

Ovarian Cancer: Importance of Surgeon

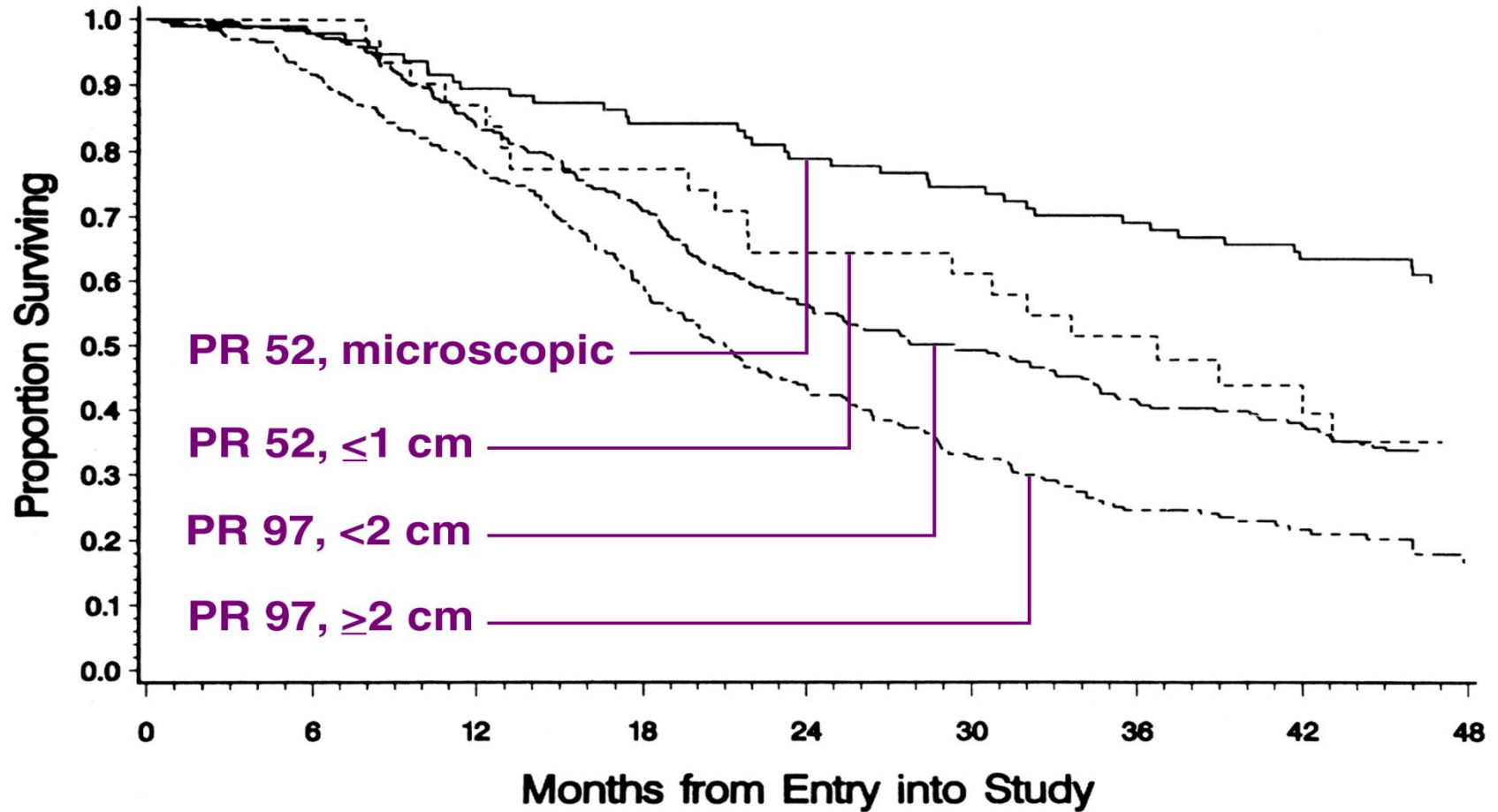
- **1,866 women with ovarian cancer**
- **Significant advantage for those women managed by Gynecologic Oncologist**
 - **More likely to have optimal cytoreduction**
 - **Reduction in death by 25% (p= 0.005) compared to Ob/Gyn and General Surgeons**

