Gynaecological Cancer Case Studies

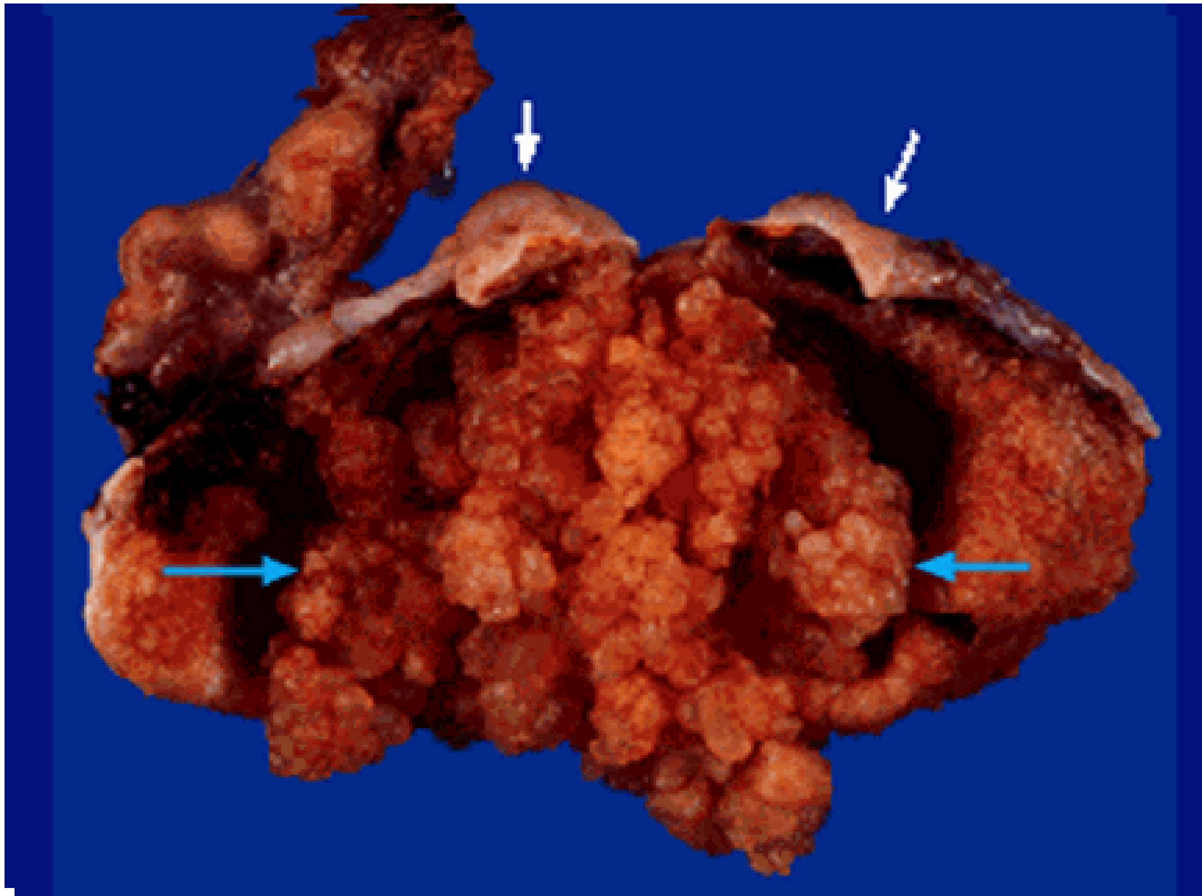
Dr Ai Ling Tan
Gynaecological Oncologist
Ascot Clinic, ADHB

ROTORUA GPCME 2012

GP and Cancer Care

- First point of contact – able to identify early symptoms of cancer
- Key role in prevention and screening- cervical and genetic cancers
- Follow up after treatment
- Palliative care

OVARIAN CANCER



CASE 1

- 58 year old who presents with abdominal pain(non specific) for a few months initially thought she was putting on weight.
- Now feels that her abdomen is distended, having frequency and feels generally tired

- “***One of the main difficulties in primary care is to differentiate between patients who symptoms may be due to cancer, and the much larger, but similar group of patients who do not have cancer.”***

Summerton N 1999 Diagnosing cancer in primary care

OVARIAN CANCER SYMPTOMS

- Pelvic and abdominal pain
- Increased abdominal size and bloating
- Urinary frequency/urgency
- Difficulty eating/feeling full

Beat Ovarian Cancer

- **B** is for **Bloating** (it is persistent and doesn't come and go)
- **E** is for **Eating** (difficulty eating & feeling full more quickly)
- **A** is for **Abdominal** (and pelvic pain you feel most days)
- **T** is for **Talking** (tell your GP)

Ovarian Cancer Australia
Symptom diary

Please tick a box on each day that you experience symptoms

	Week one	Week two	Week three	Week four	Rate symptoms
Pelvic/ abdominal pain	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	How would you rate your symptoms? (1 is mild and 10 severe) Rate
Increased abdomen size/bloating	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	How would you rate your symptoms? (1 is mild and 10 severe) Rate
Urinary frequency/ urgency	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	How would you rate your symptoms? (1 is mild and 10 severe) Rate
Difficulty eating/ feeling full	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday ☐	How would you rate your symptoms? (1 is mild and 10 severe) Rate

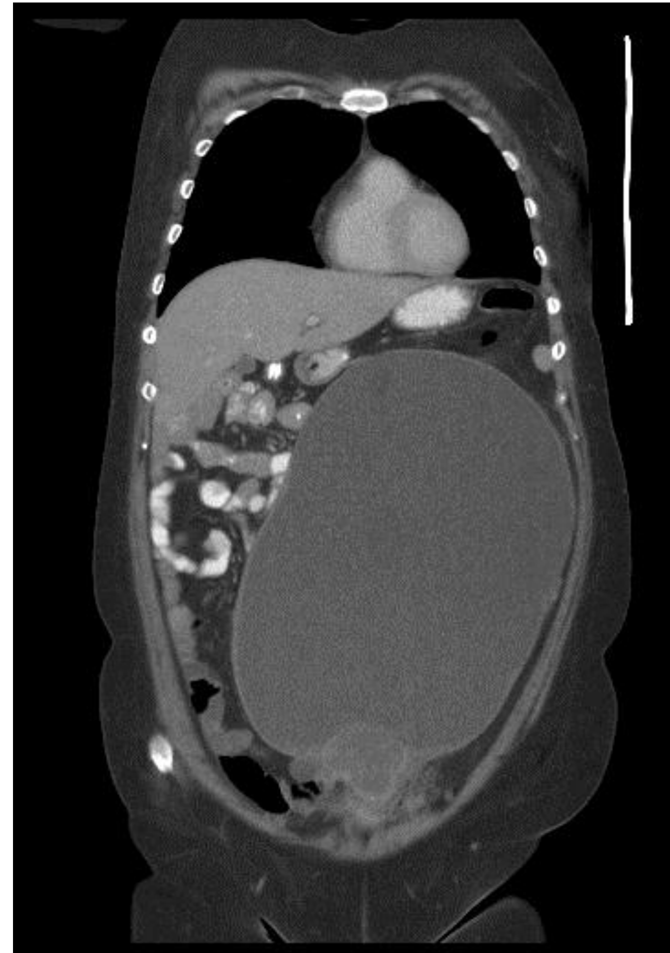
Additional symptoms & notes

Some women experience symptoms additional or different to the four key symptoms above. Tick the box next to any of the other symptoms listed here if you have experienced them in the last 4 weeks and note how frequent or severe they are.

You can also use the space here to describe how any of your symptoms are affecting your daily life, or to include anything else you want your doctor to know.

Symptom	How often?	How severe?
☐ Changes in your bowel habits		
☐ Unexplained weight gain or loss		
☐ Bleeding in-between periods or after menopause		
☐ Back pain		
☐ Indigestion or nausea		
☐ Excessive fatigue		

Gynae Oncology



General Practice

General Practice

Pelvic Mass

- Ovarian cancer
- Endometrial cancer
- Cervical cancer

- Pregnancy
- Fibroid
- Benign ovarian cyst
- Urinary retention
- Bowel pathology

PELVIC EXAM IS USEFUL

Ovarian Carcinoma Diagnosis

Results of a National Ovarian Cancer Survey

TABLE 2
Analysis of Survey Results with Respect to No. of Symptom Groups that Patients Reported

	No. of symptoms							
Survey item	0	1	2	3	4	5	6	*P* value
No. of mos for diagnosis (mean)	1.8	3.4	2.0	4.0	4.4	6.0	10.7	0.001
Mean age (yrs)	52	55	53	52	51	50	46	0.001
Delay perceived (%)	14	33	37	49	56	68	76	0.001
Pelvic exam (%)[a]	84	71	68	64	66	64	66	0.013
Treated for another diagnosis (%)[b]	16	23	21	28	32	41	50	0.001
Health care provider attitude a problem (%)	5	9	10	20	26	31	38	0.001
Stage I/II (%)	38	34	20	19	20	20	19	0.001

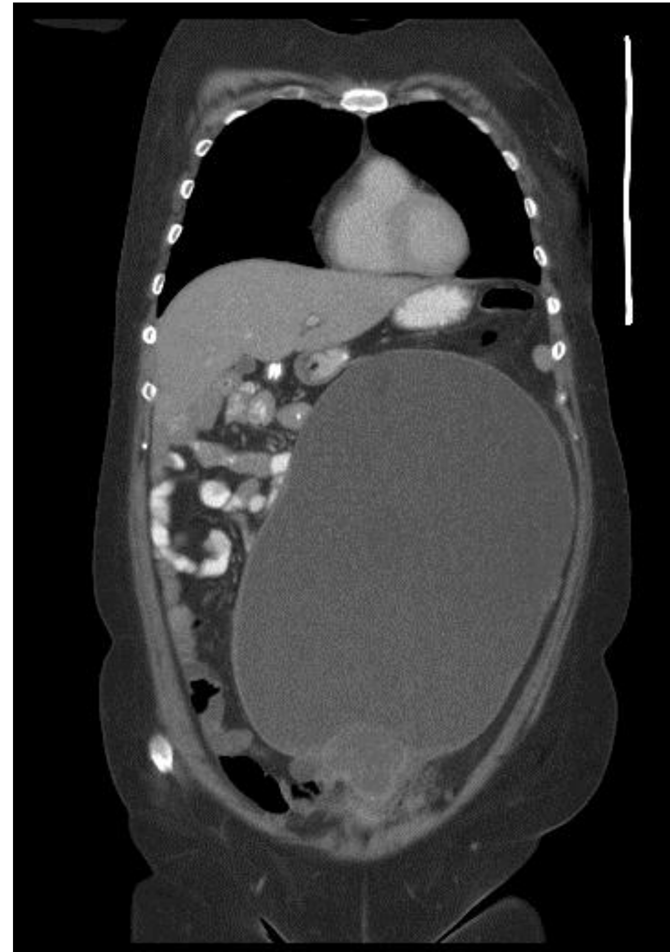
[a] At their initial visit.
[b] Initially had the wrong diagnosis.

Goff et al Cancer 2000

Investigations

- Pelvic US
- Tumour markers
  - Ca 125
  - CEA
  - Ca 19-9

Young women:
  - AFP
  - HCG



RISK OF MALIGNANCY INDEX

Using a cut off value of 200 to discriminate benign from malignant masses, there is good correlation

Sensitivity = 87%

Specificity = 97%

Useful triage tool when considering referral

RISK OF MALIGNANCY INDEX

Criteria	Scoring system	Score
Menopausal status Premenopause postmenopause	 1 3	A(1 or 3)
USS features Multiloculated Solid areas Ascites Bilateral metastases	No features=0 One feature=1 >1 feature =3	B(0,1,3)
Serum ca125	Absolute level	C
RMI		AxBxC

Appropriate Triage of Ovarian Masses is Important

- **Proper surgical staging tailors adjuvant treatment - major factor in long-term survival of patients**
- **Surgery performed by gynaecologic oncologists confers survival advantage.** *Nguyen et al, Kehoe et al*
- **Facilitates optimisation of resources.**

CASE 2

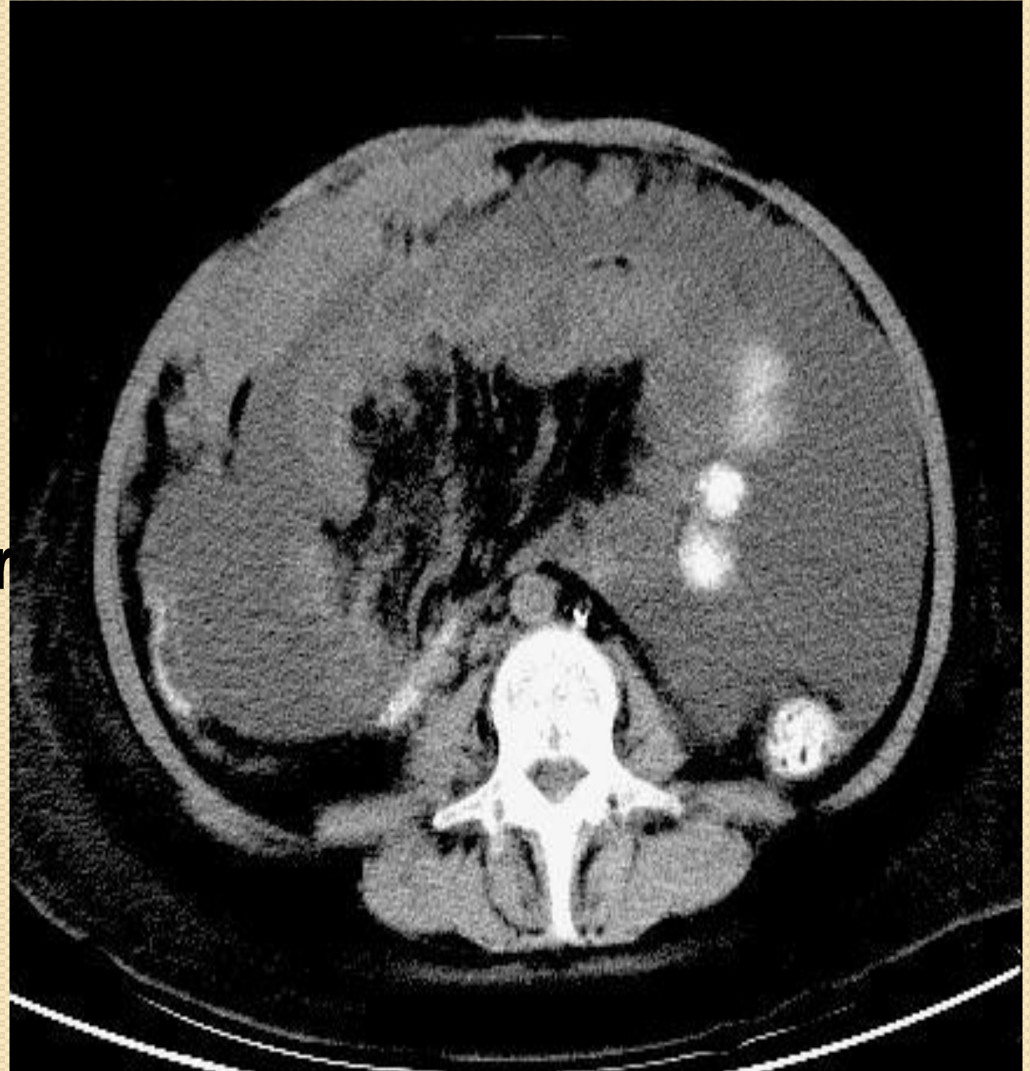
MRS EL is a 65 year old woman who presents with increasing abdominal pain, constipation and nausea.

Exam reveals a distended abdomen and PV reveals a craggy mass

You organise a Ca125 and CT scan abdomen and pelvis

CA 125 = 2830
CT scan = ascites
omental
cake

What is her RMI?
Who would you refer
her to?

