

Ovarian cancer: Postoperative

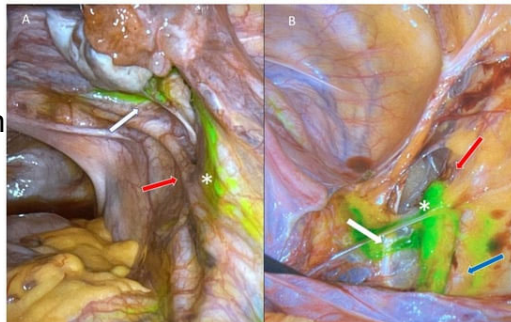
- Delayed return of bowel function “Ileus”
 - Usually occurs POD#3-5
 - Tx: Bowel rest or NGT
- Hematoma
- Infection (POD#7)
- If rectosigmoid resection → NOTHING IN RECTUM
- Epidural or TAP block for pain control
- ERAS protocol
 - ADAT and out of bed!! Incentive spirometer
 - Multimodal analgesia (Tylenol, Ibuprofen, Oxy)
- Foley catheter dc'd POD#1

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Endometrial cancer: Surgical staging

- **Most common GYN ca**
- 70,000 cases/year in US
- **Robotic or Laparoscopic**
- 3-5 – 5 mm incisions
- Same day or 1 night
- Foley comes out in the OR

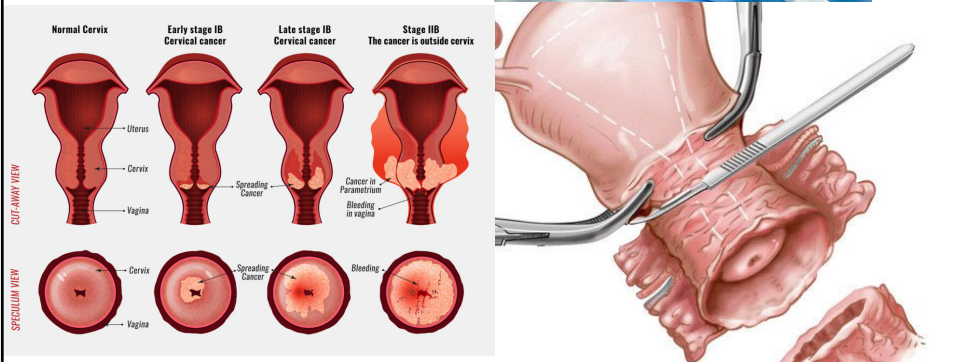
- Sentinel pelvic LN dissection
- Stage IB or > → RT
- Stage III → Chemo 6 cycles



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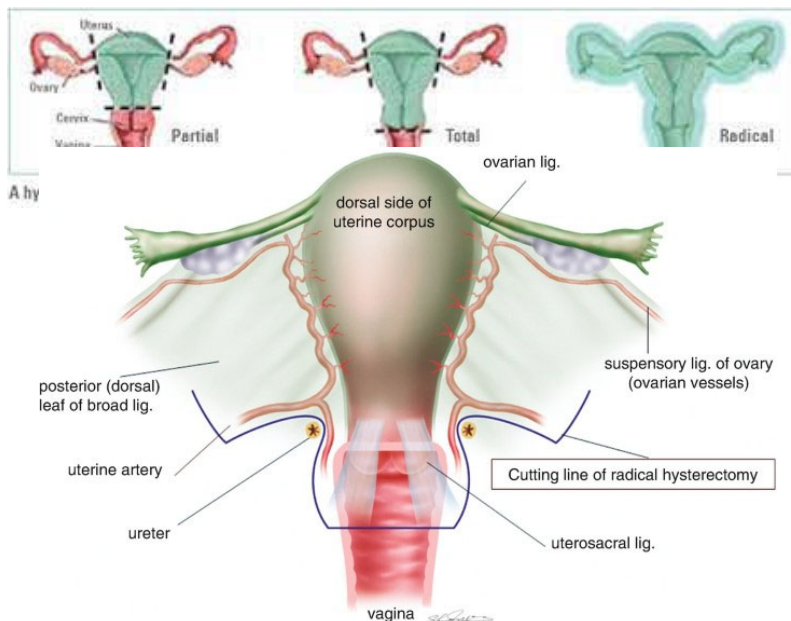
Cervical cancer: Early stage