**Junor et al, Brit J Ob/Gyn, 11/99;
Earle et al., Goff & Aletti et al.**

Ovarian Cancer: Surgical Treatment for Advanced Disease

- **Significant survival advantage for women optimally cytoreduced**
- **Procedures may include:**
 - ***En bloc* resection of uterus, ovaries and pelvic tumor**
 - **Omentectomy**
 - **Bowel resection**
 - **Removal of diaphragmatic and peritoneal implants**
 - **Splenectomy, appendectomy**

Ovarian Cancer: Survival by Residual Disease



GOG Protocols (PR) 52 and 97

Ovarian Cancer: Surgical Rx for Early Stage Disease

- **Optimal therapy: TAH BSO + staging (including pelvic and PALN)**
- **In younger women, reproductive conservation may be appropriate**
- **Approximately 30% will have histologic evidence of metastatic disease**

- **After surgery, the pathologist reviews the histology and gives a break down of cell type, differentiation, vascular space involvement, lymph node results, cytology from peritoneal washings, and other surgical site biopsies for complete staging information at Tumor Board.**
- **Tumor Board is GYN Oncology, pathology, radiation therapy and often someone from medical oncology.**
- **Decide on BEST treatment given current evidence and patients Karnofsky score (function) NOT age. THEN patients presented with information by GYN oncology MD and PATIENT and her family decides.**

- **All patients should receive a taxane and a platinum**
- **73% response rate**
- **Median survival: 38 months for Stage III/IV**
- **Many new agents being tested**
- **Encourage clinical trial participation**

- **RV pelvic exam and CA125 q 3-4 mo x 2 years, q 6 mo for years 3-5**
- **CT scan for symptoms**
- **General health maintenance (mammography, Pap smear, bone density, colon-rectal screening, cholesterol, etc.)**
- **Discuss HRT, diet, exercise**

- **75% of patients relapse**
- **Treatment options include:**
 - **Secondary cytoreduction**
 - **Retreatment with platinum/taxane**
 - **Second-line therapies, including chemo, radiation, immunologic, gene therapies**
 - **Encourage clinical trials**

**785 women with
ovarian cancer
studied**

Stage	Appropriate Treatment
I	10%
II	15%
III	71%
IV	53%

Munoz JCO 1997

- **118 women in Southeast England**
- **Only 43% appropriately managed**
- **Patients inappropriately managed had a 1.48 increased risk of death (95% CI, 1.34-4.78, p=0.004)**