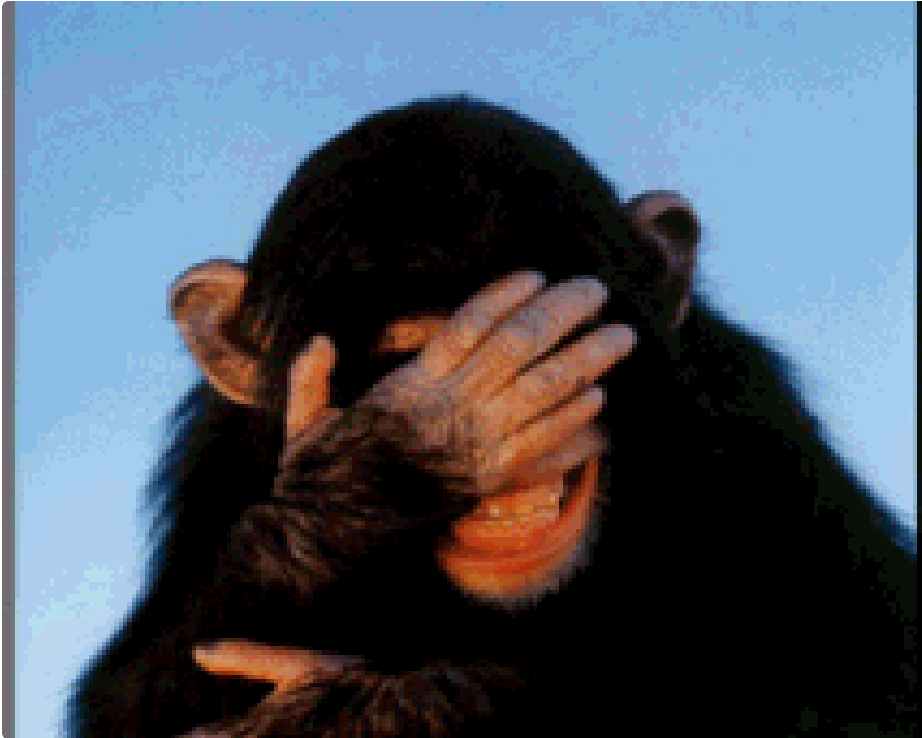


Pelvic Mass

- Consider ovarian cancer with vague symptoms
- Familial tumours occur at younger age
- Do a vaginal examination
- Pelvic ultrasound

5 year survival rates

- Stage 1 93%
- Stage 2 70%
- Stage 3 37%
- Stage 4 25%



OVARIAN CANCER

1.Investigate sx
2.Early disease has good outcome
3.Do better if operated by gyn onc
4.understand MDT as model of care

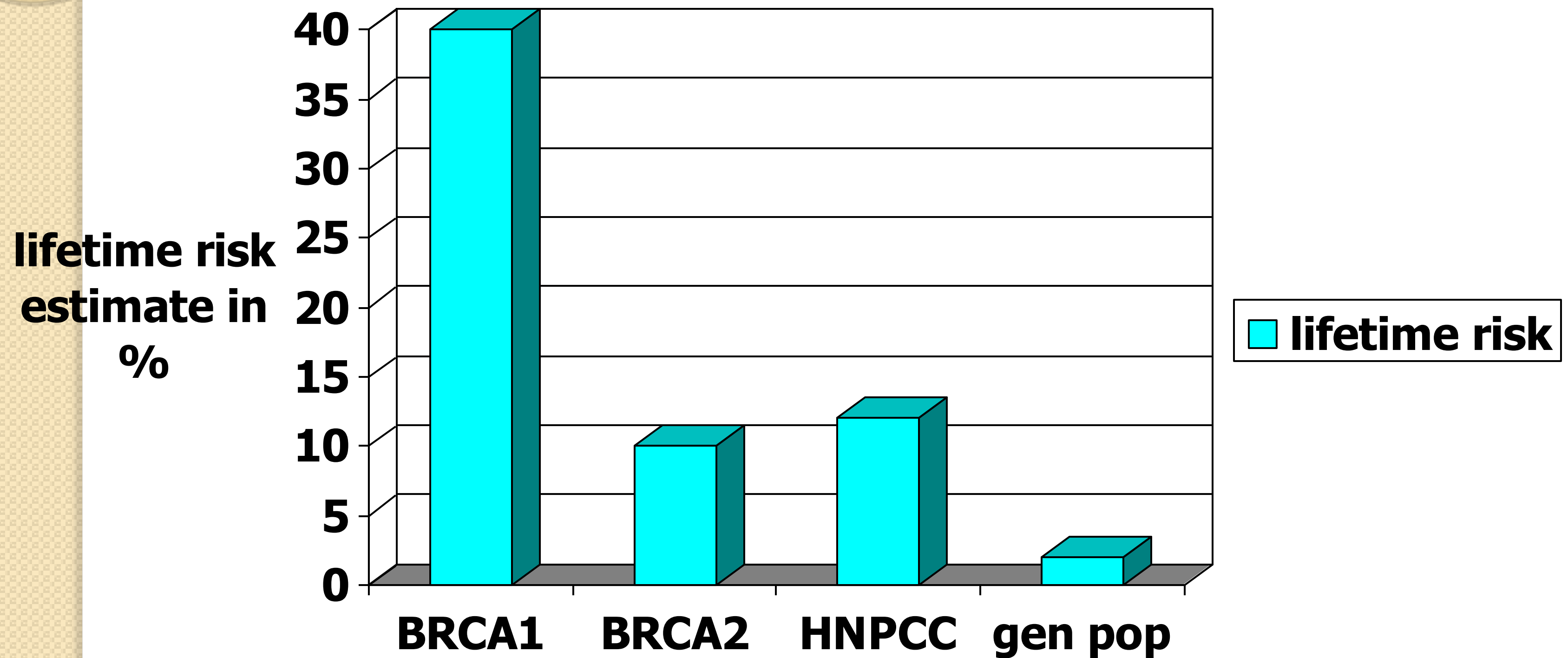
CASE 3

- 44 year old presents to discuss the risk of ovarian cancer
- Mother died of ovarian cancer(50Yr)
- Aunt has breast cancer, tested +ve for BRCA 1
- She wants to know her risks, any role of screening and management options

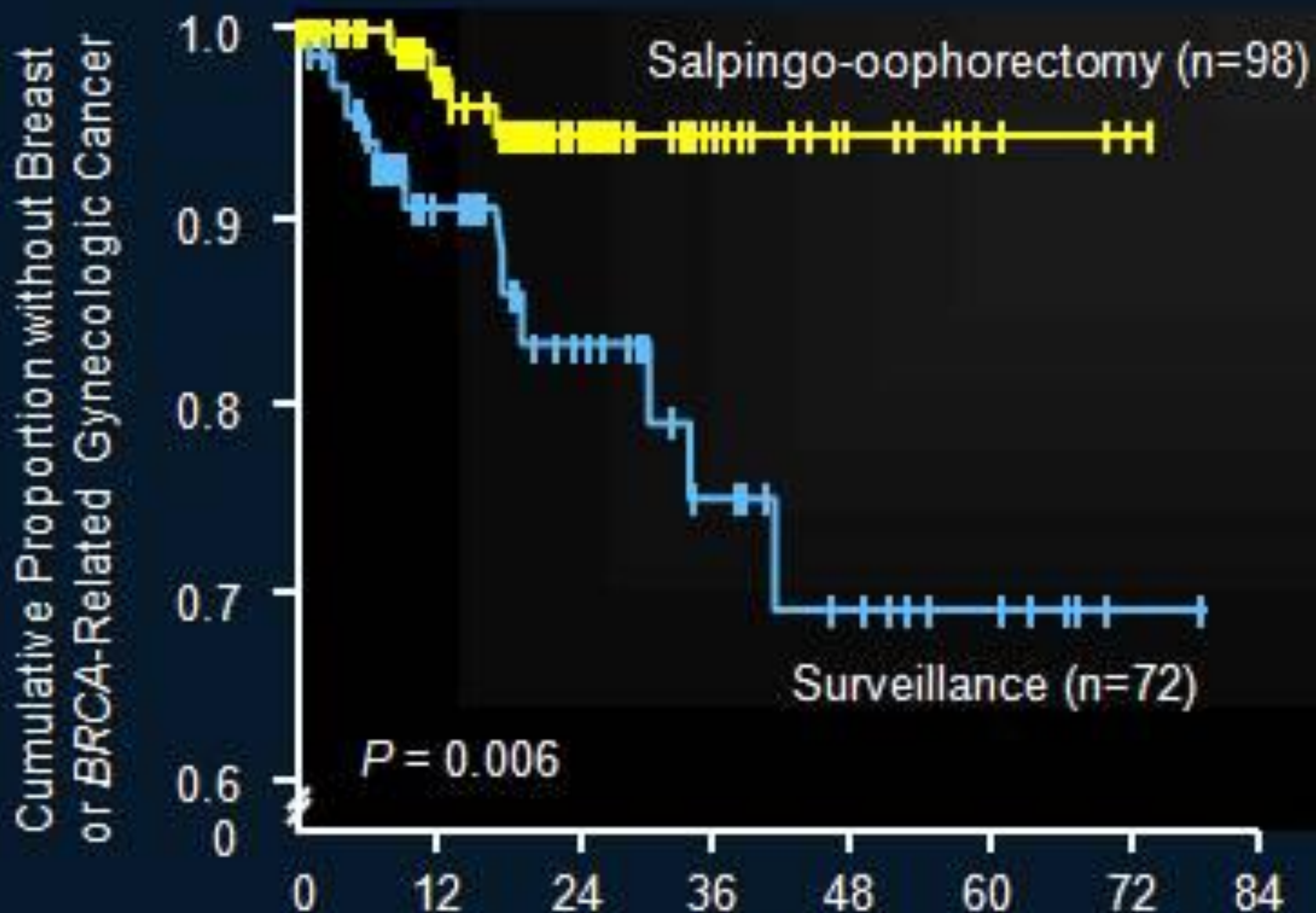
BRCA MUTATION CARRIERS

- 15% of EOC are due to mutations in BRCA1 or 2
- BRCA related ovarian cancers -- a distinct biological behaviour, more favourable prognosis ,respond differently to chemotherapy

Ovarian cancer lifetime risk estimates



RRSO Protects Against Breast & Gynecologic Cancers



No. at Risk							
Salpingo-oophorectomy	98	69	36	17	11	4	0
Surveillance	72	44	28	16	9	5	1

Kauff, ND, et al. N Eng J Med 2002;346:1609

PREVALENCE OF OCCULT CANCER IN BRCA1 OR BRCA2 MUTATIONS

STUDY	PTS	OCCULT CA
Lu 2000	22	4 (18.2%)
Kauff 2002	98	3 (3.1%)
Leeper 2002	17	4 (23.5%)
Rebbeck 2005	259	6 (2.3%)
Powell 2005	67	7 (10.4%)
Oliver 2005	65	5 (7.7%)
Finch 2006	490	11 (2.2%)
Total	**918**	**40 (4.4%)**

Primary Fallopian Tube Malignancies in BRCA+ve women undergoing RRSO

Callaghan MJ et al J Clin Oncol 2007;25:3985

- Distal fallopian tube appears to be the dominant site of origin for early malignancies detected in women undergoing RRSO
- Explains failure of screening!

RRSO – Clinical Considerations(1)

Timing of surgery

- Contentious
- Average age ovarian cancer diagnosis in BRCA1=50yrs
- Average age ovarian cancer diagnosis in BRCA2 =60yrs
- Delay surgery until 40y in BRCA1 unless there have been family members who developed cancer in 30's

RRSO – Clinical Considerations(2)

- Delay surgery until late 40's and early 50's in BRCA2 unless surgery is to decrease breast cancer risk or ovarian cancer occurred at younger age in family member
- RRSO performed before 40 yr in BRCA1 carriers,64% reduction in breast cancer risk compared to 50% reduction if carried out 40-50yr

½ Price
SALE
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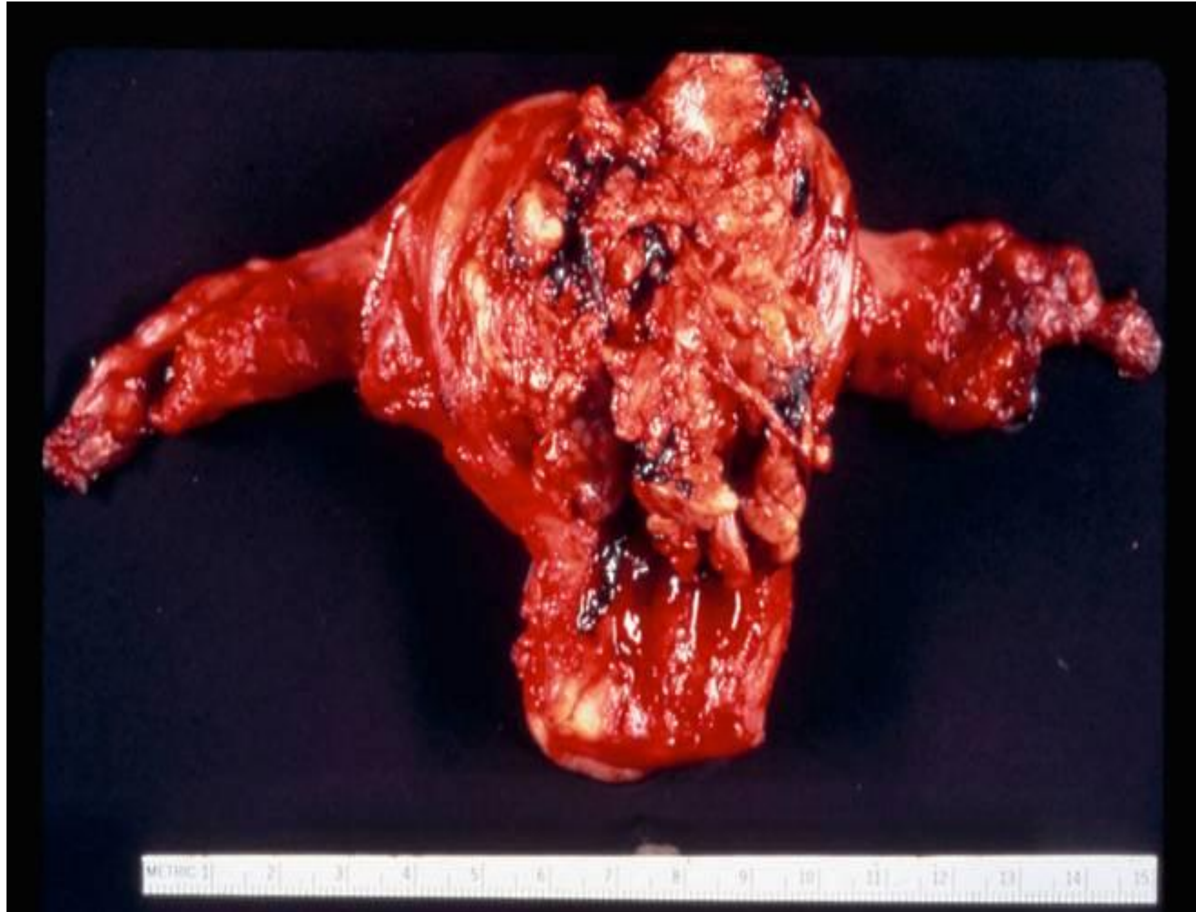
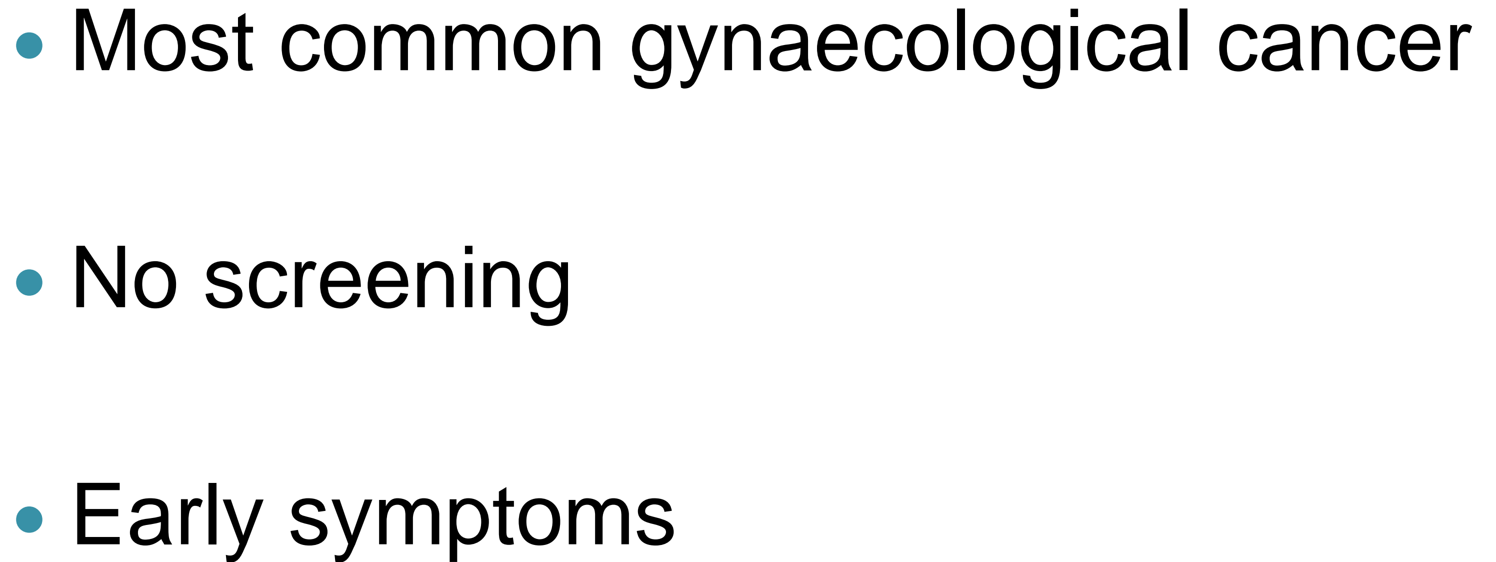
FRESH
WATER
¼ MILE →

