

## **ENDOMETRIAL CANCER**

### **Disease confined to the endometrium and myometrium**

Postmenopausal patients and patients who do not wish to preserve fertility

- First-line: total hysterectomy with bilateral salpingo-oophorectomy
- Alternative: hysterectomy with ovarian preservation (select patients only)

Patients wishing to preserve fertility

- Usually consists of progestins
- After childbearing is complete, definitive surgical therapy is usually recommended because of the risk of disease recurrence.
- Treatment with progestins may also be considered for patients who are not suitable candidates for surgery because of medical comorbidities

### **Lymph node involvement or locally advanced disease**

- Total hysterectomy with bilateral salpingo-oophorectomy
- PLUS adjuvant chemotherapy and/or radiotherapy

### **Metastatic disease**

- Palliative therapy focused on symptom control
- May include surgical tumor reduction and/or medical therapy (palliative chemotherapy, radiotherapy, hormone therapy, or immunotherapy)

## **CERVICAL CANCER**

### **Early disease (FIGO stages IA, IB1, IB2 IIA1)**

Surgery is preferred.

- Conization (with or without pelvic lymphadenectomy) and radical trachelectomy are fertility-sparing options.
- Hysterectomy (simple hysterectomy, modified radical hysterectomy, and radical hysterectomy) with bilateral pelvic lymphadenectomy is usually recommended for more advanced disease (stage  $\geq$  IA2)

If surgery is not feasible: Radiotherapy may be considered

### **Locally advanced disease (FIGO stages IB3, IIA2, III, IVA)**

- Concurrent chemoradiotherapy (CCRT) using platinum-based agents is preferred.
- Pelvic exenteration may be considered in select patients with stage IVA cervical cancer that has not extended to the pelvic side wall.

**Distant metastases (FIGO Stage IVB)**

- CCRT may be considered depending on the likely prognosis.
- Palliative radiotherapy and/or systemic chemotherapy can be considered for symptom control.
- Consider hormone replacement therapy for patients < 50 years of age who have lost ovarian function

**OVARIAN CANCER****Surgery**

Surgical staging: to obtain pathological specimens and evaluate the extent of cancer spread

- Hysterectomy with bilateral salpingo-oophorectomy
- Pelvic and paraaortic lymph node dissection
- Omentectomy
- Peritoneal cytology

Surgical debulking: Whenever possible, maximal cytoreduction (i.e., removal of visible tumor) should be performed to improve long-term outcomes

- Optimal debulking is defined as < 1 cm of residual tumor. [25]
- Used in disease stages I–III, and, occasionally, IV.

**Chemotherapy**

- Most patients with ovarian cancer should receive adjuvant chemotherapy except for patients with low-grade, stage I disease.
- Neoadjuvant chemotherapy followed by interval debulking surgery can be considered in patients with advanced-stage disease and high perioperative risk

**Targeted molecular therapy**

- BRCA1- or BRCA2-positive disease [28]
- Maintenance therapy after surgical debulking and chemotherapy

**Radiotherapy**

- Reserved for patients with dysgerminomas or metastatic disease

**ENDOMETRIOSIS****Pharmacological therapy**

Mild to moderate pelvic pain without complications

- Empiric treatment with NSAIDs and continuous hormonal contraceptives
- NSAIDs alone if pregnancy is desired
- Synthetic androgens (e.g., danazol)

Severe symptoms: GnRH agonists (e.g., buserelin, goserelin) and estrogen-progestin OCPs

## **Surgical therapy**

First-line: laparoscopic excision and ablation of endometrial implants

- To confirm the diagnosis and exclude malignancy
- To treat patients who do not respond to pharmacological therapy
- To treat expanding endometriomas and complications

Second-line: open surgery with hysterectomy with or without bilateral salpingo-oophorectomy

