Ob/Gyn residency programs in US with a response rate of 43% (n = 104) reported that 63% (n = 65) have no formal, dedicated Pediatric and Adolescent Gynecology clinic, while 83% (n = 87) have no outpatient Pediatric and Adolescent Gynecology rotation.⁷ Thus, this degree of exposure may be insufficient to meet the PAG learning objectives in the majority of training programs.

The mission of the North American Society for Pediatric and Adolescent Gynecology (NASPAG) is to provide a forum for education, research and communication among health professionals who provide gynecologic care to children and adolescents.⁸ Two of its goals include: (1) to conduct and encourage programs of medical education in the field of PAG; (2) to encourage and support professional training programs in PAG.

In 2012, the NASPAG Resident Education Sub-Committee was created with the purpose of developing a curriculum and tools for the NASPAG membership to use for resident

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education in PAG. One of its first tasks was to develop a Short Curriculum for resident education in this discipline. We present the Short Curriculum in this format to ensure wider dissemination of this resident education curriculum.

Training programs with limited expertise/time or dedicated curriculum in PAG will benefit from this Short Curriculum in order to fulfill accreditation requirements.

Goals of the Short Curriculum

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of gynecologic problems in the pediatric and adolescent patient, and the promotion of health for women and children. The goal of this Short Curriculum is a two-week 'Nuts and Bolts' curriculum in PAG for resident education using existing teaching resources. This program is designed to be incorporated into existing rotations aimed to teach residents critical information to guide their encounters with the pediatric and adolescent patient population. This curriculum does not cover all training objectives for PAG but highlights aspects learners may not otherwise encounter during training.

Target Audience

Post-graduate trainees in Ob/Gyn, Pediatrics, Adolescent Medicine and Family Medicine from centers with limited exposure to PAG.

Educational Objectives

This program covers core knowledge determined to be essential for the provider encountering the pediatric gynecology patient and that may not be covered in other aspects of the learner's training. The learner will gain understanding of common PAG conditions but does not replace direct patient clinical or surgical skill training.

The *first week* is focused on the prepubertal pediatric patient. At the conclusion of this curriculum the participant will:

- Identify the steps and approach to the genital exam of the prepubertal child.
- Describe the evaluation and management of the child with vulvovaginitis and vulvar skin disorders.
- Review the evaluation and management of vaginal bleeding of the prepubertal child.
- Outline the evaluation and management of abnormal puberty.

The *second week* is focused on the adolescent patient. At the conclusion of this curriculum the participant will:

- Describe confidentiality issues in the adolescent patient.
- Apply techniques to improve communication with adolescents.
- Evaluate menstrual disorders and pelvic pain specifically among adolescent patients.

- Describe the evaluation and management of congenital anomalies of the reproductive tract, presenting in the adolescent.
- Review the menstrual management of patients with disabilities.

Time Requirement

The 10 topics can be covered by dedicating 1 hour per day over 10 days.

Definitions

1. Reading Assignment: resources recommended by the NASPAG resident education committee on what a trainee should read ("must read"). We propose that training programs have these resources available for their trainees.

Recommended textbooks:

- a. Emans SJ, Laufer MR: Pediatric and Adolescent Gynecology (6th ed.) Philadelphia, Lippincott Williams & Wilkins, 2012

OR

- b. Sanfilippo J, Lara-Torre E, Edmonds DK, Templeman C (ed): Clinical Pediatric and Adolescent Gynecology, NY, Informa Healthcare USA Inc, 2009
2. Additional resources for trainee who wishes to review clinical scenarios or seeks additional information about specific subjects
 - a. Clinical Cases in Pediatric and Adolescent gynecology by MR Laufer and LS Goldstein, (NASPAG/ACOG CD-ROM available at <http://sales.acog.org>)
 - b. American Society for Reproductive Medicine (ASRM) Modules (<http://www.asrm.org/eLearnCatalog/>)
 - c. ACOG Guidelines for Adolescent Health Care, 2nd ed, available at http://www.acog.org/About_ACOG/ACOG_Districts/District_II/Adolescent_Health_Care
 - d. PAG Review articles

Week One: Focus on Prepubertal Child

Day 1: Anatomy and Examination of Pre-pubertal Child

Reading Assignment

Chapter 1: Office evaluation of the child p. 1-9 (Emans and Laufer 6th ed)

OR

Chapter 7: The physical exam in the pediatric and adolescent patient p. 113-120 (Sanfilippo 2009)