Endometrial Cancer




Most common gynaecological cancer
No screening
Early symptoms

CASE 1

- 57 year old presents with PMB, pink discharge for 2 years
- Referred after heavy PV bleeding
- Hypertensive obese

CASE 2

- 50 year old presents with symptomatic anaemia
- On history noted to have heavy irregular bleeding
- On examination had a large fibroid

Case 3

- 39 year old who presents with menorrhagia
- Trying to conceive for 6 years
- Bmi=38

Risk Factors

- Age
- Obesity
- Diabetic
- Hypertensive
- PCO
- Tamoxifen

Carcinoma of the endometrium

TYPE 1 (E related)

- 2/3 patients
- Mean age = 59y
- Indolent
- Develop from N epith under E influence
- Endometriod
- Low stage, good prognosis

TYPE 2

- Older women
- Aggressive subtype
- Deep myometrial invasion, extrauterine disease
- Poor outcome

HNPCC/Lynch(TYPE 3)

- Lifetime risk of endometrial cancer = 60%
- Efficacy of endometrial screening unproven
- Interval cancers occur in symptomatic patients
- TVS and Endometrial sample from 35y
- Other cancers = colorectal, urological, pancreas ovary

Clinical features

90% have abnormal bleeding

Patients in whom endometrial cancer should be excluded:

- Post menopausal bleeding
- Perimenopausal women with IMB or increasing heavy periods
- Premenopausal women with abnormal irregular bleeding, especially with anovulation

Diagnosis

- All patients suspected of having endometrial cancer should have an **endometrial biopsy**

- False –ve =10%, a **negative biopsy** in the face of **a symptomatic patient** should be followed by a **definitive D+C**

Non invasive procedure

Transvaginal US

	Sensitivity	Specificity	False positive
TVS	96 – 98 %	36 – 68 %	44 – 56 %

Brand et al Journal Society Ob and Gyn Canada 2000

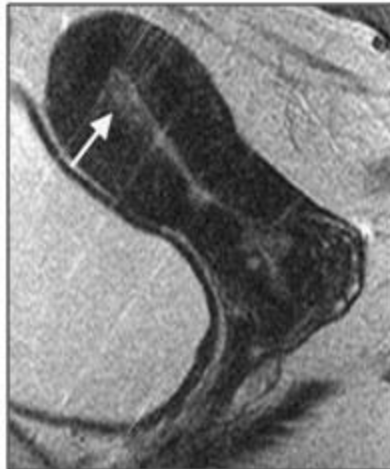
Preoperative investigations

MRI

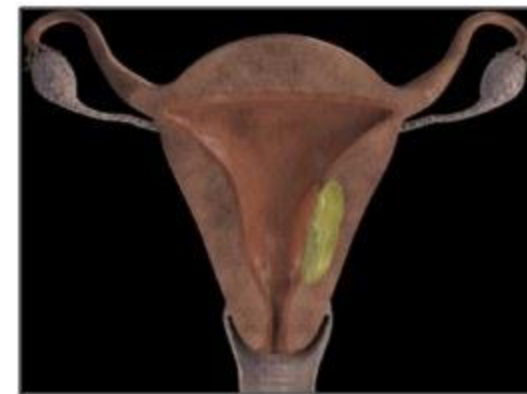
accuracy for assessing myometrial invasion =86%,

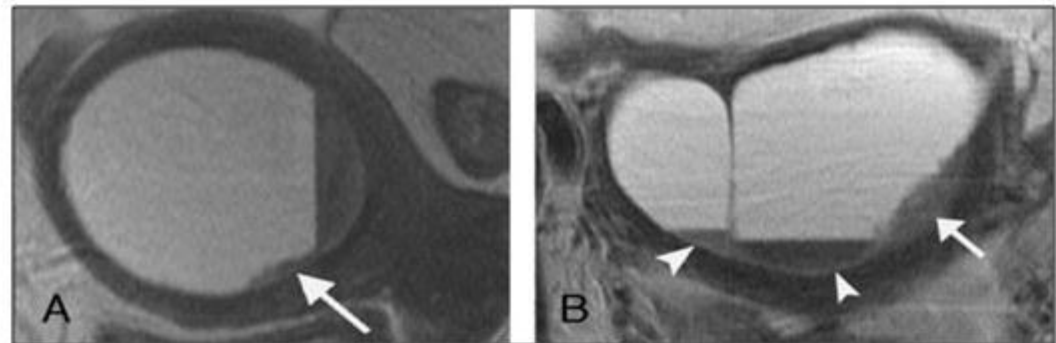
Triage where patient has surgery

Stage IA



A 55-year-old woman with an irregular menstrual cycle. There is mild irregularity of the uterine fundal endometrium without definite mass (arrow), indicating a **stage IA disease.**



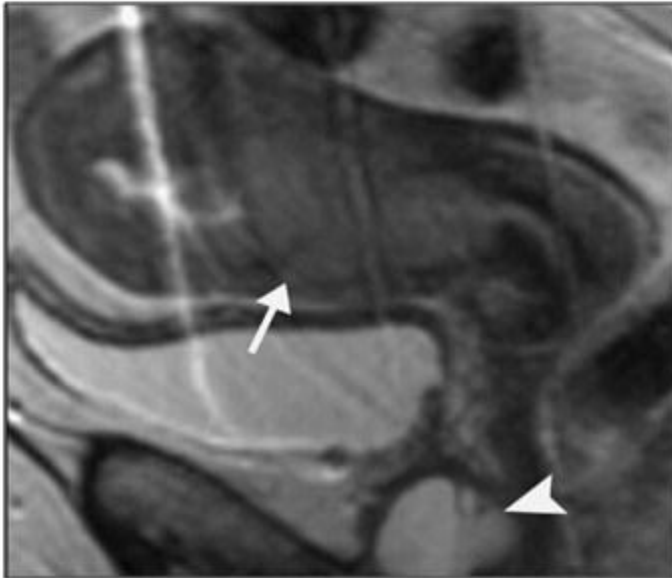


53-year-old female patient with a history of 4-month abnormal vaginal bleeding.
A Sagittal T2WI MRI shows irregular soft tissue thickening along the inferior surface endometrium (arrow) with **superficial invasion less than 50%** (arrow).
B Axial T2WI MRI shows an irregular soft tissue thickening of the endometrium (arrow) with superficial invasion **less than 50%, indicating a stage IA disease**. Fluid-fluid levels (arrowheads) in the endometrial cavity either due to hemorrhage or proteinaceous debris.

Magnetic Resonance Imaging of Endometrial Carcinoma.
Peungjesada, Silanath; Bhosale, Priya; Balachandran, Aparna; Iyer, Revathy

Journal of Computer Assisted Tomography. 33(4):601-608, July/August 2009.
DOI:10.1097/RCT.0b013e31818d4279

Stage IB



A 66-year-old woman with a history of 5-month postmenopausal bleeding. Sagittal T2WI shows almost **full-thickness myometrial invasion** (arrow). Note the high T2 signal cyst (arrowhead) adjacent to the lower vagina.

Stage IB disease

Magnetic Resonance Imaging of Endometrial Carcinoma.
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ENDOMETRIAL CANCER
(early disease)

- Total abdominal hysterectomy, bilateral salpingo-opherectomy +/- staging **(SURGERY)**

- **(RADIOTHERAPY)**

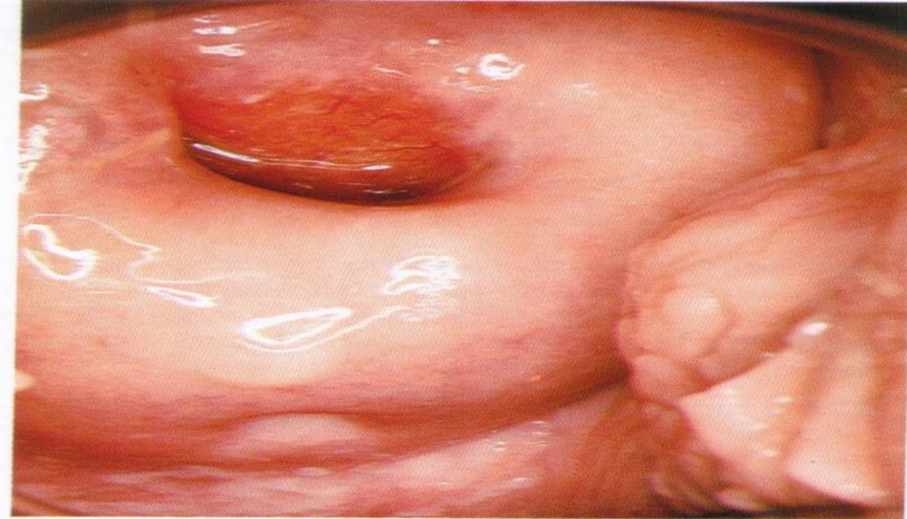
ENDOMETRIAL CANCER (advanced disease)

- Individualised
- Hysterectomy even in the presence of metastatic disease can offer symptom control and improve quality of life
- Palliation with progesterones, radiotherapy

CERVICAL CANCER

CASE 1

- 29 year old asymptomatic woman who presents for a smear.
- Smear comes back HSIL cannot exclude invasion
- Clinically cervix is as below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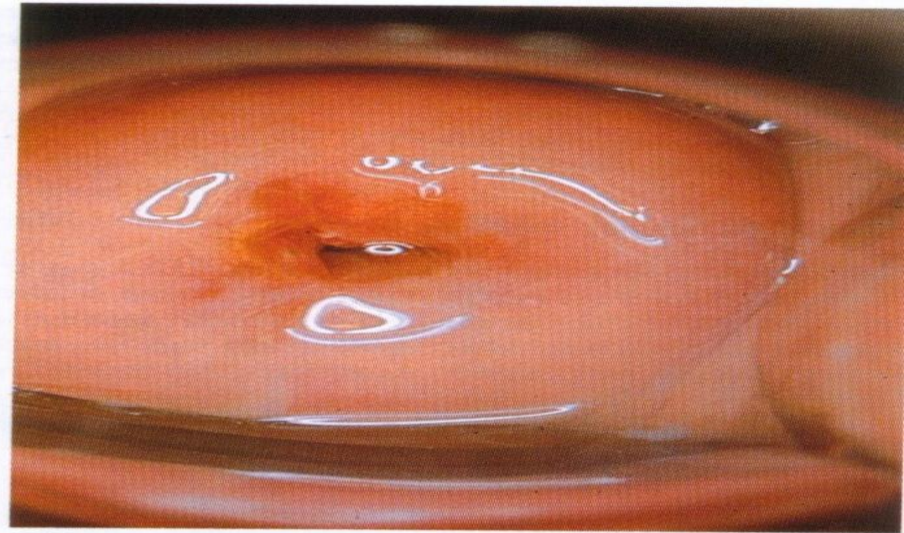
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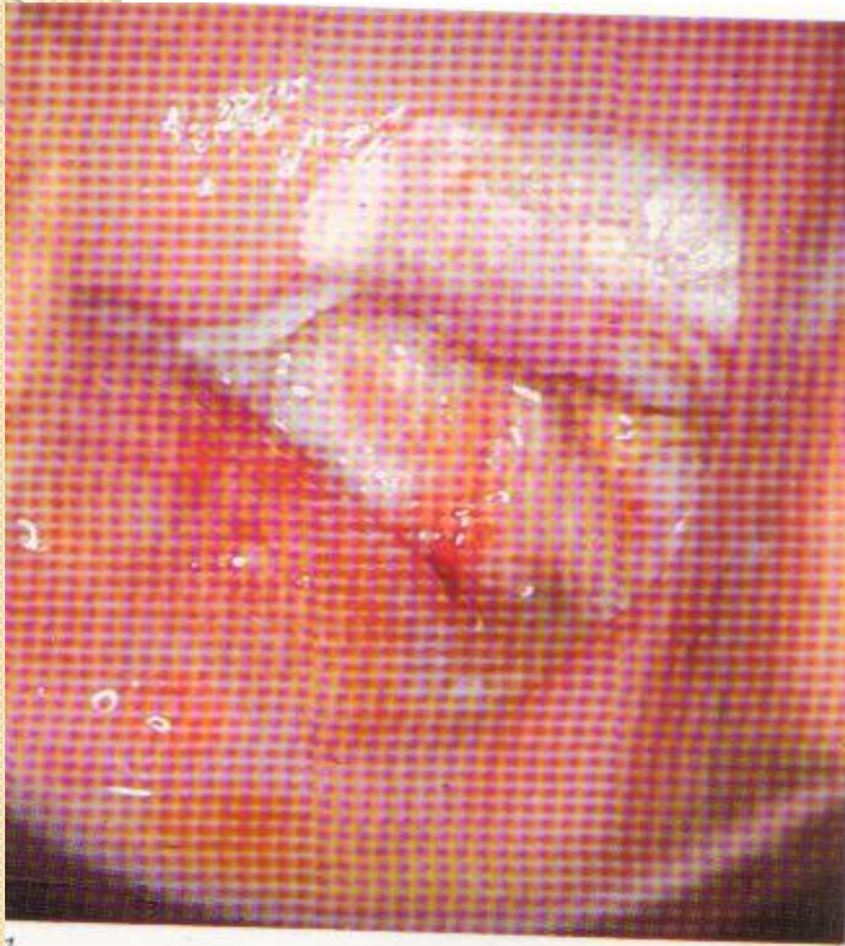
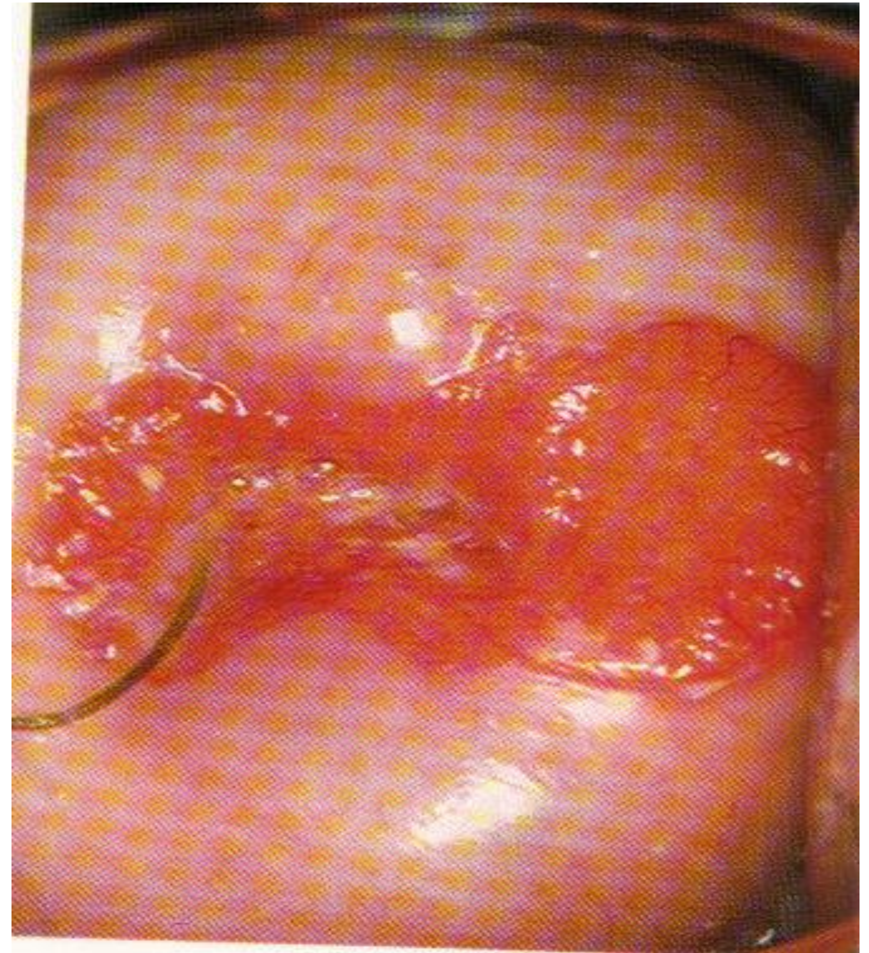
DIAGNOSIS