- Treatment-resistant symptoms
- No desire to bear additional children

## **ABORTIONS/ MISCARRIAGES**

- If uterus is larger than 12 weeks, or patient is at all unstable, evacuation of uterus under GA
- THREATENED MISCARRIAGE: Reassure, counsel, booking, discharge, 60% will not abort
- COMPLETE MISCARRIAGE: All products passed. Complete fetus with placenta after 16 weeks. Contraception. Discharge
- MISSED MISCARRIAGE: Misoprostol + MVA. If second trimester Misoprostol per protocol
- INCOMPLETE MISCARRIAGE: MVA if < 9 weeks. Evacuation of uterus if > 9 weeks

## **PCOS**

### **Patients not planning to conceive**

- Combined oral contraceptives (COCs) - first-line treatment for hyperandrogenism and/or menstrual cycle abnormalities
- Metformin: improves menstrual irregularities, metabolic outcomes, and weight (especially when combined with lifestyle modifications)
- Antiandrogens (spironolactone, finasteride, flutamide) - can be considered for treatment of hirsutism and androgen-related alopecia in patients unable to take or tolerate COCs

### **Patients planning to conceive**

- Letrozole: first-line therapy for ovulation induction
- Clomiphene: alternative to letrozole
- Exogenous gonadotropins: The low-dose regimen is the second-line treatment for ovulation induction.
- Metformin - First-line therapy for insulin resistance
- Additional fertility interventions - Laparoscopic ovarian drilling (Second-line treatment for ovulation induction), In vitro fertilization (can be offered as third-line therapy)

## **Management of other PCOS manifestations**

- Hirsutism: Nonpharmacological therapy is first-line (e.g., electrolysis, light-based hair removal via laser or photoepilation)
- Acne: Consider topical therapies (e.g., benzoyl peroxide, topical antibiotics)

## **PELVIC ORGAN PROLAPSE**

### **Asymptomatic POP**

- No treatment is required.
- Pelvic floor muscle training may be considered

### **Symptomatic POP: conservative treatment or surgery**

#### **Conservative treatment**

- Vaginal pessary
- Kegel exercises: pelvic floor muscle training (also as a preventive measure)

## **SURGERY**

- Obliterative surgery: colpocleisis, a procedure that involves sewing the walls of the vagina together to provide support for pelvic organs.
- Reconstructive surgery (abdominal or vaginal approach): to restore the original position of the descended pelvic organs
  - Sacrocolpopexy (with vaginal vault suspension and hysterectomy): repair of apical or vaginal vault prolapse by hysterectomy and fixation of the vaginal apex to the sacrum
  - Suspension techniques: fixation or suspension of the prolapsed organ by using native tissues such as endopelvic fascia, iliococcygeus muscle, uterosacral ligament, or sacrospinous ligaments
  - Colporrhaphy: reinforcement of the anterior or posterior vaginal wall for the repair of cystocele or rectocele
  - Sacrohysteropexy: fixation of the cervix to the sacrum for the repair of uterine prolapse

## **UTERINE LEIOMYOMA**

### **MANAGEMENT**

- Monitor reported symptoms for any worsening at annual well-woman exams.
- Typically, no active treatment is required.
- Surveillance imaging is not routinely required.
- Recommend follow-up if symptoms change or pregnancy is planned.

## **Pharmacotherapy**

### **Heavy menstrual bleeding without features of mass effect**

- GnRH antagonists in combination with hormone therapy
- Levonorgestrel intrauterine device (IUD)
- Oral contraceptives (combined oral contraceptive pill or progesterone-only pill)
- Tranexamic acid

### **Mass effect with or without heavy menstrual bleeding**

- GnRH agonists (e.g., leuprolide)

### **Nonsurgical interventional treatments**

- Uterine artery embolization
- Radiofrequency ablation - Ultrasound-guided targeted coagulative necrosis of leiomyoma

### **Surgery**

- Myomectomy - A uterus-preserving surgical option for the removal of leiomyomas
- Hysteroscopic myomectomy is preferred for submucosal leiomyomas.
- Laparoscopic myomectomy may be preferred for subserosal and most intramural leiomyomas.
- Hysterectomy - Patients seeking definitive treatment who do not desire fertility and/or have had an insufficient response to alternative treatments