Wolfe et al Eur J Cancer 1997

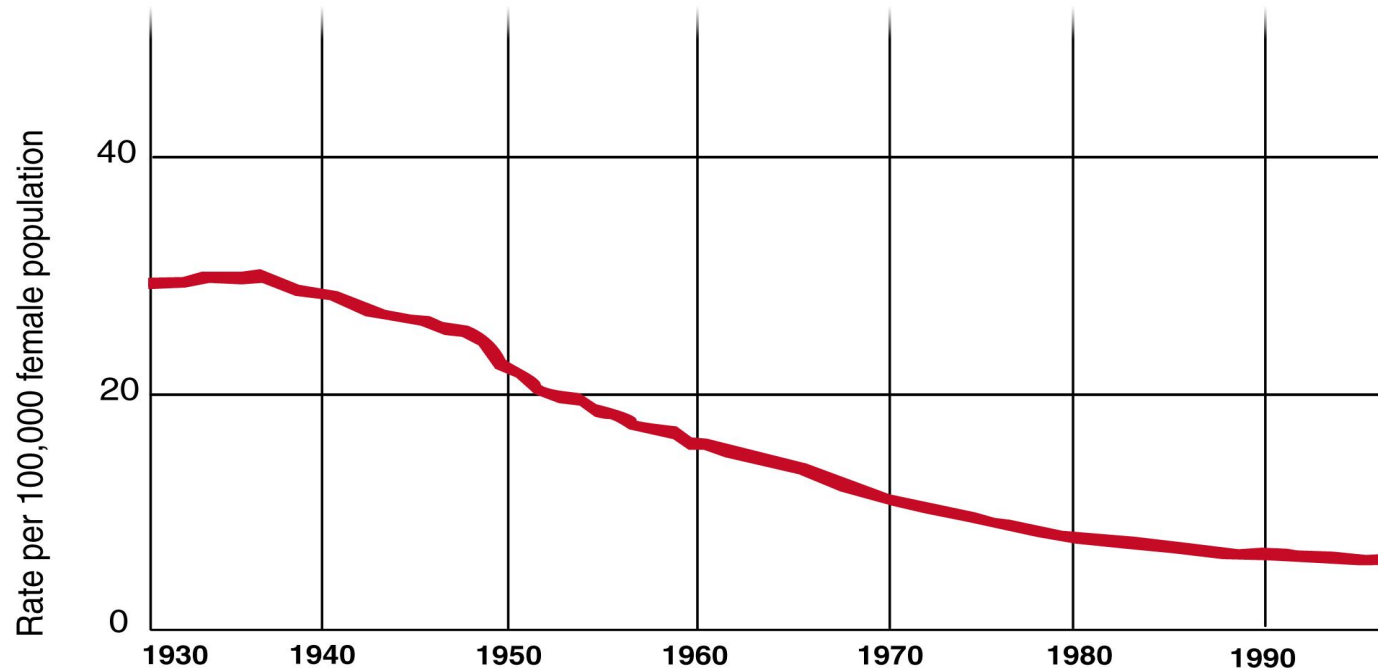
- **Cost-effective screening**
- **Early detection**
- **Prevention**
- **Reversing chemoresistance**
- **Immunotherapy**
- **Gene therapy**

- **Edith will undergo a pelvic washing, TAH, BSO, pelvic lymph node dissection, and after a malignant frozen section is returned, then a staging surgery with additional lymph node dissection and inspection/palpation of diaphragm, liver, and aorta.**
- **The majority of cases are diagnosed at stage 3C with papillary serous histological typing which requires chemotherapy. First line treatment is 6 treatments of Carboplatin and Taxol every 21-28 days. Despite research, 50% will still recur in 2 years. The advances mean healthier lives, not longer ones.**
- **I was invited to their 50th wedding anniv. Party and continue to see her working the booth at the local agricultural fair!**



- **Jody, age 33, G.1 P.0, WSF, newly employed as fork lift operator for lumber company presents with post-coital bleeding. PMH includes: 30 pack year smoking hx, normal pap last done 3 years ago when pt. last had medical insurance, approximately 10 sex partners and most of them unprotected (without condoms). She uses OCPs for contraception, and has since age 16.**

Cervical Cancer: Have we decreased the incidence in the U.S.?



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- **With the advent of the Pap smear, the incidence of cervical cancer has dramatically declined.**
- **The curve has been stable for the past decade because we are not reaching the unscreened population.**

- **Early age of intercourse**
- **Number of sexual partners**
- **Smoking**
- **Lower socioeconomic status**
- **High-risk male partner**
- **Other sexually transmitted diseases**
- **Up to 50% of the U.S. population is infected with HPV**

- **Cervical cancer is a sexually transmitted disease.**
- **HPV DNA is present in virtually all cases of cervical cancer and precursors.**
- **Some strains of HPV have a predilection to the genital tract and transmission is usually through sexual contact.**
- **Little understanding of why small subset of women are affected by HPV.**
- **HPV may be latent for many years before inducing cervical neoplasia.**

- **Educate all providers, men and women regarding HPV and the link to cervical cancer.**
- **Adolescents are an especially high-risk group due to behavior and cervical biology. ENCOURAGE the vaccine for those aged 9-26.**
- **Delay onset of sexual intercourse.**
- **Condoms may help prevent sexually transmitted disease.**