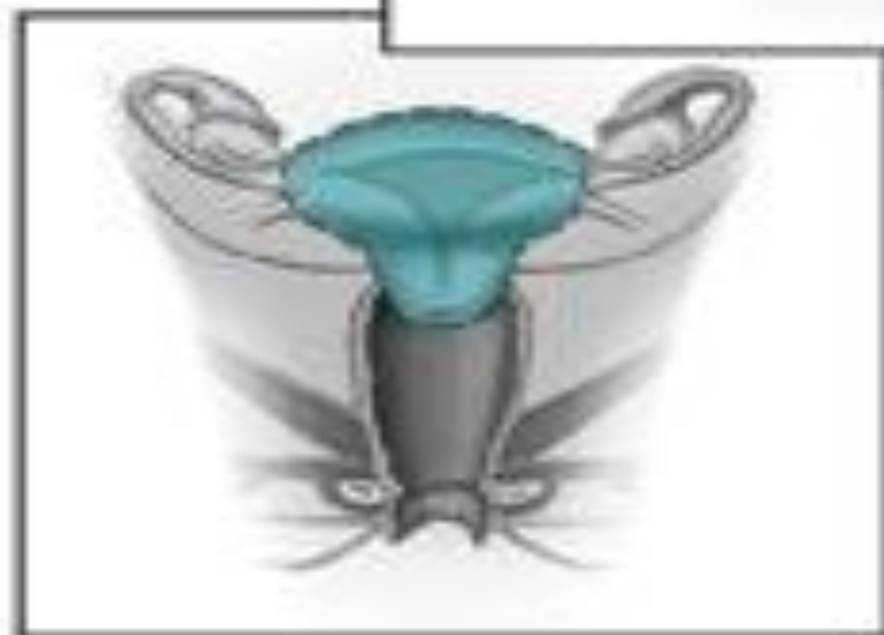
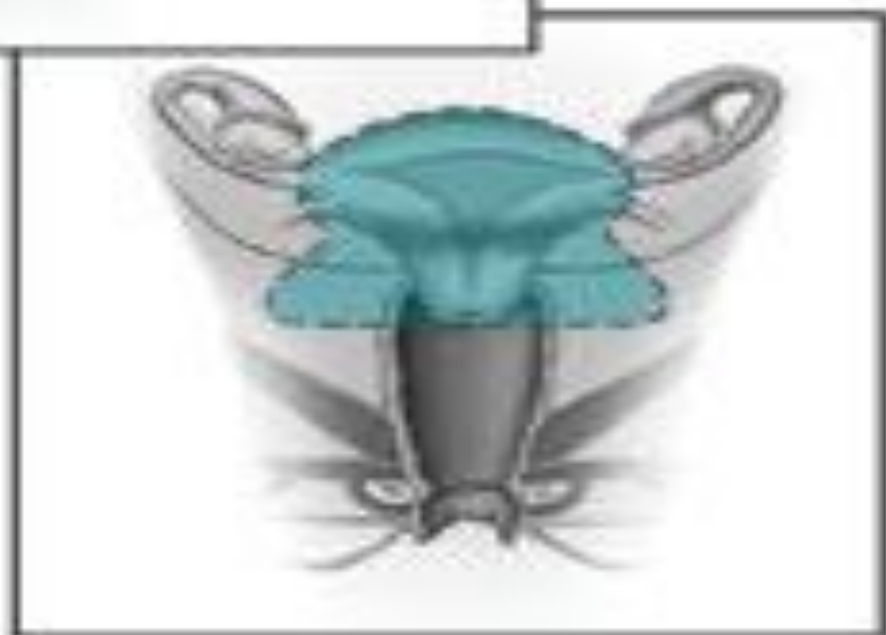
<u>Early diagnosis can be challenging</u>

- Frequently asymptomatic nature of early disease
- The origin of some tumors from w/in the endocervical canal or beneath the epithelium of the ectocervix
- Significant false –ve rate for Pap smears

CERVICAL CANCER

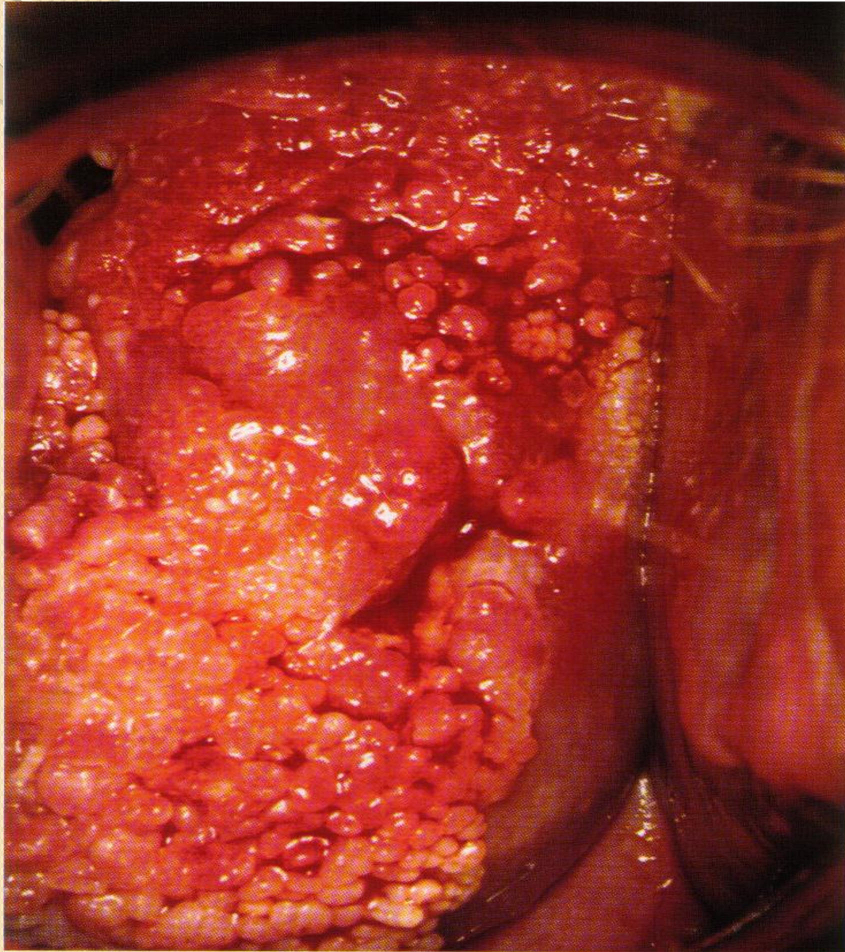


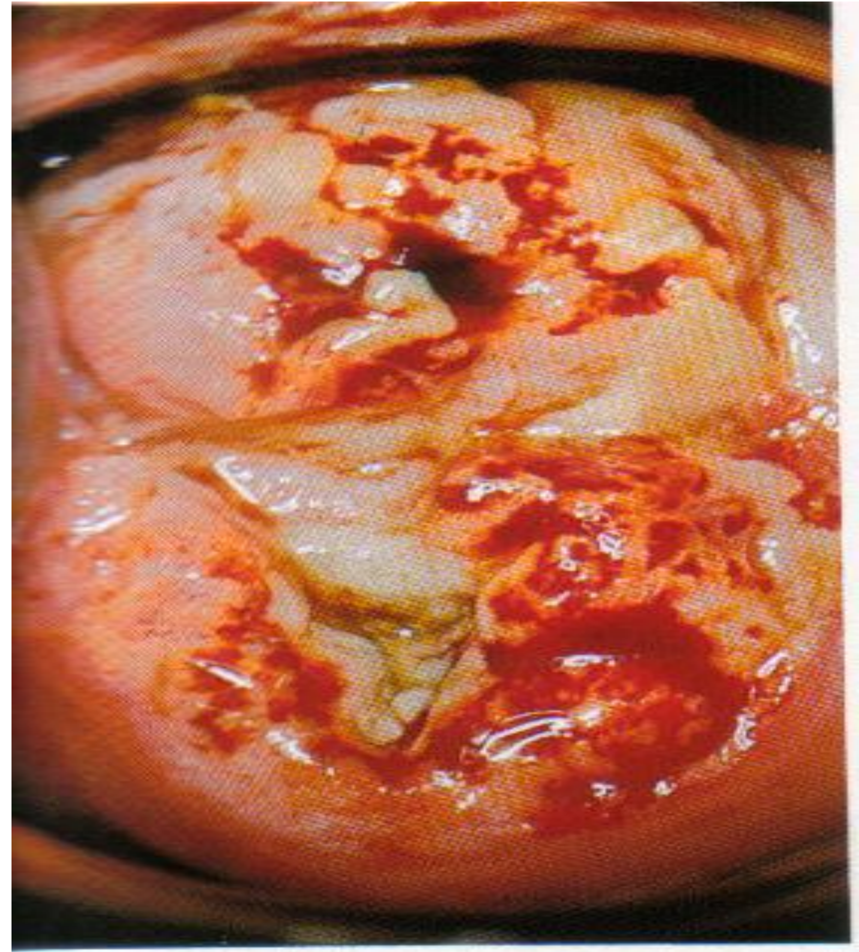


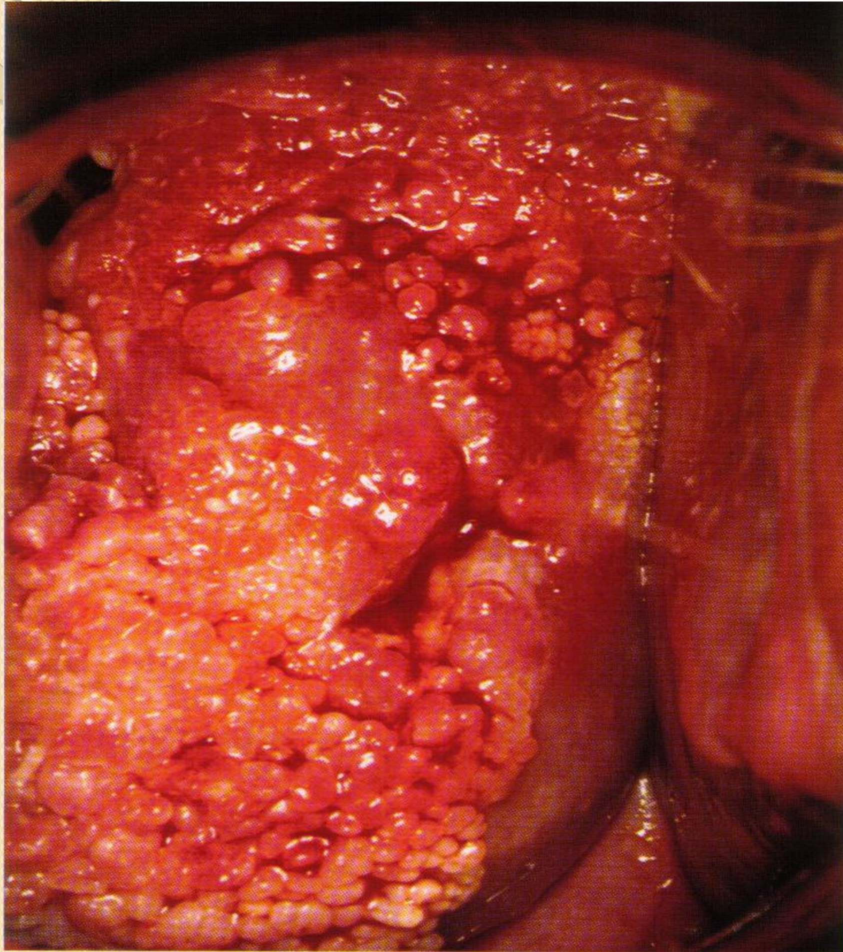
CASE 2

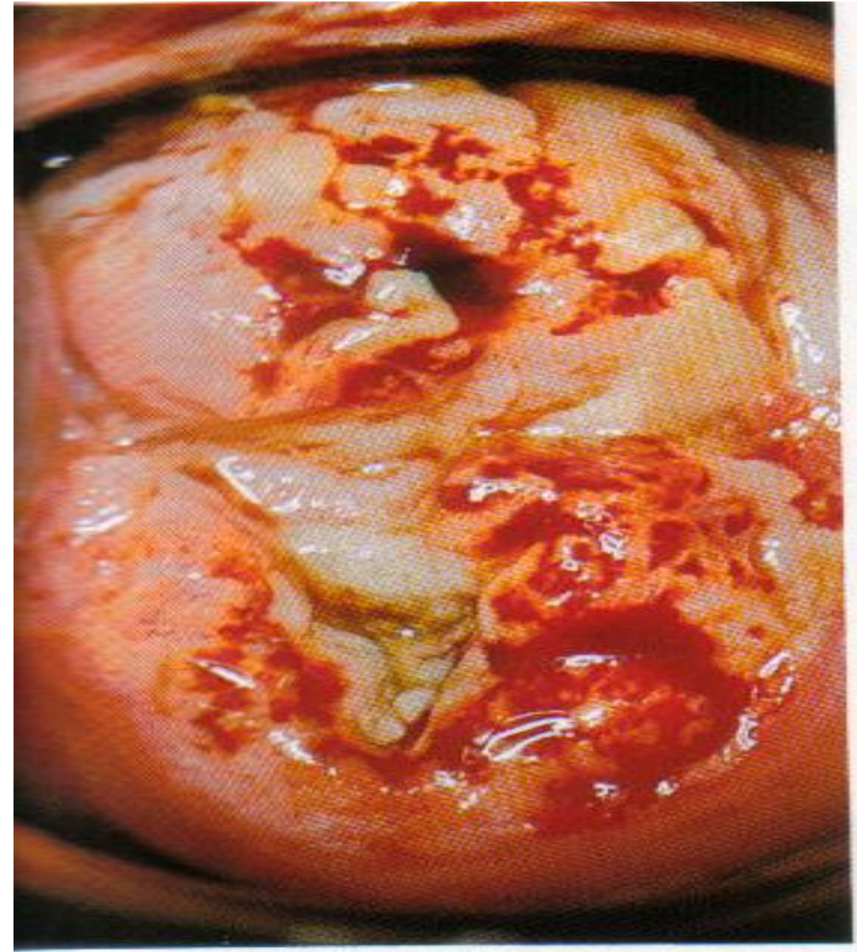
- 60 yr old who presents with 6 months of PV bleeding and pain
- On examination you find





CERVICAL CANCER

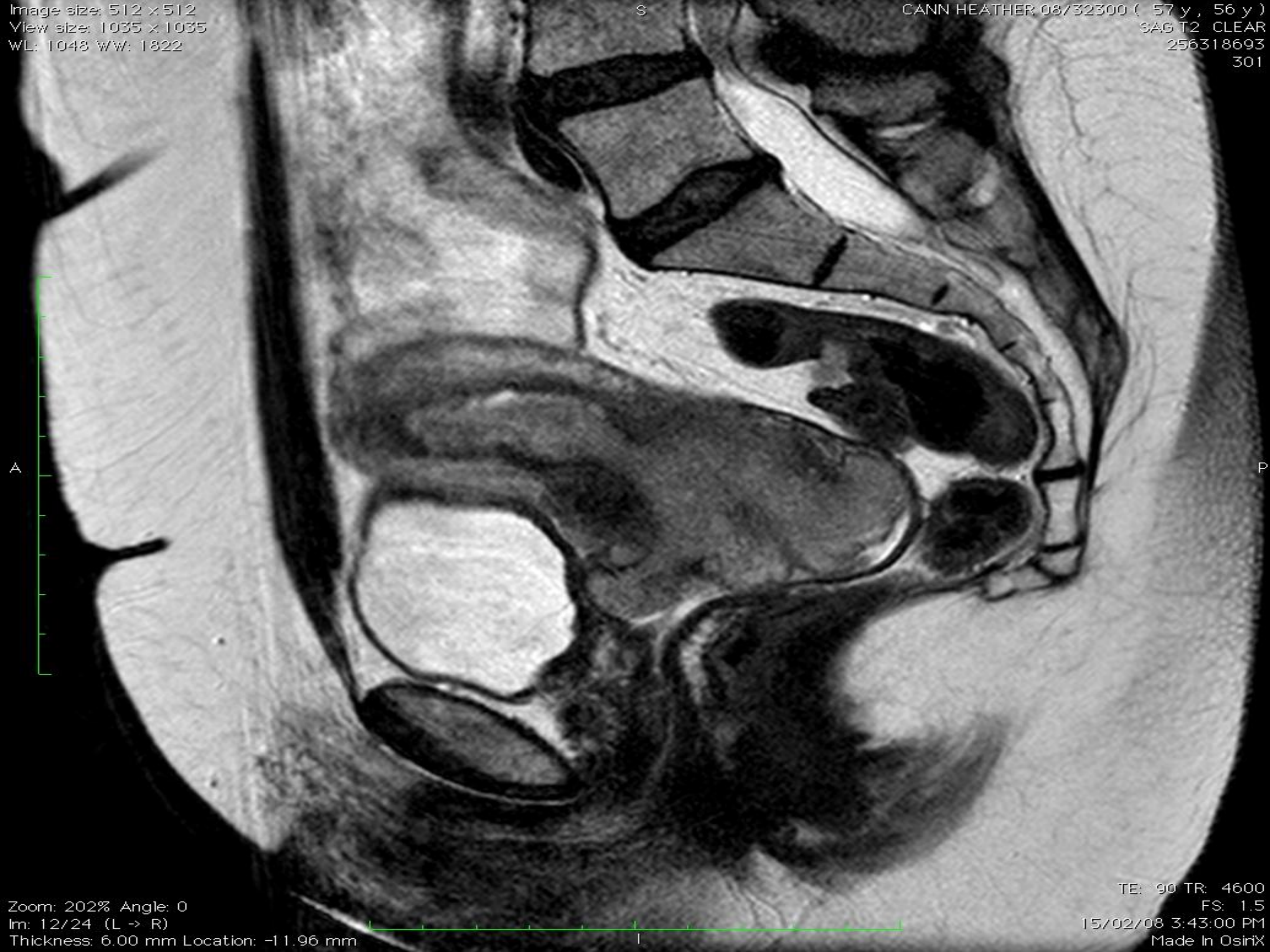




CERVICAL CANCER SYMPTOMS

- **Abnormal vaginal bleeding** = most common presenting symptom . If sexually active, includes postcoital bleed (56%)
- Not sexually active, asymptomatic until quite advanced
- **Malodorous discharge** (4%)
- **Pelvic pain, pressure symptoms** of bowel and bladder (4%)