- 13,000 new cases dx and 4,000 women die in US/ year
- **HPV 16/18 = Preventable!**
- **VACCINATE!!**



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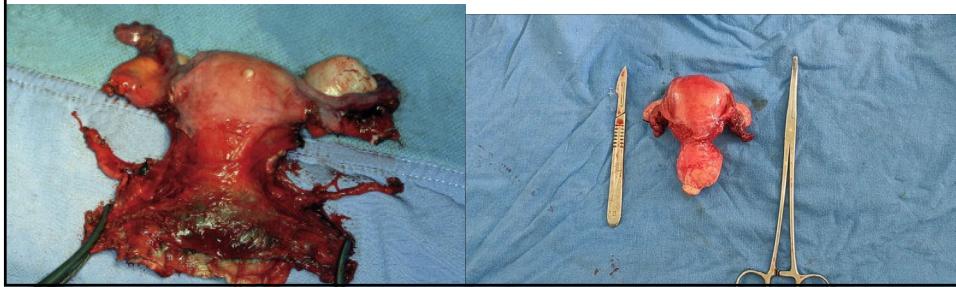
“Radical Hysterectomy”



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Cervical cancer: Postoperative

- **Urinary retention (70%)**
 - Foley for 7 days – trial of void in clinic
 - Abx for Foley removal (debatable)
- Fever w/in 48 hours of surgery is almost always due to atelectasis → ambulation, IS
- Superficial wound infxn/hematoma, UTI & pelvic infxn (10-20%)



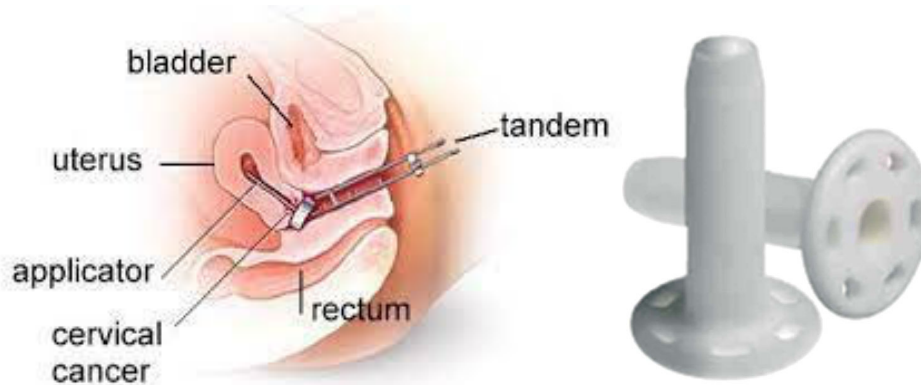
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Cervical cancer: Locally advanced (Stage IIB-IVA)

- **External Beam Radiation Therapy “EBRT”**
- Prescribed by Radiation Oncologists
- **5 weeks** of treatment (Mon-Fri)
- Cisplatin IV on Mondays – “Radiosensitizer”

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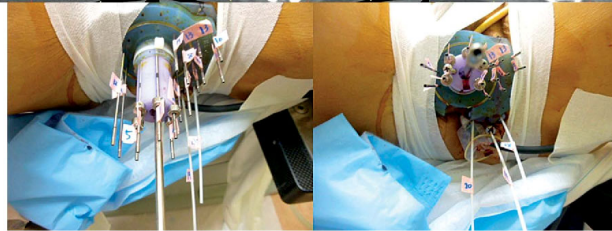
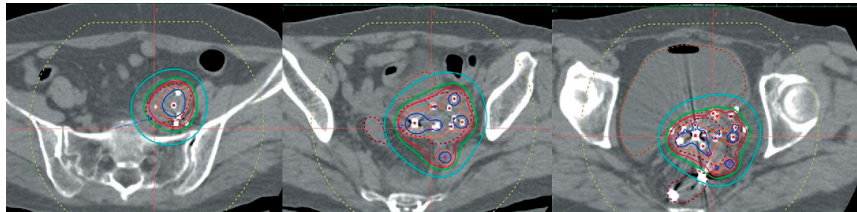
Brachytherapy: “Tandem & Ring”



- Internal radiation to the tumor – **VERY important for the cure!**
- **Smit sleeve** inserted by GYN/ONC and sutured to the cervix
- **Outpatient treatment:** 5 RT visits, tandem is placed into the Smit sleeve and RT delivered