Cervical Cancer Detection: Dr. George Papanicolaou



- First Pap at age 18 or onset of sexual relations, whichever comes first
- Annual Pap for all women with risk factors
- Following three normal exams in the absence of risk factors, less frequent Paps may be considered in consultation with a physician

Cervical Cancer: Pap Smear Technique

- **Do not use lubricants with exam other than a small amount of water.**
- **The endocervical canal and exocervix should be sampled separately.**
- **The slide should be promptly fixed with thin cell distributions to avoid clumping and air drying artifact; optimally use the liquid pap tests. Liquid testing allows cytotechs to view individual cells.**
- **Any visible cervical lesion requires a biopsy regardless of the Pap results.**

- **The Bethesda system**
 - **LGSIL**
 - **HGSIL**
 - **AGUS/ASCUS**
- **Histologic diagnoses**
 - **CIN 1**
 - **CIN 2**
 - **CIN 3/CIS**
 - **Invasive cancer**

Cervical Cancer: Screening Window of Opportunity

- **Single Pap false negative rate is 20%.**
- **The latency period from dysplasia to cancer of the cervix is variable.**
- **50% of women with cervical cancer have never had a Pap smear.**
- **25% of cases and 41% of deaths occur in women 65 years of age or older.**

Cervical Cancer: Who Is Not Getting a Pap Smear?

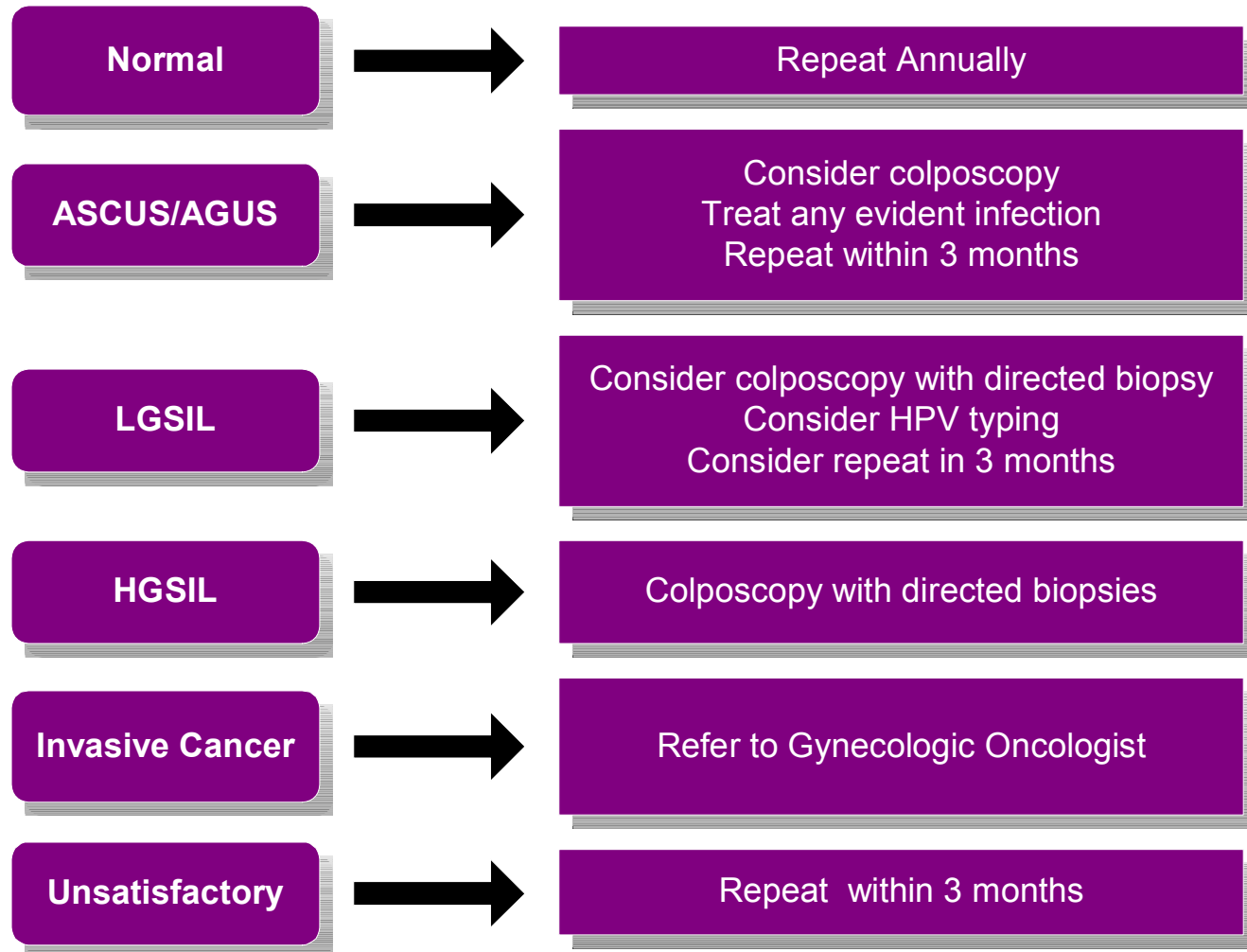
- **Uninsured**
- **Elderly**
- **Ethnic minorities, especially Hispanic and African-American women**
- **Poor women, especially in rural areas**
- **Developing nations**
- **Reasons for lack of screening**
 - **Attitudes and concerns**
 - **Logistical problems**