28% had abnormal smears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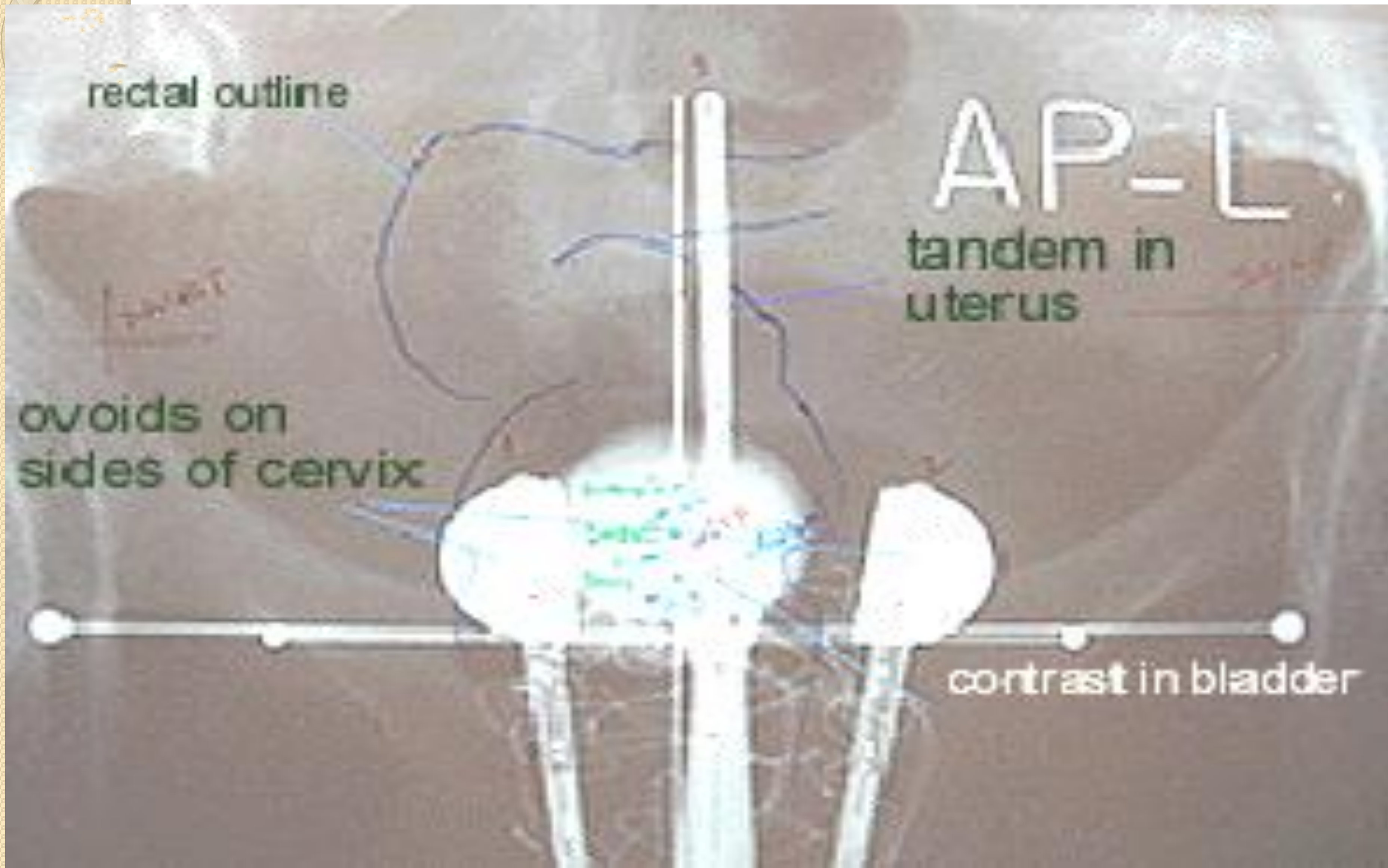
CASE 2 contd

- You tell her that she has a cancer of the cervix
- She says “ I dont want to have treatment as I will die any way”
- I am scared of what they will do in the hospital and the side effects!
- How would you manage her?

ADVANCED STAGE DISEASE

- External beam pelvic radiation therapy
- Weekly cisplatin at 40mg/m2 during the radiation treatment
- Intracavitary radiation treatment at the conclusion of external beam

BRACHYTHERAPY



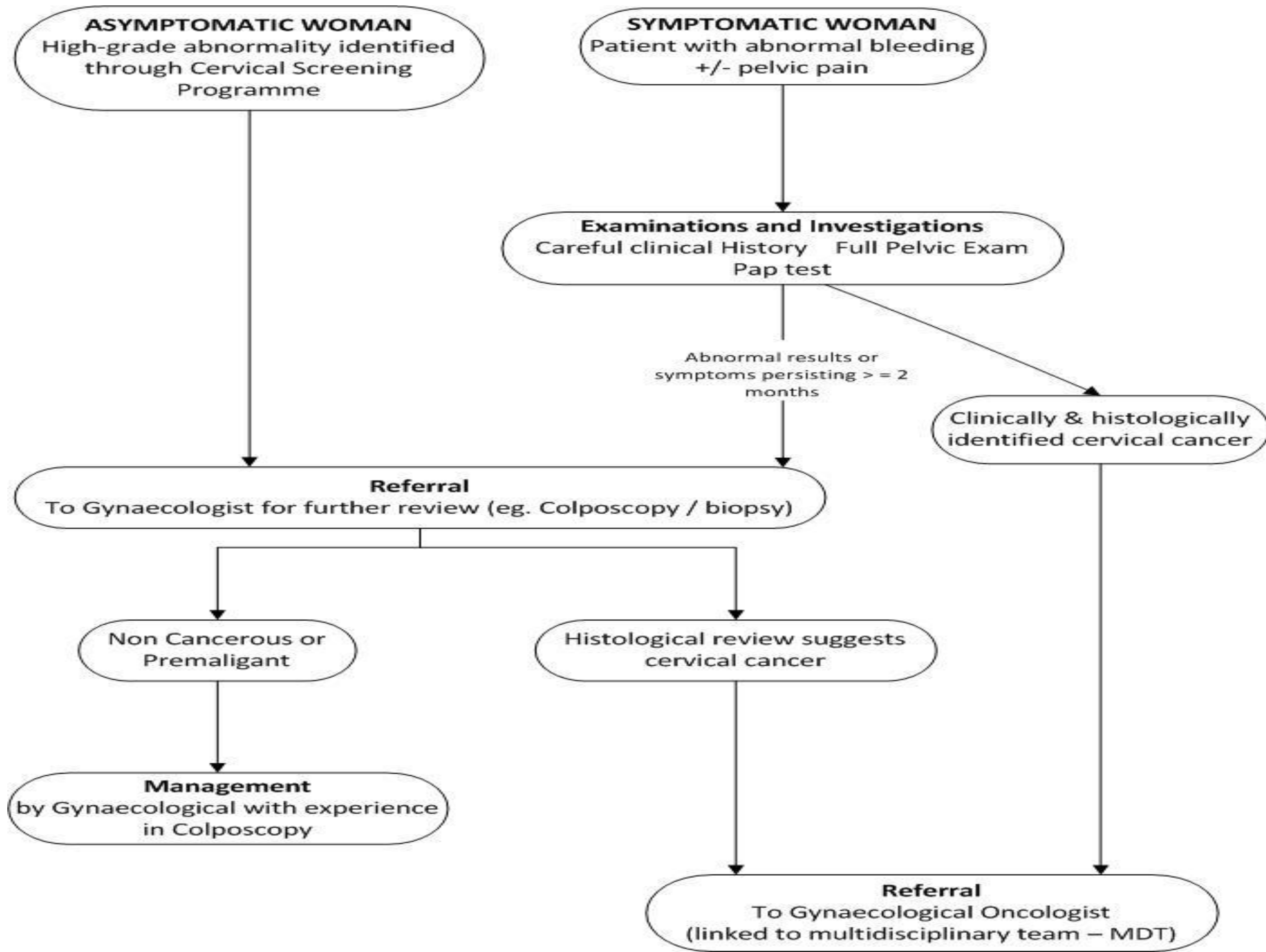
ACUTE RT EFFECTS

- General = Fatigue
- Bone marrow toxicity
- Enteritis – nausea, cramps and diarrhoea
- Proctosigmoiditis – PR bleed, frequent BM, tenesmus
- Skin changes
- Cystitis
- Genital tract changes --→ fibrosis(long term)

5 YR SURVIVAL(1992)

Microinvasive	95%
Stage 1B	85%
Stage 2	66%
Stage 3	35 %
Stage 4 a/b	17%/9%

Cervical Cancer Referral Pathway



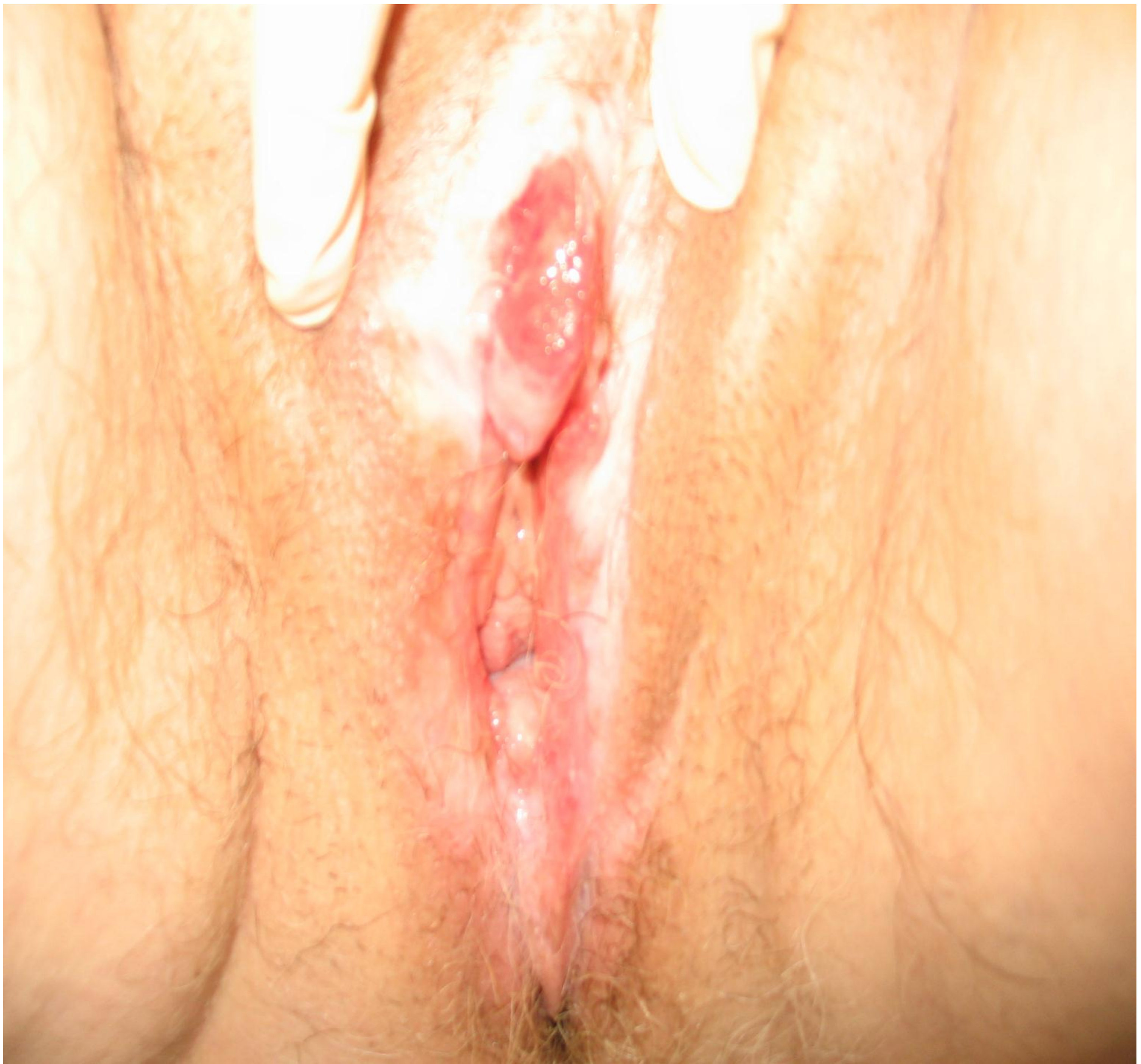
CARCINOMA OF THE VULVA

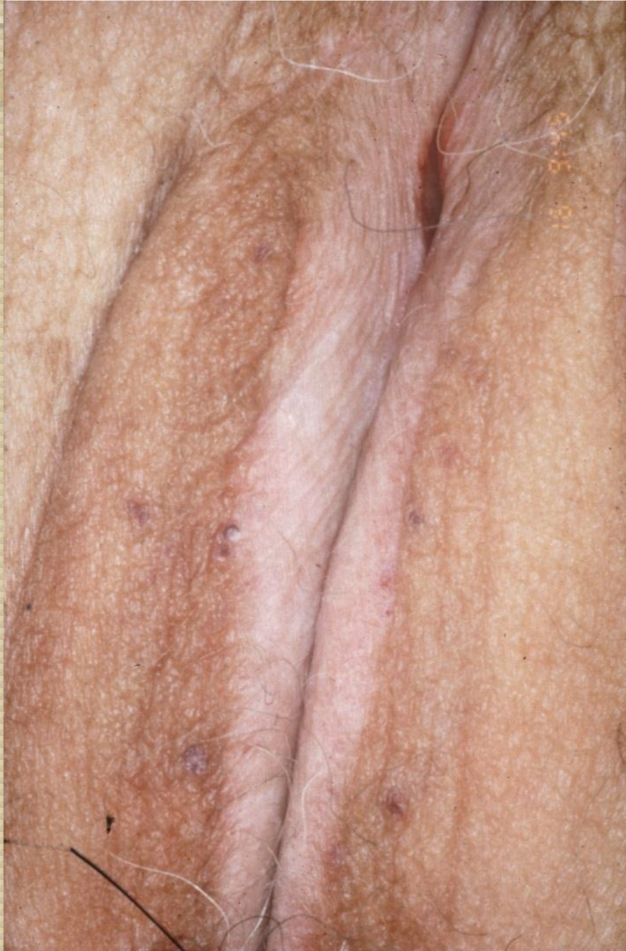
Case 1(SC)

