

Introduction to GYN Specialties

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Outline

- Gynecologic Oncology*
- Female Pelvic Medicine and Reconstructive Surgery*
- Reproductive Endocrinology and Infertility*
- Pediatric and Adolescent Gynecology**
- Family Planning**
- Reproductive Infectious Disease**
- Benign Gynecology
- Minimally Invasive Gynecologic Surgery**

*ABOG Fellowship
**Non-ABOG Fellowship

Gynecologic Oncology

- Every year, in the US, more than 90,000 women are diagnosed with a gynecologic cancer and approximately 30,000 die from a gynecologic cancer
- GYN oncologists are specialists who provide consultation on comprehensive management of patients with gynecologic cancers:

- Outpatient evaluation
- Surgery
- Chemotherapy
- Radiation therapy
- Postoperative, intensive and palliative care



	2015	New Cases	Deaths
Cervical		12,340	4,030
Ovarian		21,290	14,180
Uterine		54,870	10,170
Vaginal		4,070	910
Vulvar		5,150	1,080

Surgeries for Gynecologic Cancer

Procedure	Description
Staging surgery	This will help determine the best course of treatment, as cancers in different stages may be treated differently.
Debulking surgery	Reduce tumor burden, often in preparation for chemotherapy.
Total hysterectomy	Removal of the uterus, including the cervix.
Radical hysterectomy	Removal of the uterus, cervix, and part of the vagina.
Omentectomy	Removal of the omentum.
Lymph node removal	Removal of all or a portion of lymph nodes.

Beyond Treatment

- Genetic counseling and testing for women with family history of gynecologic cancer
- Oncofertility services to maximize the reproductive potential of cancer patients and survivors
- Evaluation, counseling and management of cancer-related sexual issues

Female Pelvic Medicine and Reconstructive Surgery (FPMRS/Urogynecology)

- Specialists who provide evaluation, diagnosis, and treatment of conditions that affect the muscles and connective tissue of the female pelvic organs
- Pelvic floor conditions that urogynecologists commonly treat include urinary incontinence, fistulas, overactive bladder, and pelvic organ prolapse.

Burden of Incontinence

- In the US, the cost among adults was estimated at \$19.5 billion (2000)
- A majority of costs are attributed to resources used for incontinence management (absorbent pads, protection, laundry)

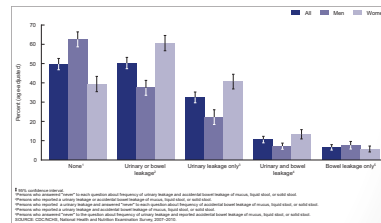


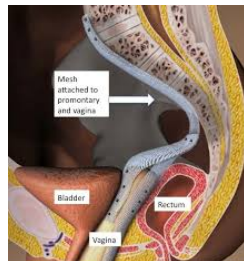
Figure 1. Age-adjusted incontinence among noninstitutionalized persons aged 65 and over, by type of incontinence and sex: National Health and Nutrition Examination Survey, 2007-2010

Non-Surgical Treatments

- Pelvic floor physical therapy
- Biofeedback
- Pessary
- Injections or instillations
 - Botox
 - Bulking agents
- Pharmacologic therapies
 - Anticholinergics

Surgical Treatments

- Anal sphincteroplasty
- Colpocleisis
- Cystocele/rectocele/enterocele repair
- Perineorrhaphy
- Sacral neuromodulation
- Urethral diverticulectomy
- Fistula repair
- Sacrocolpopexy
- Mid-urethral sling



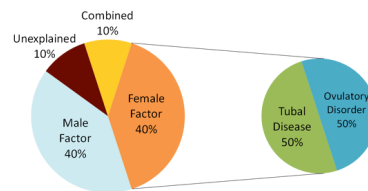
Sacrocolpopexy

Reproductive Endocrinology and Infertility

- Scope of the problem: 1 in 8 couples have trouble getting pregnant or sustaining a pregnancy

niaw
NATIONAL INFERTILITY ASSISTANCE WEEK

I am 1 in 8



Clinical Services

- Oncoreproductive health and oncofertility management
- Reproductive health and hormone management for menopausal women
- Endocrine disorders which impact reproductive function
- Recurrent pregnancy loss
- Same-sex and single partner fertility care
- Reproduction utilizing donor gametes
- Elective fertility preservation (gamete/embryo cryopreservation)
- Surgical management of Mullerian anomalies
- Surgery focused on restoration of the reproductive tract in the context of fertility optimization

Family Planning

- Subspecialist training in research, teaching and clinical practice in abortion and contraception
- Provision of reproductive services for treatment of miscarriage, contraceptive care, and induced abortion