Cervical Cancer: What is the transformation zone?



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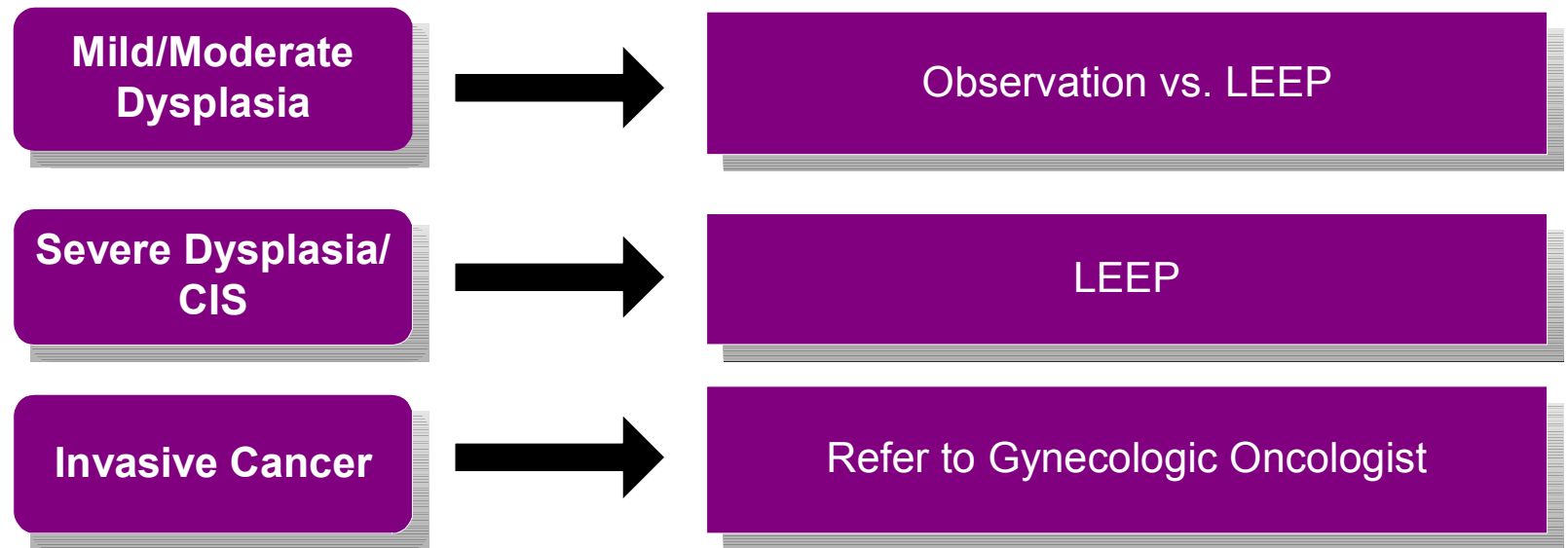
Cervical Cancer: Pap Smear Result