Additional Resources

1. Zitelli BJ, McIntire SC, Nowalk AJ: Zitelli and Davis' Atlas of Pediatric Physical Diagnosis, (6th ed.). Philadelphia, Elsevier, 2012
2. Myhre AK, Berntzen K, Bratlid D: Genital anatomy in non-abused preschool girls. Acta Paediatr 2003; 92:1453

3. Pillai M: Genital findings in prepubertal girls: what can be concluded from an examination? *J Pediatr Adolesc Gynecol* 2008; 21:177
4. Loveless MB, Finkenzeller D, Ibrahim S, et al: A simulation program for teaching obstetrics and gynecology residents the pediatric gynecology examination and procedures. *J Pediatr Adolesc Gynecol* 2011; 24:127 [Simulation using pelvic model to teach exam techniques, culture collection, vaginal lavage, and vaginoscopy]

Day 2: Vulvovaginitis and Skin Conditions in Prepubertal Girls

Reading Assignment

Chapter 4: *Vulvovaginal problems in the prepubertal child* p. 42-59 (Emans and Laufer 6th ed)

AND Chapter 5: *Vulvar dermatology* p. 60-99 (Emans and Laufer 6th ed)

OR

Chapter 9: *Vaginal discharge and genital bleeding in childhood* p. 140-145 and 149-151 (Sanfilippo 2009)

AND Chapter 10: *Basic dermatology in children and adolescents* p. 154-175 (Sanfilippo 2009)

Additional Resources

1. CD-ROM Case 2, Topics 1,3, 5, 7
2. ASRM Pediatric Gynecology (RES000)
3. Van Eyk N, Allen L, Giesbrecht E, et al: Pediatric vulvovaginal disorders: a diagnostic approach and review of the literature. *J Obstet Gynaecol Can* 2009; 31: 850

Day 3: Prepubertal Vaginal Bleeding

Reading Assignment

Chapter 4: *Vulvovaginal problems in the prepubertal child* (Emans and Laufer 6th ed) (same as Day 2)

AND

Chapter 9: *Vaginal discharge and genital bleeding in childhood* p. 145-149 (Sanfilippo 2009)

Additional Resources

1. CD-ROM Topic 2 Cases 2, 6 & 10
2. **OR** ASRM Pediatric Gynecology (RES000)

Day 4 & 5: Delayed Puberty and Precocious Puberty

Reading Assignment

Chapter 7: *Precocious puberty*

AND Chapter 8 *Delayed puberty* (Emans and Laufer 6th ed)

OR

Chapter 5: *Precocious puberty*

AND Chapter 6: *Delayed puberty* (Sanfilippo 2009)

Additional Resources

1. CD-ROM Topic 3 Cases 1-2
2. **and/or** ASRM module (RES001) Precocious puberty and Delayed puberty (RES004)

3. Appelbaum H, Malhotra S. A comprehensive approach to the spectrum of abnormal pubertal development. *Adolesc Med State Art Rev* 2012; 23:1

Week 2: Focus on Adolescent

Day 1: Confidentiality in Adolescent Care and Communication

Reading Assignment

Confidentiality in Adolescent Care

- a. ACOG Guidelines for Adolescent Health care 2nd ed, Teen Care Tool Kit (ACOG Confidentiality) pages 4-9 available at <http://www.acog.org/~media/Departments/Adolescent%20Health%20Care/Teen%20Care%20Tool%20Kit/ACOGConfidentiality.pdf?dmc=1&ts=20121002T1417451368>

Communication

- b. Interviewing adolescents. HEADS examination
 - i. Klein DA, Goldenring JM, Adelman WP. HEADSSS 3.0: The psychosocial interview for adolescent updated for a new century fueled by media. *Contemporary Pediatrics* Jan 2014; p. 1-16. <http://contemporarypediatrics.modernmedicine.com/contemporary-pediatrics/news/probing-scars-how-ask-essential-questions>
- c. Motivational Interviewing
 - i. Gold MA, Kokotailo PK: Motivational interviewing strategies to facilitate adolescent behavior change. *Adolesc Health Update* 2007; 20:1

Day 2: Congenital Anomalies of Reproductive System

Reading Assignment

Breech L, Laufer M: Mullerian Anomalies. *Obstet Gynecol Clin North Am* 2009; 36:47

OR

Chapter 12: Structural abnormalities of the female reproductive tract (Emans and Laufer, 6th ed)

OR

Chapter 28: Treatment of anomalies of the reproductive tract (Sanfilippo 2009)

Additional Resources

1. CD-ROM cases Topic 1 (4 cases)
2. ASRM Module Developmental Disorders of the urogenital tract (RES002)
3. Clinical guidelines for the management of disorders of sex development in childhood. Consortium on the management of disorders of sex development. 2006. <http://www.accordalliance.org/dsd-guidelines.html>

DAY 3: Menstrual Abnormalities

Reading Assignment

Chapter 10: Abnormal vaginal bleeding in the adolescent (Emans and Laufer, 6th ed)

OR

Chapter 11: Menstrual disorders in adolescents (Sanfilippo 2009)

OR

American Academy of Pediatrics Textbook of Adolescent Health Care (M. Fisher, E. Alderman, R. Kreipe, W. Rosenfeld, eds), 2011.