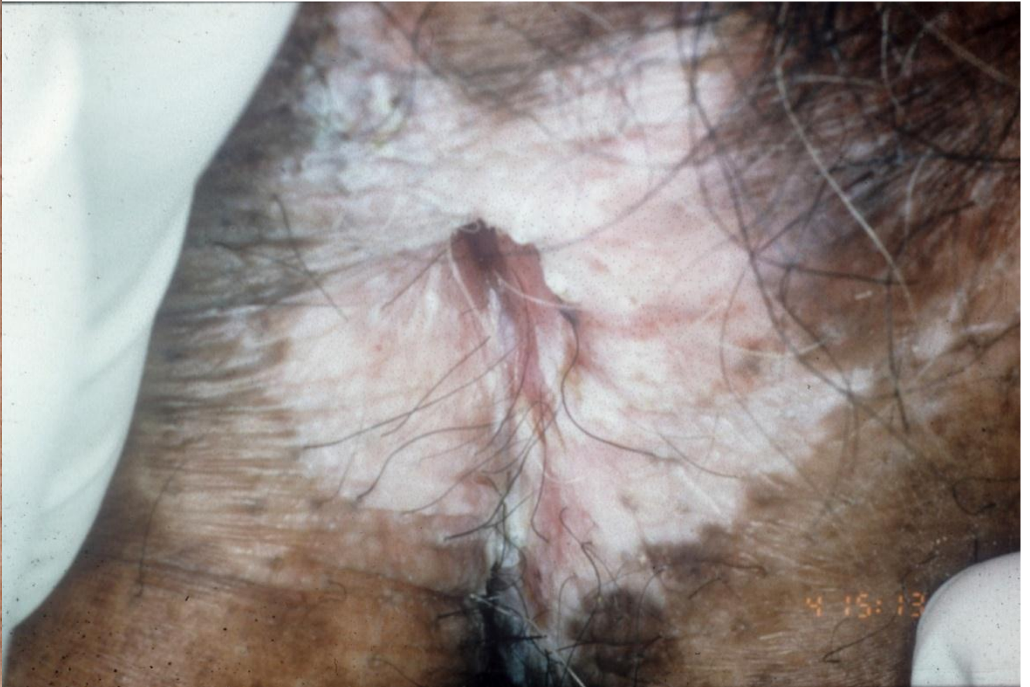
- 71 year old with a 12 month history of itch and irritation
- Treated with ovestin, canestan, local anaesthetic with no progress
- Was examined at the last visit and referred
- Obvious lesion to left of clitoris confirmed scc on biopsy

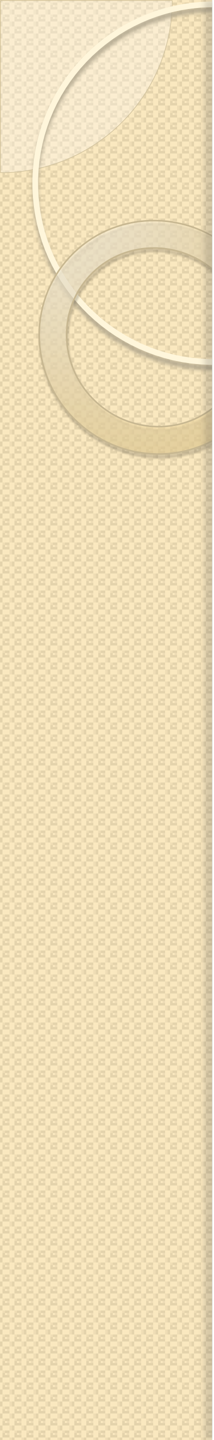
CASE 2(FL)

- 58 yr old presented over several years with itchiness, last 6 months had bad irritation
- Rx with metronidazole and several ointments, not examined
- Examined but not diagnosed



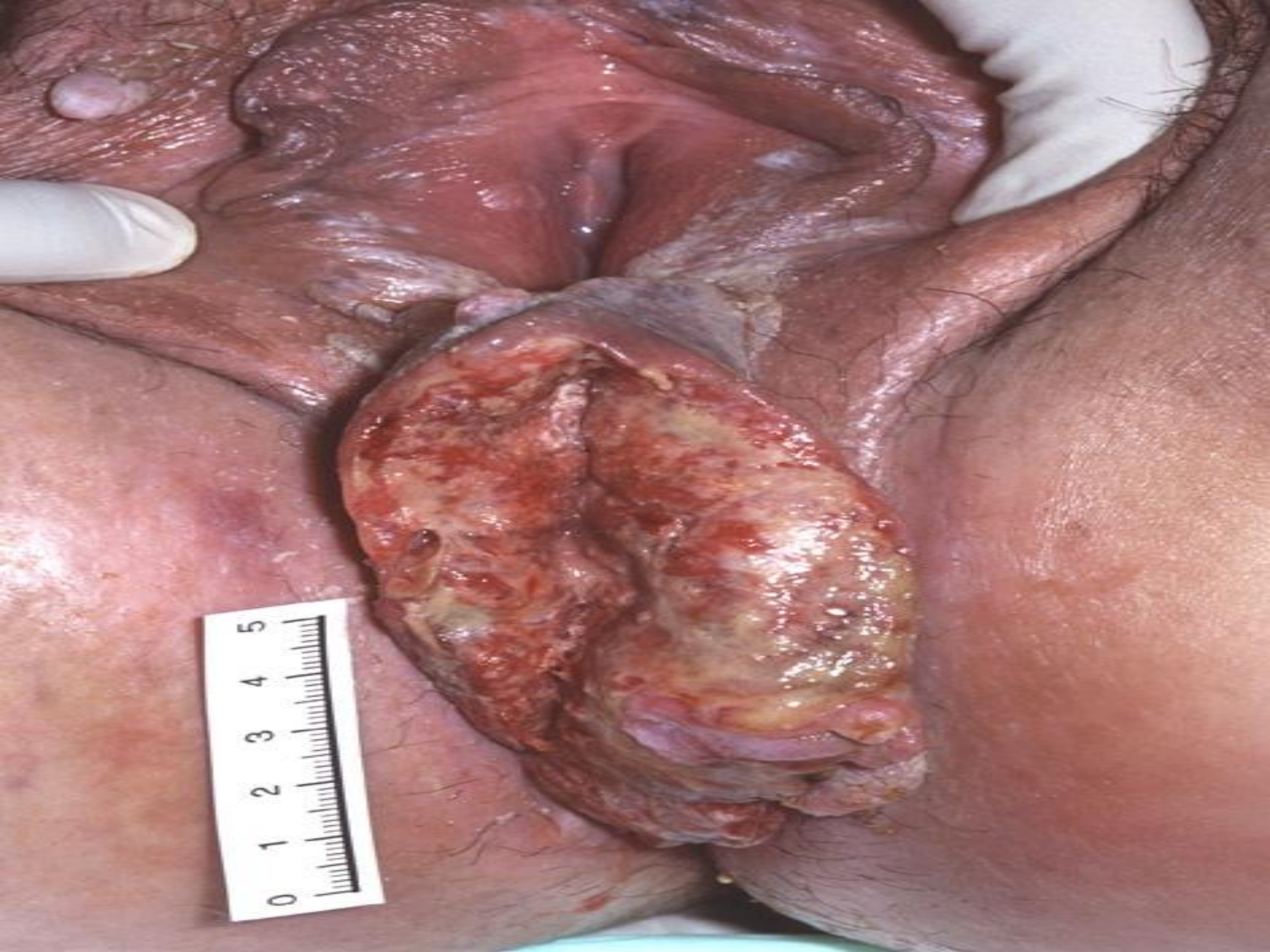






CASE 3(MW)

- 27 yr old sexually abused as a child/young adult
- Treated for CIN 3 aged 20
- Noticed small " wart" beginning of the year
- Presented when painful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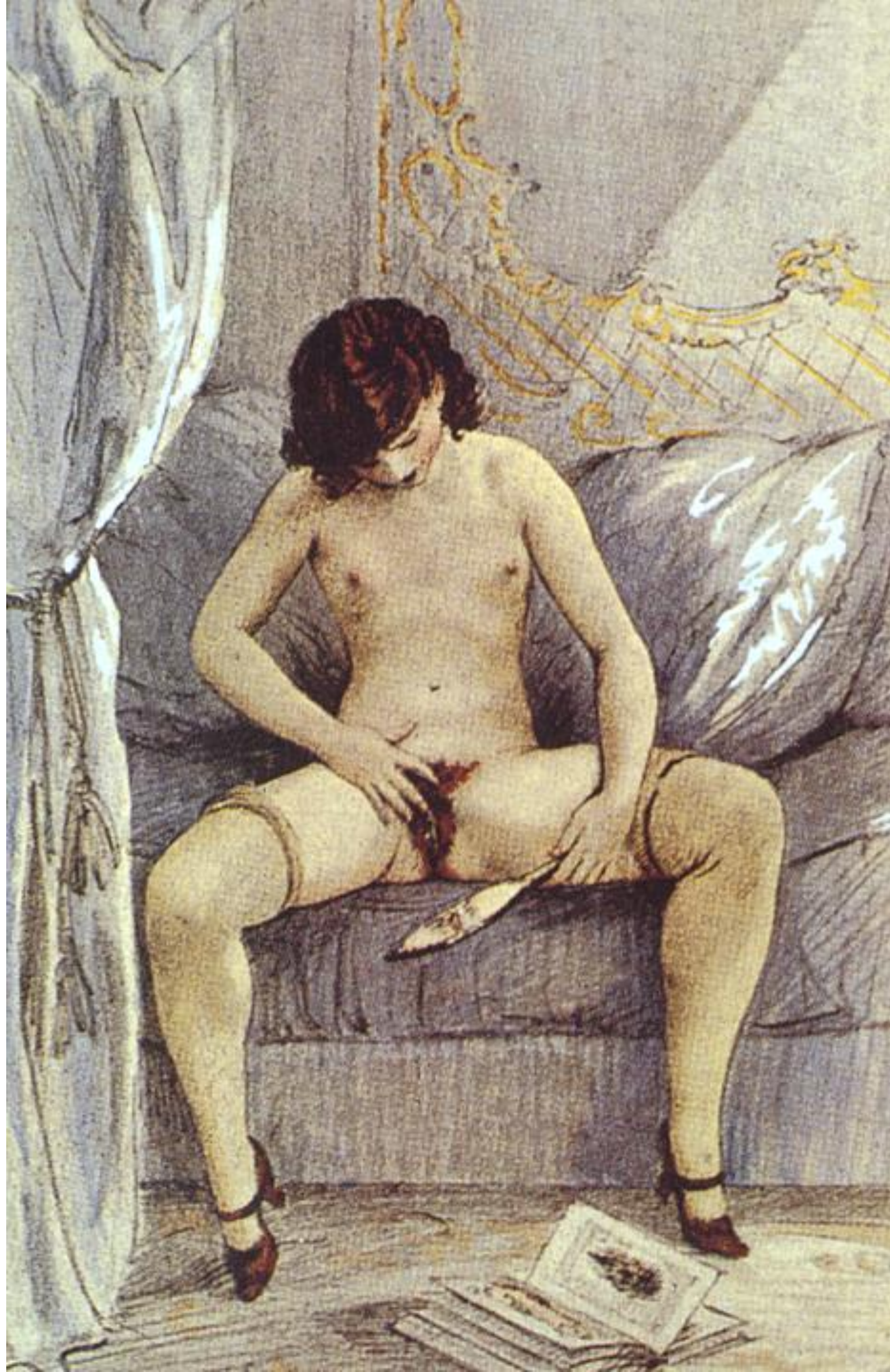
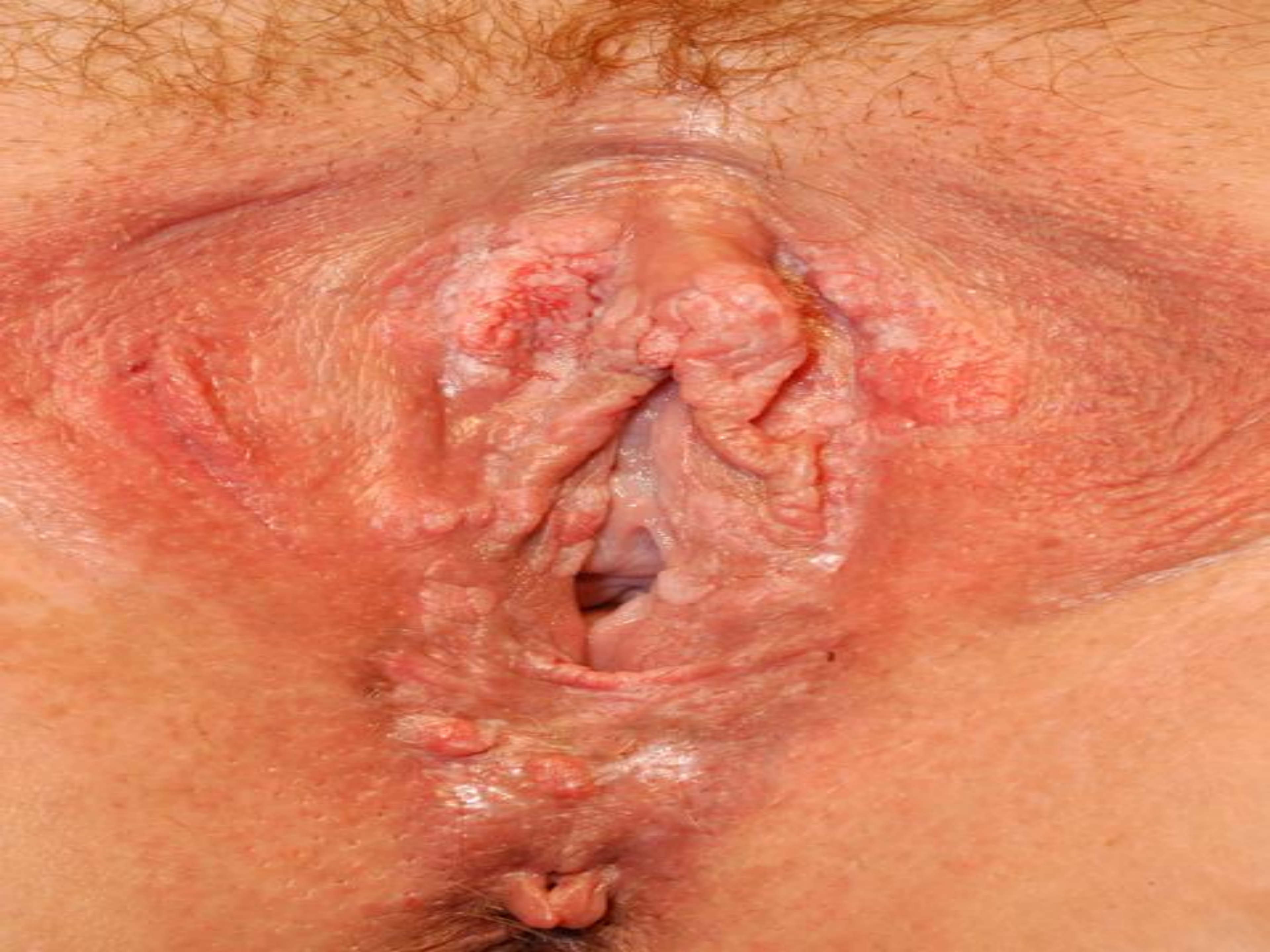