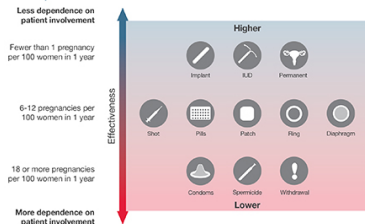


USMEC

US MEDICAL ELIGIBILITY CRITERIA
FOR CONTRACEPTIVE USE, 2016

CDC Center for Disease Control and Prevention
www.cdc.gov/medwatch

Contraceptive Effectiveness of Birth Control Methods¹⁷



Reproductive Infectious Disease

- Collaboration with obstetricians, gynecologists, microbiologists, reproductive epidemiologists, and pharmaceutical specialists
- Study of:
 - Unique organisms responsible for infections in OB/GYN patients
 - Clinical manifestations and sequelae of obstetric and gynecologic infections including sexually transmitted diseases
 - Clinical manifestations and sequelae of fetal/perinatal infections

ZIKA & PREGNANCY

SEXUALLY TRANSMITTED INFECTIONS AMONG YOUNG AMERICANS

Youth bear disproportionate share of STIs. 24,600 new infections each year.

Consequences are particularly severe for young women.

Young people account for a substantial proportion of new STIs:

- 70% Chlamydia
- 63% Gonorrhea
- 49% HPV
- 45% Syphilis
- 26% Herpes
- 20% HIV

Many do not know they're infected because STIs often have no symptoms.

Unique factors place youth at risk:

- Delayed or no condom use
- Multiple partners
- Partner's other partners
- Partner's other partners' other partners
- Partner's other partners' other partners' other partners
- Partner's other partners' other partners' other partners' other partners
- Partner's other partners' other partners' other partners' other partners' other partners

Young people can protect themselves:

- GET TESTED
- REDUCE RISK BEHAVIORS
- GET VACCINATED AGAINST HPV

Pediatric and Adolescent Gynecology

- Evaluation and treatment of patients from infancy and childhood through adolescence and young adulthood, giving special consideration to the physical and emotional needs of young women, and providing support in their transition from pediatric care to gynecologic care

21 REASONS TO SEE A GYNECOLOGIST BEFORE AGE 21

Although most young women don't need to have a gynecologist until they're 21 years old, there are at least 21 reasons why you should see one at least once before age 21.

1. To get a health check-up before you start your period.
2. To get a Pap smear to check for cervical cancer.
3. To get a pelvic exam to check for infections and other problems.
4. To get a STI test to check for sexually transmitted infections.
5. To get a breast exam to check for lumps and other problems.
6. To get a chlamydia test to check for this common STI.
7. To get a gonorrhea test to check for this common STI.
8. To get a syphilis test to check for this common STI.
9. To get a HIV test to check for this common STI.
10. To get a hepatitis B test to check for this common STI.
11. To get a hepatitis C test to check for this common STI.
12. To get a hepatitis D test to check for this common STI.
13. To get a hepatitis E test to check for this common STI.
14. To get a hepatitis A test to check for this common STI.
15. To get a hepatitis G test to check for this common STI.
16. To get a hepatitis F test to check for this common STI.
17. To get a hepatitis H test to check for this common STI.
18. To get a hepatitis I test to check for this common STI.
19. To get a hepatitis J test to check for this common STI.
20. To get a hepatitis K test to check for this common STI.
21. To get a hepatitis L test to check for this common STI.

PAG Conditions

- Obstructive anomalies of the female reproductive system, such imperforate hymen or transverse vaginal septum
- Other Mullerian anomalies
- Ovarian cysts and other pelvic masses
- Menstrual disorders
- Amenorrhea
- Preventative health
- Adolescent sexual health
- Disorders of sexual differentiation