Cervical Cancer: Colposcopy



Cervical Cancer: Colposcopic Biopsy Result



Cervical Cancer: Signs and Symptoms of Invasive Disease

- **May be silent until advanced disease develops**
- **Post-coital bleeding**
- **Foul vaginal discharge**
- **Abnormal bleeding**
- **Pelvic pain**
- **Unilateral leg swelling or pain**
- **Pelvic mass**
- **Gross cervical lesion**

- **Squamous carcinoma of the cervix that has <3mm invasion from the basement membrane**
- **The diagnosis must be based on a cone or hysterectomy specimen.**
- **No lymph-vascular invasion**
- **May be successfully treated with fertility preservation in selected patients**
- **These patients should all be referred for consultation.**

Cervical Cancer: Treating Early Cervical Cancer

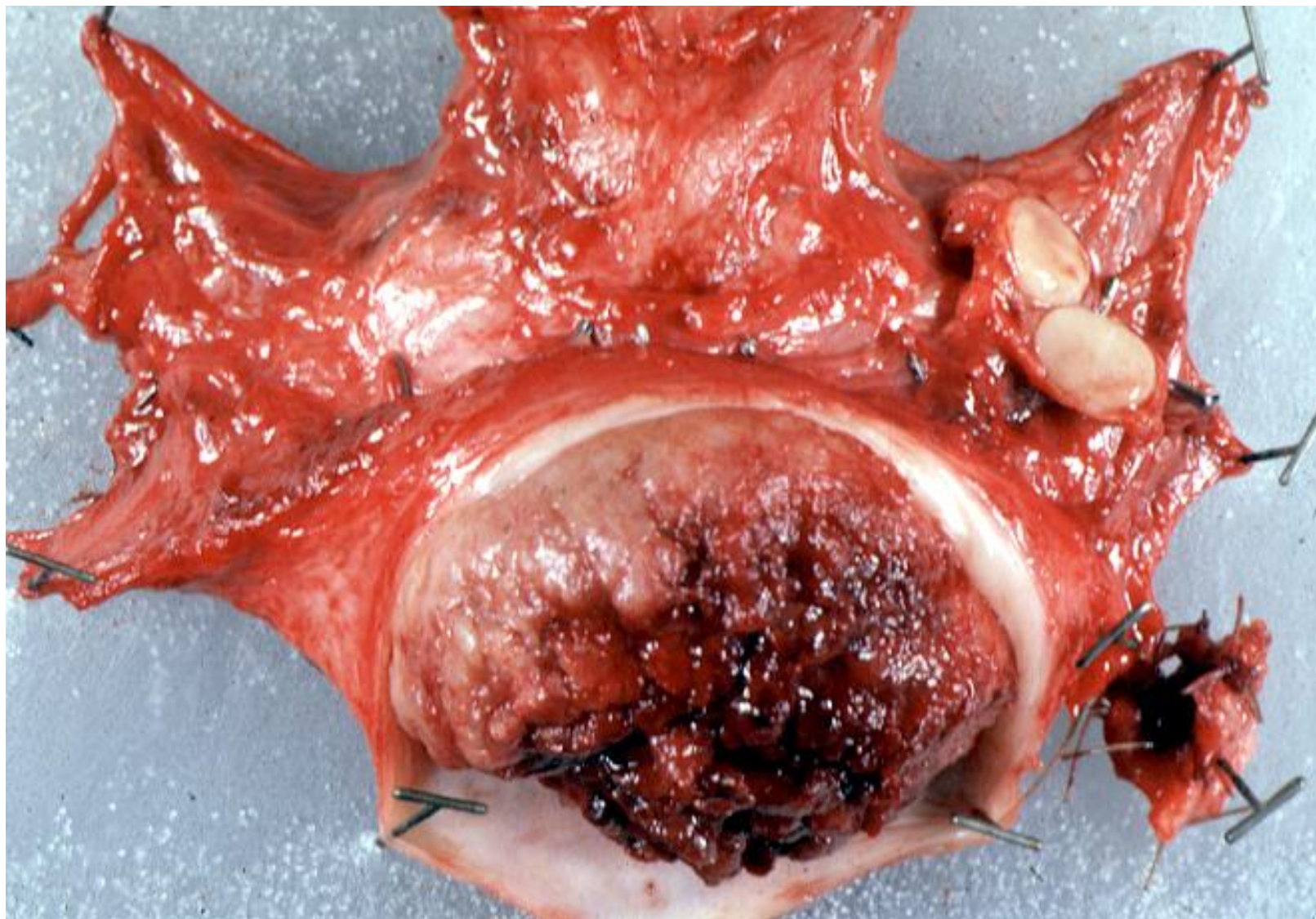
- **Conization or simple hysterectomy (removal of the uterus) - microinvasive cancer**
- **Radical hysterectomy - removal of the uterus with its associated connective tissues, the upper vagina, and pelvic lymph nodes. Ovarian preservation is possible.**
- **Chemoradiation therapy**