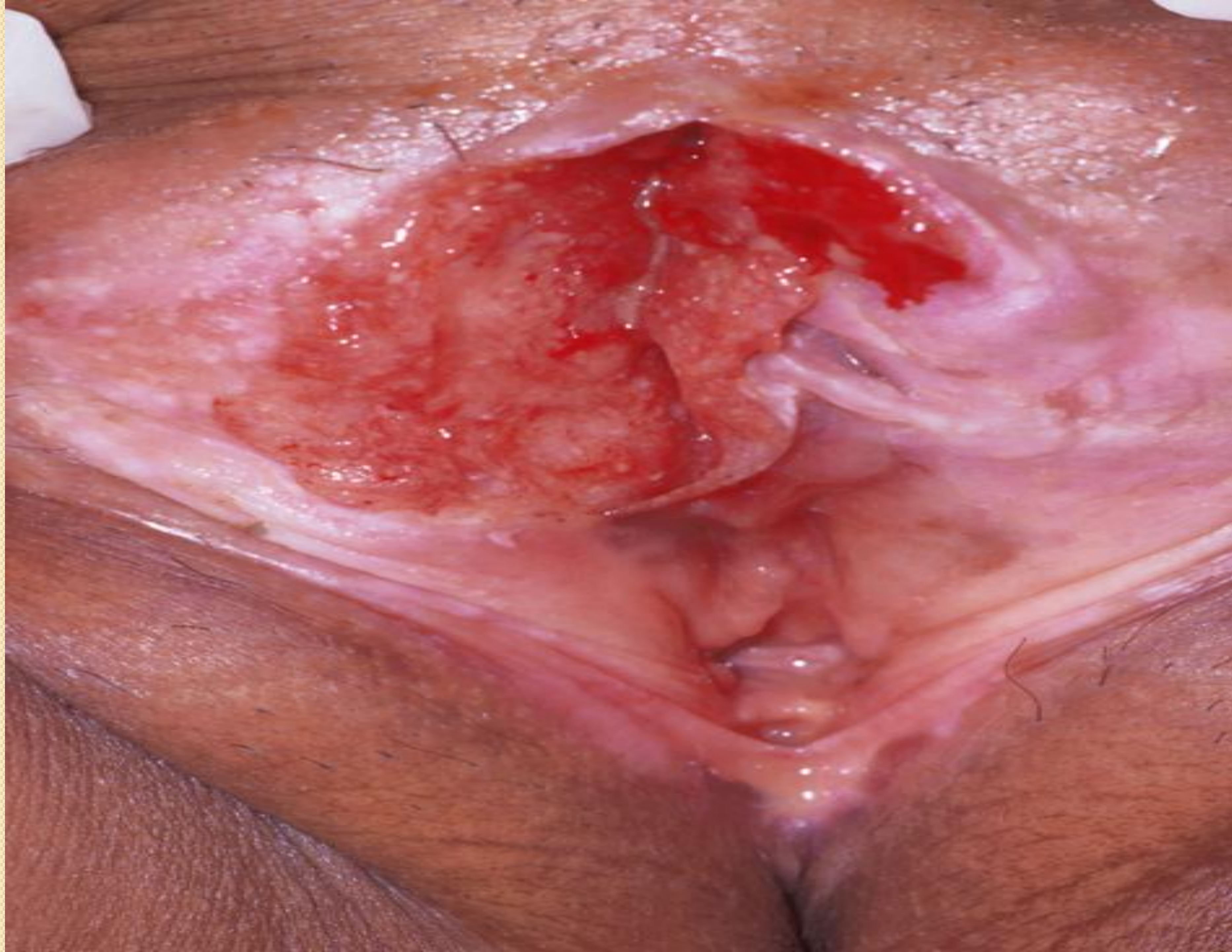
Clinical Features of invasive vulva cancer

- Lump
- Mass
- Pruritis

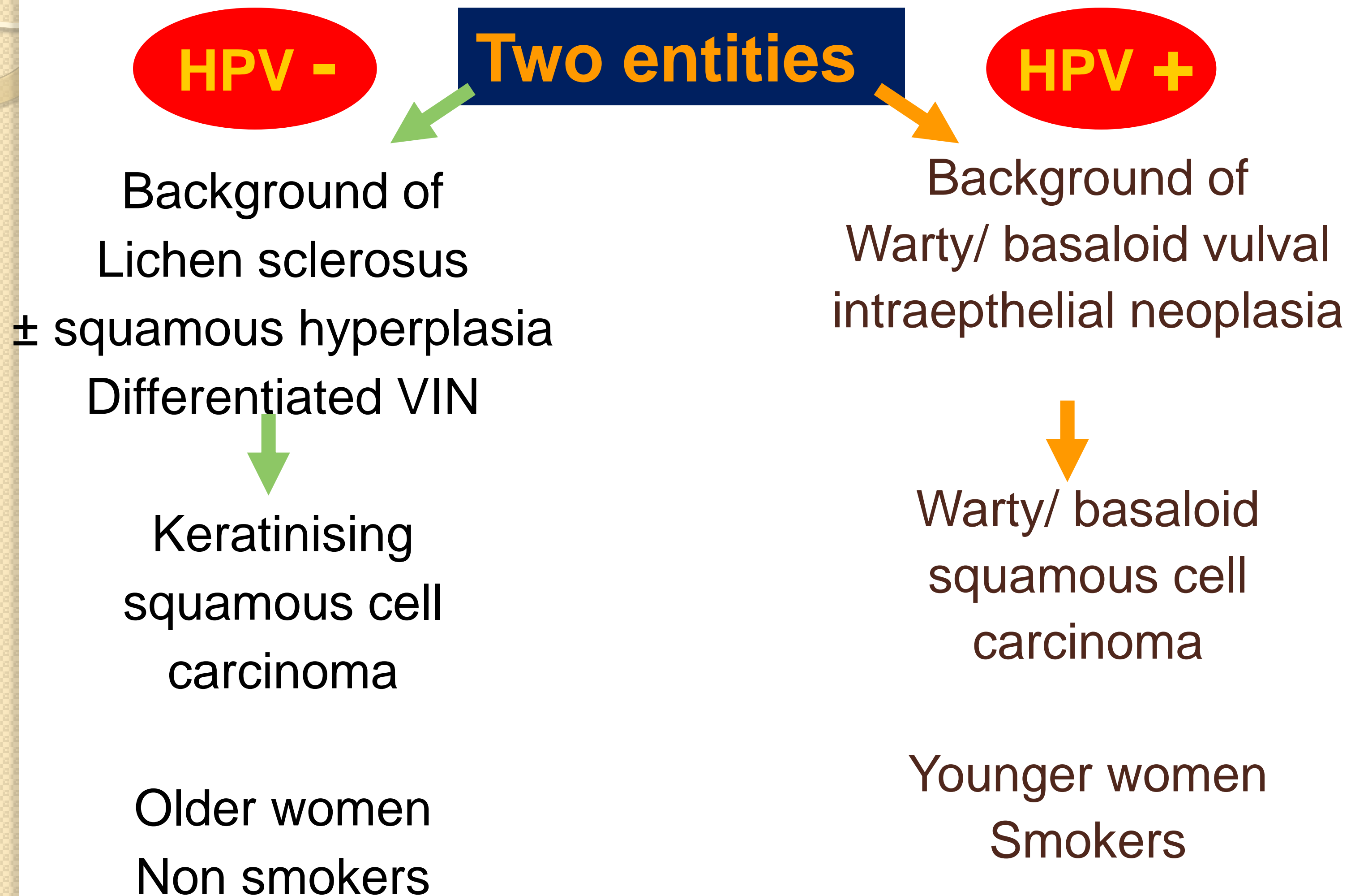
R/S analysis (1989-1996) of women presenting with scc of vulva to NWH

- 94% presented with pruritis
- 87% had symptoms >6 months,28% >5 years
- 30% of women had 3 or > consultations
- Skin around the vulva is abnormal in 85% cases