I. Hypoplasia/agenesis

A. Vaginal B. Cervical

II. Unicornuate

A. Communicating B. Noncommunicating

C. Fundal D. Tubal E. Combined

C. No cavity D. No horn

III. Didelphys

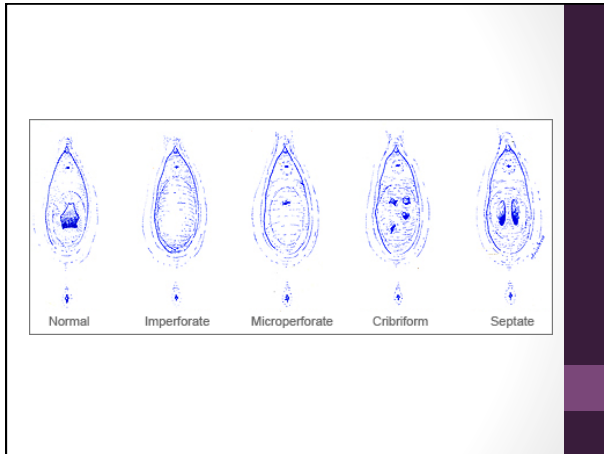
IV. Bicornuate

A. Complete B. Partial

V. Septate VI. Arcuate VII. DES related

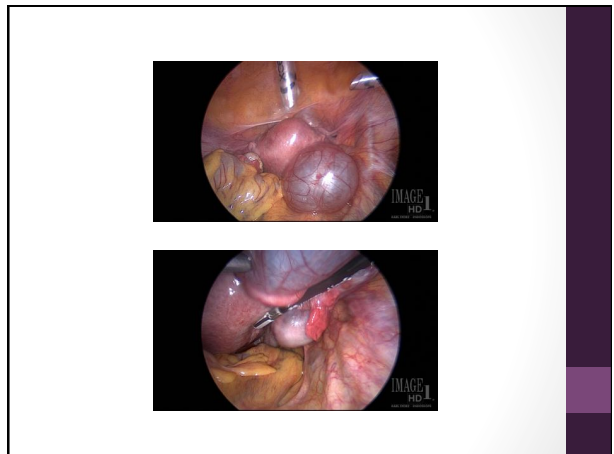
A. Complete B. Partial


Source: F. Guy, C. Campbell, K. Korshak, J. Larson, S. Kessler, M. Moran, C. Callahan, Y. Spring, and S. Gasha. www.medscape.com Copyright McGraw-Hill Education. All rights reserved.





Benign Gynecology

- Menstrual disorders
 - Dysmenorrhea
 - Abnormal uterine bleeding
- Uterine fibroids
- Endometriosis
- Ovarian cysts
- Chronic pelvic pain
- Menopause
- Vulvar health
 - Vulvar dermatoses
 - Vulvodynia





Mature Cystic Teratoma (Dermoid Cyst)



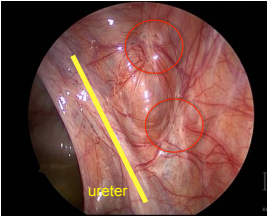
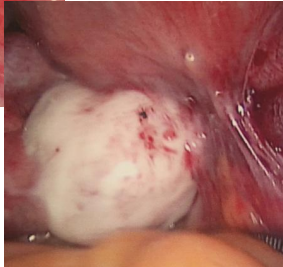
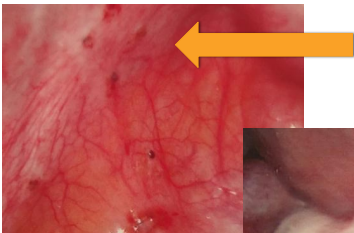
Endometrioma

Minimally Invasive Gynecologic Surgery (MIGS)

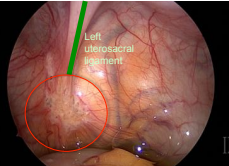
Laparoscopic, robotic, vaginal or hysteroscopic surgeries performed as alternatives to traditional open surgery

Benefits

- Significantly less pain
- Less blood loss and need for transfusion
- Less risk of infection
- Shorter hospital stay
- Quicker recovery and return to normal activities
- Small incisions for minimal scarring
- Better patient satisfaction



uterus

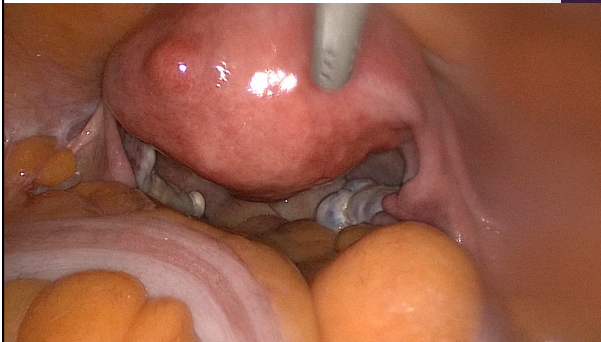


Left uterosacral ligament

Laparoscopic Excision of Endometriosis

LSC Bilateral Salpingo-Oophorectomy

LSC Reduction of Adnexal Torsion



**Laparoscopic Hysterectomy
Step-by-Step**

Future Directions in GYN Research

- Urinary microbiome and its role in incontinence and other conditions
- Selective progesterone receptor modulator (SPRM) for long-term treatment of uterine fibroids
- Male "biological clock" - fertility treatment is less likely to be successful for couples in which the male partner is older than 40
- Novel ovarian cancer drug inhibits thymidylate synthase and selectively enters cancer cells by mimicking the folic acid receptor, which is commonly overexpressed on cancer cells

Good Luck and Have Fun!

- Know your patient
- Know the anatomy
- Ask questions
- You are part of the team!