- **Vary greatly by degree of cancer involved.**
- **Counter-intuitive, the more disease present means surgery is aborted and the patient is radiated with external beam pelvic radiation and 1-2 inpatient sessions with tandem and ovoids. This will also include some platinum based chemotherapy to radio-sensitize the tissue.**
- **Less disease = cut it out. Surgery and no radiation.**

Cervical Cancer: Treating Advanced Cervical Cancer

- **Chemoradiation is the mainstay of treatment**
 - **4-5 weeks of external radiation**
 - **Two or more implants (brachytherapy)**
 - **Concurrent Cisplatin-based chemotherapy significantly improves the chances of survival**
 - **Radiation treats the primary tumor and adjacent tissues and lymph nodes**
 - **Chemotherapy acts as a radiation sensitizer and may also control distant disease**

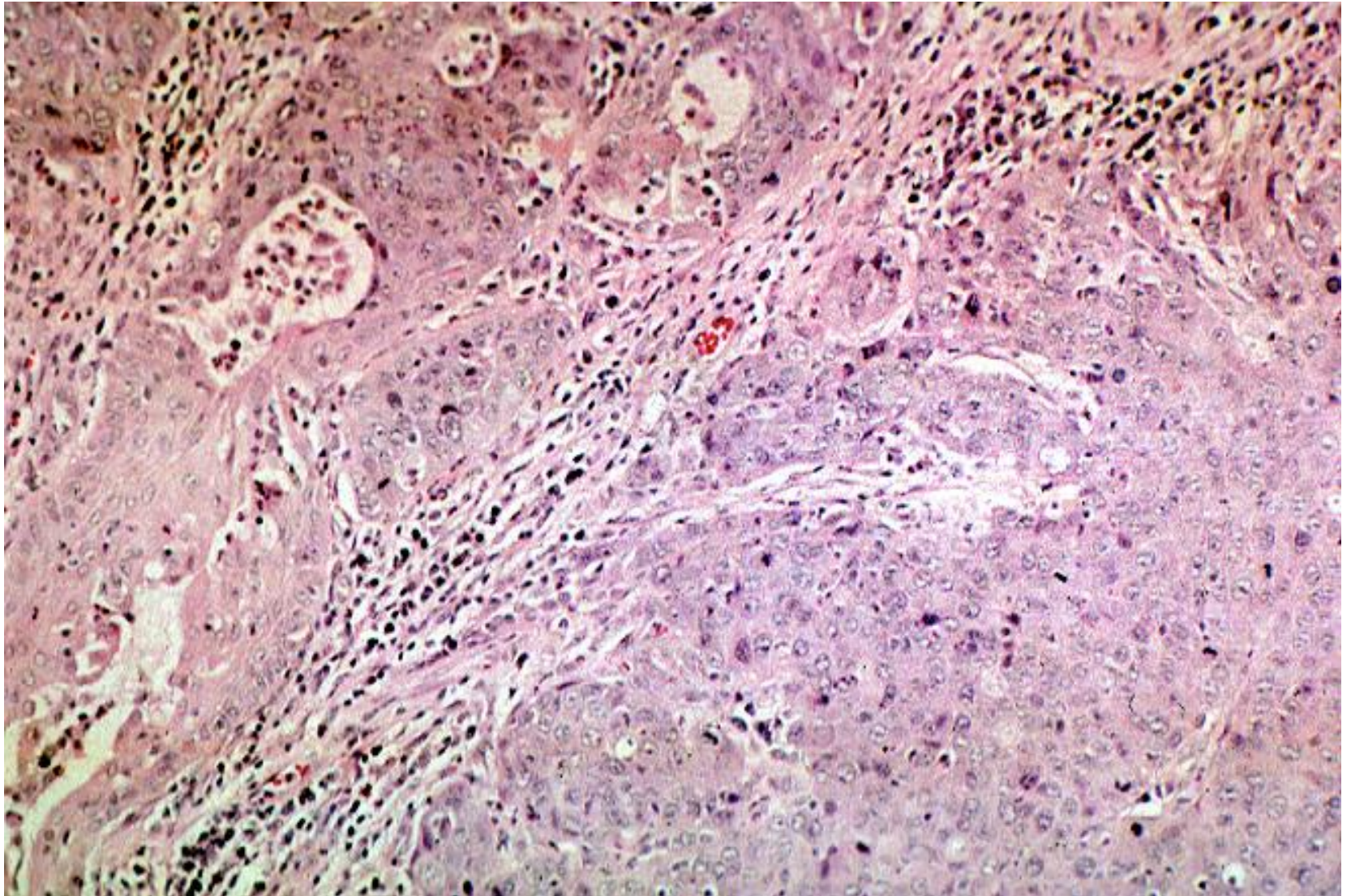
Cervix cancer—gross view



Cervical Cancer: Five-Year Survival

Stage	Rad Hyst	Chemo/XRT
Ib	85-95%	85-90%
IIb	N/A	70-80%
IIIb	N/A	55-65%

Cervical cancer—microscopic view



Cervical Cancer: Surveillance Post-therapy

- **Post-treatment surveillance is, by definition, applied to asymptomatic patients.**
- **Reassurance is an important component.**
- **An acceptable schedule of follow-up visits is every 3-4 months during the first 2 years, every 6 months for the next 3 years, and annually thereafter.**
- **The most critical component of the follow-up visit is a thorough pelvic exam.**
- **Many gynecologic oncologists recommend periodic Pap smears and chest radiographs.**