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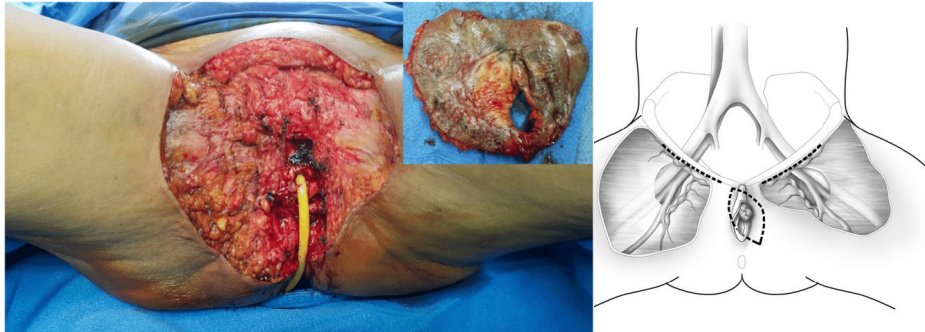
Brachytherapy: “Interstitial” / “Needles”



- Admitted to the Hospital for 2-3 days
- Epidural for pain control
- Foley catheter
- Immobilizing devices ***CANNOT MOVE WITH NEEDLES***

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Vulvar cancer



- Rate of new cases: 2.5 per 100,000 women per year
- HPV or non-HPV associated
- **Surgery:** Radical vulvectomy with LN dissection
- **Locally advanced:** RT to vulva, pelvis & groins
- **Metastatic:** Chemotherapy

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Fertility Sparing Treatment

- **Cervical**
 - Stage IA1, LVSI negative: CKC
 - IA1--> IB1: Radical trachelectomy, LND w/ cerclage
 - IA1 w/ LVSI, Stage IA2 cancers, and Stage IB1
- **Ovarian**
 - USO w/ staging (omentectomy, pelvic+PA LNs, peritoneal biopsies), keep uterus in place
 - Germ cell
 - Sex cord stromal (X lymph nodes)
 - Borderline or low malignant potential (X lymph nodes)
 - Mucinous (Stage I)
 - Hereditary cancer syndrome? --> NOT eligible
- **Endometrial**
 - Endometrioid grade 1 “well differentiated”
 - No evidence of metastatic disease on imaging
 - No myometrial invasion on MRI
 - No contraindications to progestin therapy/pregnancy

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Overview

- Preinvasive disease
- Cancer staging and surgery:
 - Ovarian cancer
 - Endometrial cancer
 - Cervical cancer
 - Vulvar cancer
- Postoperative expectations/concerns
- **Treatment in a Nutshell**
- Side Effects

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Treatment in a Nutshell

- **Uterine**
 - Surgery +/- adjuvant RT or chemo
 - Adjuvant radiation (Brachytherapy) if **high intermediate risk early stage**
 - Risk factors: Age, LVSI, grade 2-3, outer 1/3 invasion
 - Stage III or >: Carbo/Taxol
- **Ovarian:** Surgery then Carbo/Taxol
- **Vulvar:** Surgery (early) or ChemoRT w/ Cisplatin (late stage)
- **Cervix:**
 - Surgery (early)
 - ChemoRT w/ Cisplatin (>Stage IIA)
 - Cisplatin/Taxol/Avastin (distant metastatic)

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GYN Chemotherapy Side Effects

- Myelosuppression
 - Carboplatin → Low platelets (easy bruising)
 - Anemia & Neutropenia
- Hair loss
- Neuropathy
 - Numbness/tingling in toes/finger tips
- Fatigue/weakness/arthritis
- Nausea/emesis
 - Prevented w/ premedications
- Allergic reaction

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Non-chemotherapy treatment

- **PARP inhibitors** –I poly-ADP ribose polymerase → double strand breaks
 - BRCA 1/2 patients
 - **Olaparib, Rucaparib, Niraparib**
 - Anemia, fatigue, rare: myelodysplastic syndrome
- **VEGF inhibitor** –I angiogenesis
 - **Bevacizumab**
- Hypertension, rare: bowel perforation
- PD-1 inhibitor – **Pembrolizumab** - stimulates immune system to kill cancer cells