- Menstrual disorders: dysmenorrhea and premenstrual syndrome, p. 589–603
- Abnormal uterine bleeding, p. 604–610

Additional Resources

1. CD-ROM Topic 4 (1 case)
2. ASRM module Abnormal Uterine Bleeding (RES006)
3. ACOG Committee on Adolescent health care Committee Opinion number 349, November 2006 “Menstrual cycle as a vital sign”
4. Talib HJ, Coupey SM: Excessive uterine bleeding. *Adolesc Med State Art Rev* 2012; 23:53

Day 4: Pelvic Pain

Reading Assignment

Chapter 13: Gynecologic pain: dysmenorrhea, acute and chronic pelvic pain, endometriosis and premenstrual syndrome (Emans and Laufer, 6th ed)

OR

Chapter 27: Chronic pelvic pain in endometriosis (Sanfilippo 2009)

Additional Resources

1. CD-ROM Topic 10
2. ASRM module Dysmenorrhea (RES005)
3. Damle LF, Gomez-Lobo V: Pelvic pain in adolescents. *J Pediatr Adolesc Gynecol* 2011; 24:172
4. ACOG Guidelines for Adolescent Health Care, pages 164–171.

Day 5: Patients with Disabilities

Recommended Reading

1. ACOG Committee on Adolescent Health care Number 448, December 2009: Menstrual manipulation for adolescents with disabilities http://www.acog.org/Resources_And_Publications/Committee_Opinions/Committee_on_Adolescent_Health_Care/Menstrual_Manipulation_for_Adolescents_With_Disabilities
2. Quint EH: Gynecological care for teenagers with disabilities. *J Pediatr Adolesc Gynecol* 2003; 16:115

Additional Resources

1. CD-ROM Topic 11 Vaginal bleeding in childhood and menstrual disorders in adolescence

2. ACOG website:

- a. Reproductive health care for women with disabilities (PowerPoint program and a case based program) on site http://www.acog.org/About_ACOG/ACOG_Departments/Women_with_Disabilities/New_Video_Training_on_Health_Care_for_Women_with_Developmental_Disabilities
- b. **OR** Preservice Health Training Modules for women with disabilities http://womenshealth.phtmodules.net/develop_dis/developmental_disability.aspx

Conclusion

The degree of exposure to PAG varies across academic programs in Ob/Gyn, Pediatrics, and Adolescent Medicine in North America. Nevertheless, these programs are useful to train residents and provide opportunities within their training programs to fulfill PAG learning objectives. To that end, NASPAG has taken a leadership role in PAG resident education by disseminating this Short Curriculum. Indeed, one of NASPAG's objectives is to enhance education in PAG by providing a structured didactic curriculum that any training program can incorporate into their teaching curriculum. The benefits of this Short Curriculum are to provide specific learning objectives and a list of essential resources to cover key concepts in PAG. Consequently, this Short Curriculum will be an adjunct to existing PAG teaching currently established in various post graduate medical education programs. Finally, we hope to inspire trainee interest in PAG which will encourage growth in our discipline.

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3. Royal College of Physicians and Surgeons of Canada. Available: <http://www.royalcollege.ca/cs/groups/public/documents/document/y2vk/mdaw/-edisp/tztest3rcpsced000922.pdf>. Accessed August 28, 2013.
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6. Nayak SR, Racek C, Sanfilippo JS: Resident education in pediatric and adolescent gynecology: from a residency program director's perspective. *J Reprod Med* 2013; 57:489
7. Solomon ER, Muffly TM, Hood C, et al: Residency training in pediatric and adolescent gynecology across obstetrics and gynecology residency programs: a cross-sectional study. *J Pediatr Adolesc Gynecol* 2013; 26:180
8. North American Society for Pediatric and Adolescent Gynecology: Mission and Goals Available: <http://www.naspag.org/index.php/pagemissionandgoals>. Accessed April 10, 2013.