Cervical Cancer: Signs and Symptoms of Recurrent Disease

- **Weight loss, fatigue and anorexia**
- **Abnormal vaginal bleeding**
- **Pelvic pain**
- **Unilateral leg swelling or pain**
- **Foul discharge**
- **Signs of distant metastases**
- **NOTE: must distinguish radiation side effects from recurrent cancer**

Cervical Cancer: Management of Recurrence

- **Chemoradiation may be curative or palliative, especially in women who have not received prior radiation therapy.**
- **Isolated soft tissue recurrence may occasionally be treated by resection with long-term survival.**
- **Chemotherapy is palliative in nature.**

- **Areas of concern and study**
 - **Reproductive function**
 - **Sexual function**
 - **Urinary and bowel effects**
 - **Self-image**
 - **Issues surrounding sexual transmission of HPV**

Cervical Cancer: How do we eradicate cervical cancer?

- **Research**
 - **Promising work with HPV vaccine**
 - Several commercial development efforts under way
 - Vaccines are being designed for both prophylaxis and therapy
 - **Encourage voluntary participation in clinical trials**

- **Jody had Stage 2B. This diagnosis is the only GYN cancer that is clinically staged. This means that even after surgery/radiographic imaging showing an increased amount of disease, she is staged according to the original diagnosis. She had carcinoma beyond the cervix, but not to the lower third of the vagina and not to the pelvic wall.**
- **She was treated with radiation & chemo.**