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GYN Radiation Side Effects

- Diarrhea (bloody or mucous stools)
- Skin irritation
- Nausea, fatigue
- Bladder irritation/urinary symptoms
- Vaginal pain/bleeding/discharge
- Irregular menstruation or early menopause



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Sexual Side Effects

- Distorted anatomy
- Vaginal dryness
- Hot flashes
- Mood swings/sleep changes
- Pain with sexual intercourse
- Decreased interest in sex
- Vaginal stenosis from RT

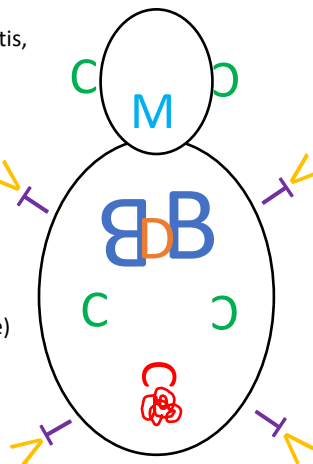
There are treatments!

Many patients are eligible for HRT

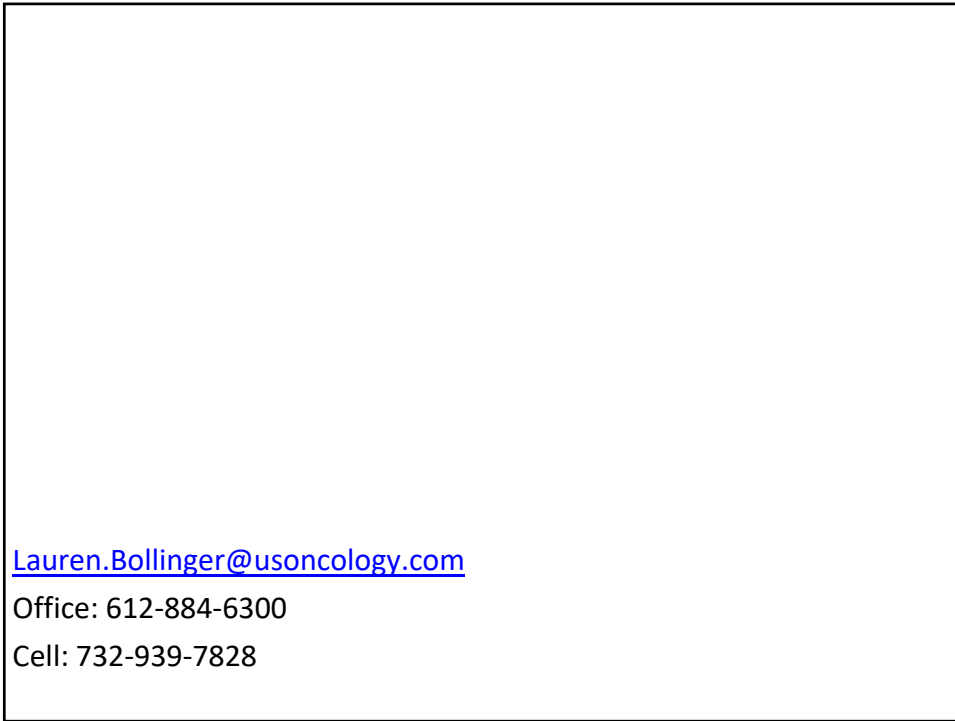
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CHEMOTHERAPY TOXICITIES

- **Alkylating agents** – disrupt DNA replication (cell cycle nonspecific)
 - **Cyclophosphamide**/Ifosfamide – hemorrhagic cystitis, anemia (Tx: Mesna)
 - **Cisplatin** – oto- & nephrotoxicity
 - Carboplatin- myelosuppression (platelets)
- **Taxanes** – induce stable polymerization of microtubules
 - **Paclitaxel** – bone marrow suppression, neuropathy
- **Antitumor antibiotics**
 - **Bleomycin** – Pulmonary fibrosis.
 - **Doxorubicin** – Cardiac toxicity
 - Liposomal doxorubicin- hand-foot syndrome
- **Antimetabolites** – interfere with DNA synthesis (S phase)
 - 5FU
 - **Methotrexate** – mucosal toxicity, anemia
 - Tx: Folic acid
- **Vinca Alkaloids** – Arrest cell in M phase, toxic to mitotic spindle
 - **Vincristine, Vinblastine** – Peripheral neuropathy



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