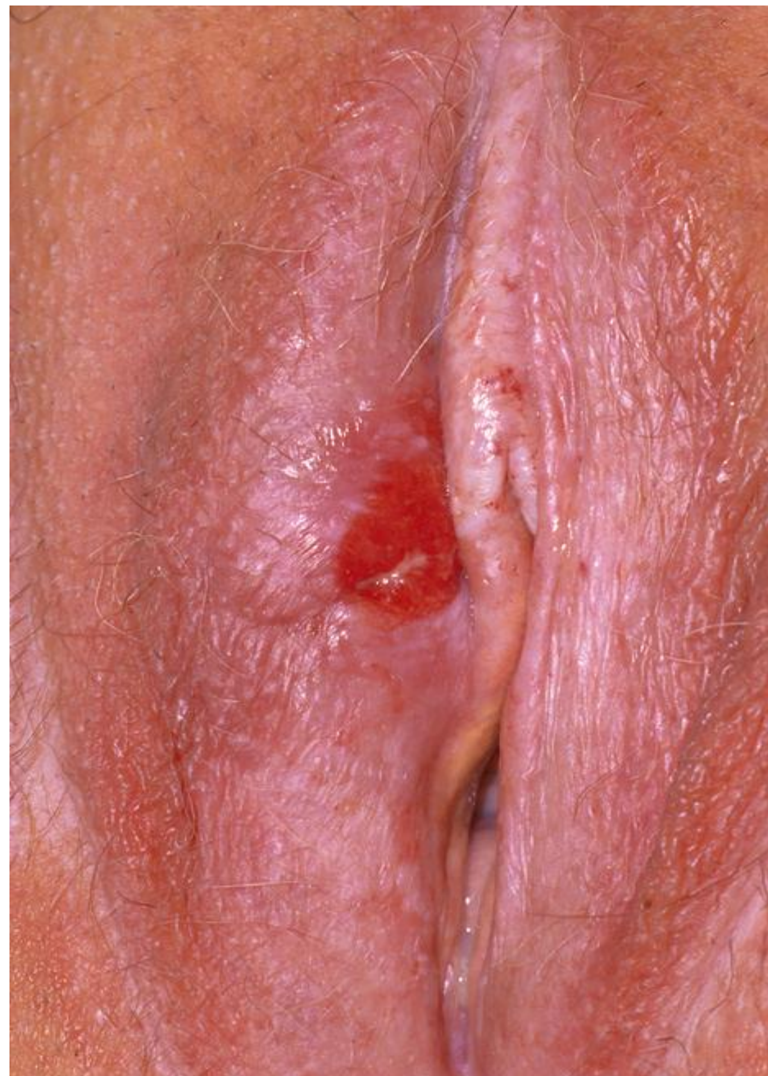




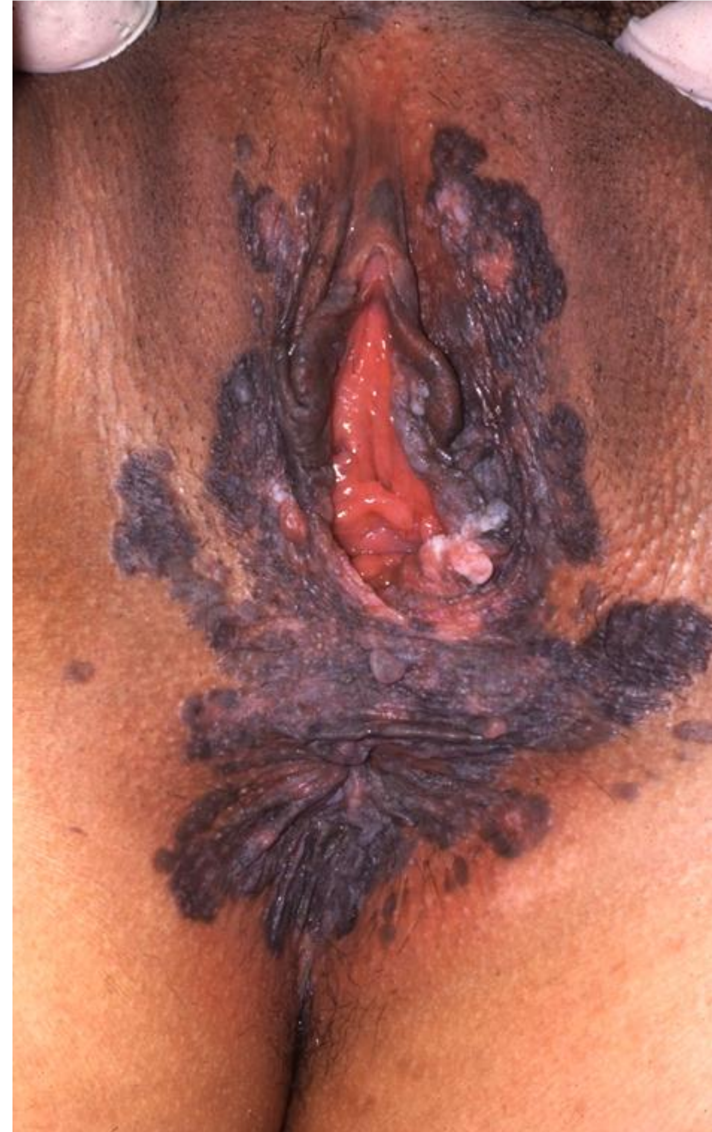
Vulvar Carcinoma



HPV -ve



HPV +ve



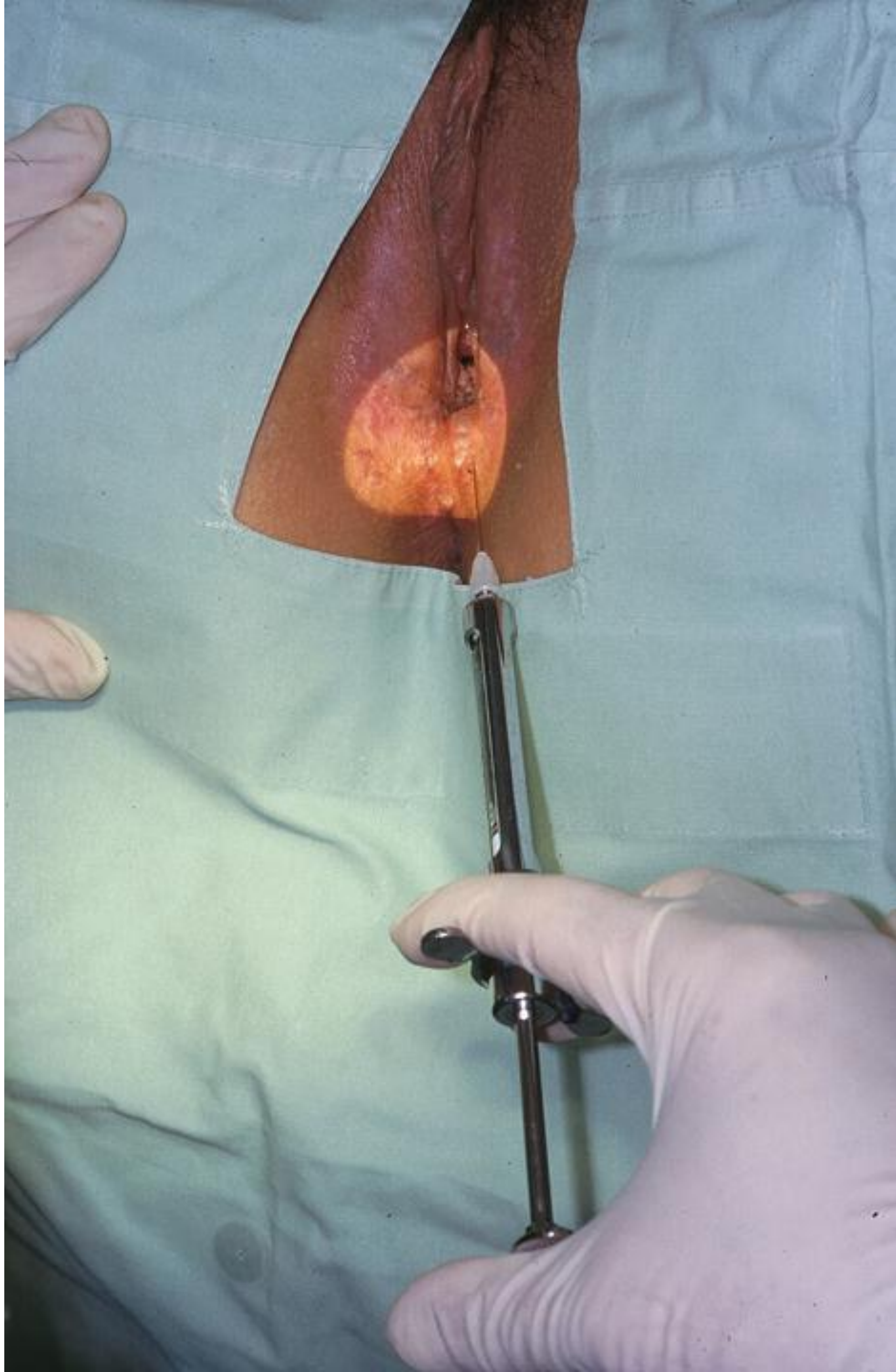
Diagnosis

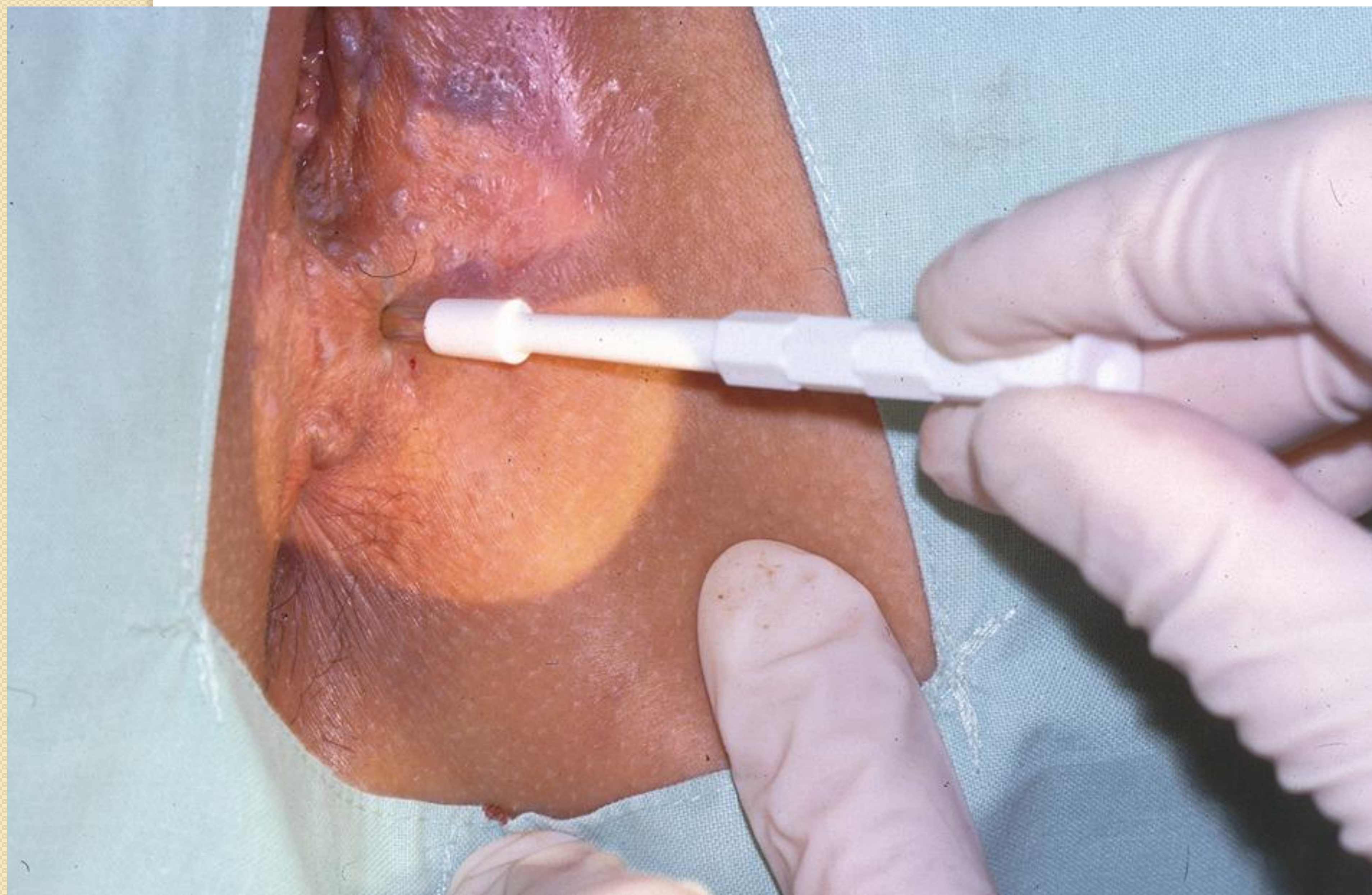
Wedge biopsy/Keyes punch biopsy specimen

- Surrounding skin
- Some dermis and connective tissue

Allow pathologist to work out depth of invasion

Leave primary lesion in situ to allow the treating surgeon to fashion adequate surgical margins





Modern management of vulvar cancer

- Should be delivered by experienced multidisciplinary team in tertiary referral centres

  80% of cases rx in the community do not have a node dissection and survival data was worse for all stages

- Paradigm shift in surgical approaches to the disease

  = Individualized, more conservative

  = Disease occurring in younger women

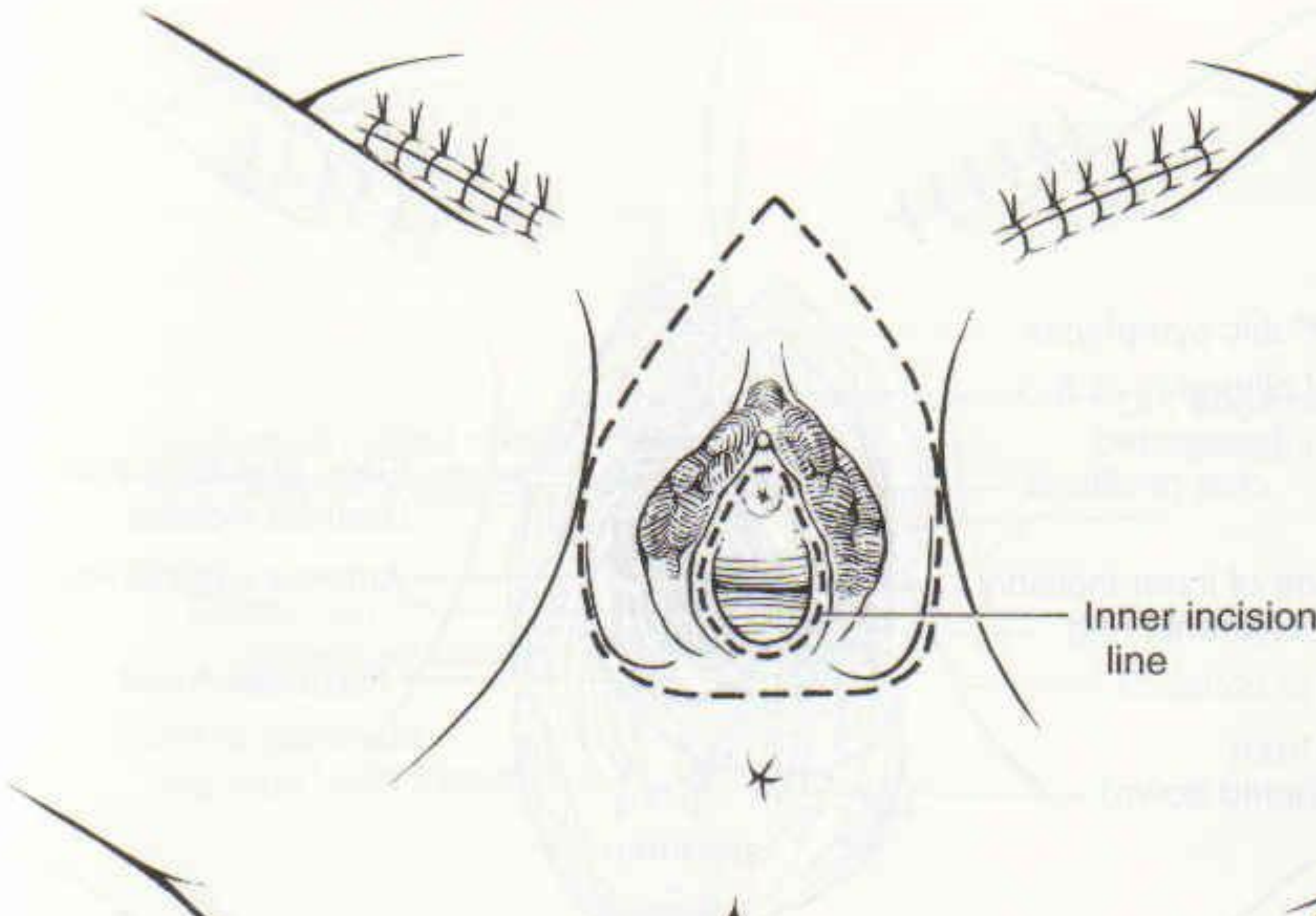
  =Concerns about morbidity and psychosexual consequences

HOW WILL THEY TREAT THIS DOCTOR?

- SURGERY – PRIMARY TUMOR
  _ LYMPH GLANDS

- RADIOTHERAPY

  To vulva, lymph glands or both usually with chemotherapy



Inner incision line

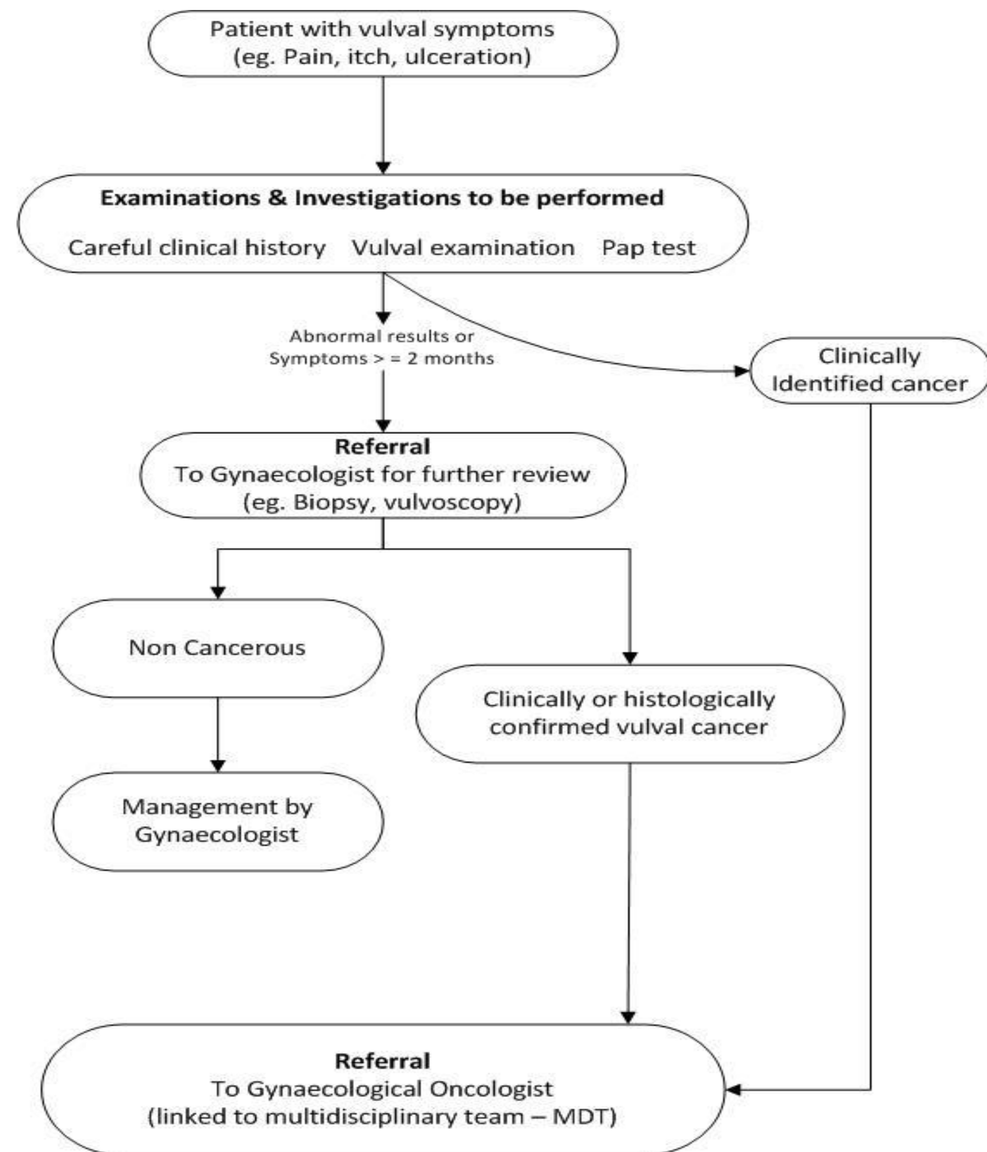
Vulva Cancer Referral Pathway

Patient History

- prolonged skin condition eg LS,LP =high risk
- Previous VIN
- Gynae history

Symptoms and signs

- Itching, burning, soreness
- Lump, swelling, wart like growth
- Thickened red, white, dark patches on skin of vulva
- Vulva sore, ulcer
- Vulva pain
- Mole that changes



Complications with vulvar cancer surgery

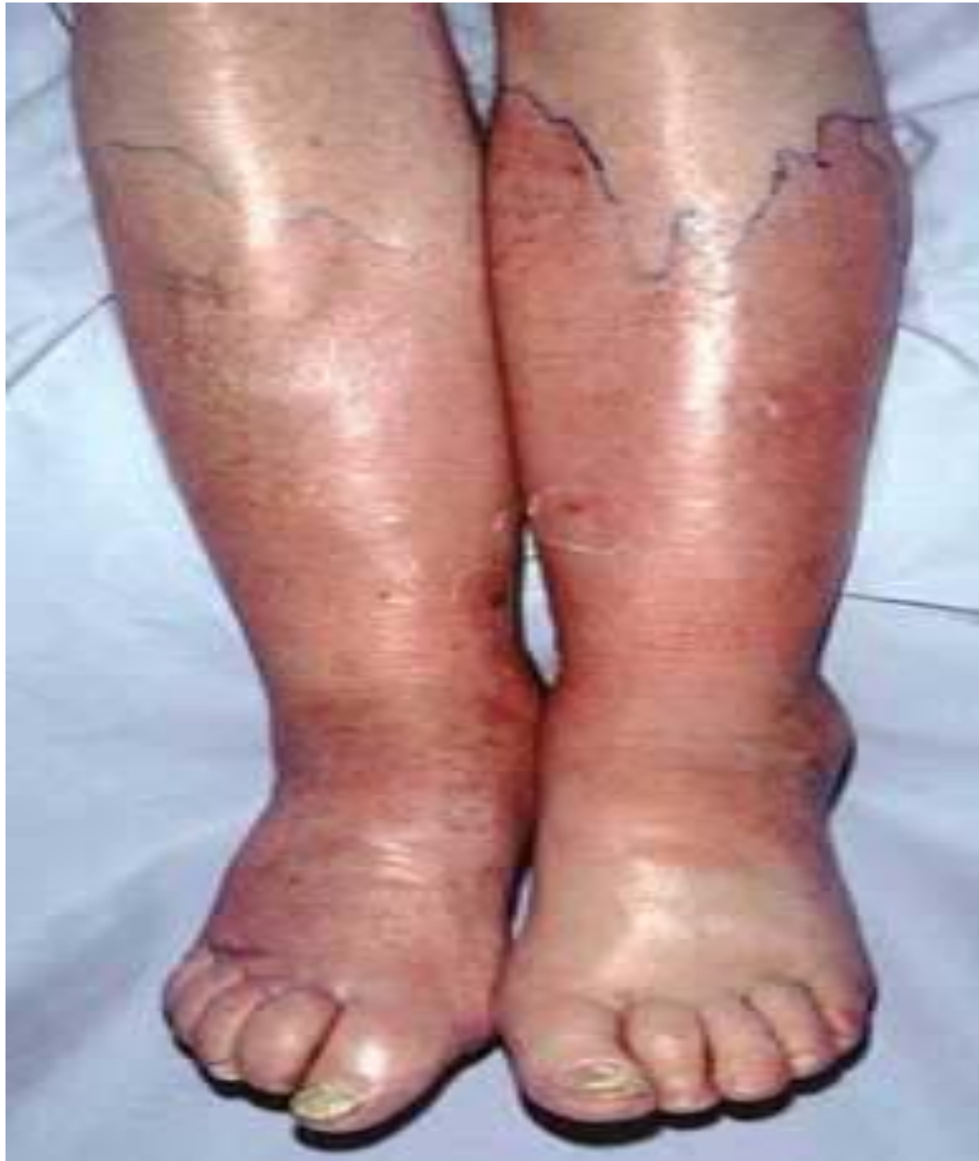
- Wound infection, breakdown, necrosis
- UTI, spraying
- Seroma in femoral triangle
- Lymphaedema
- Prolapse
- Introital stenosis
- Dyspareunia
- DVT,PE

SEXUALITY

- BODY IMAGE ISSUES
- DECREASE IN SEXUAL AROUSAL
- DYSPAREUNIA (INTROITAL STENOSIS)

Should have consult preoperatively with psychologist especially younger women

FOLLOW UP VISIT



LYMPHAEDEMA

- Exclude DVT
- ?any infection

- Physical examination
- Ultrasound scan

LYMPHAEDEMA- *RISK FACTORS*

- SURGERY
- OBESITY
- TUMOR BLOCKING LYMPH NODES OR VESSELS
- SCAR TISSUE

LYMPHAEDEMA –*PREVENTION*

- Keep skin and nails clean. Prevent infection
- Avoid blocking flow of fluids
- Prevent blood from pooling

TREATMENT

- Compression
- Massage
- Bandage
- Skincare
- Laser

CHRONIC LEG EDEMA

- **RHW IN SYDNEY –INCIDENCE OF CHRONIC LEG EDEMA = 62%**
- **50% ONSET WITHIN 3 MONTHS**
- **85% ONSET WITHIN 12 MONTHS**

Ryan,hacker et al

QUALITY OF LIFE AND ROLE OF SENTINEL NODE BIOPSY

- **N=60 treated for ca vulva that could have snb, FIGO 1B,2, 3 with –ve inguinal femoral nodes**
- **Had treatment 12 months before**

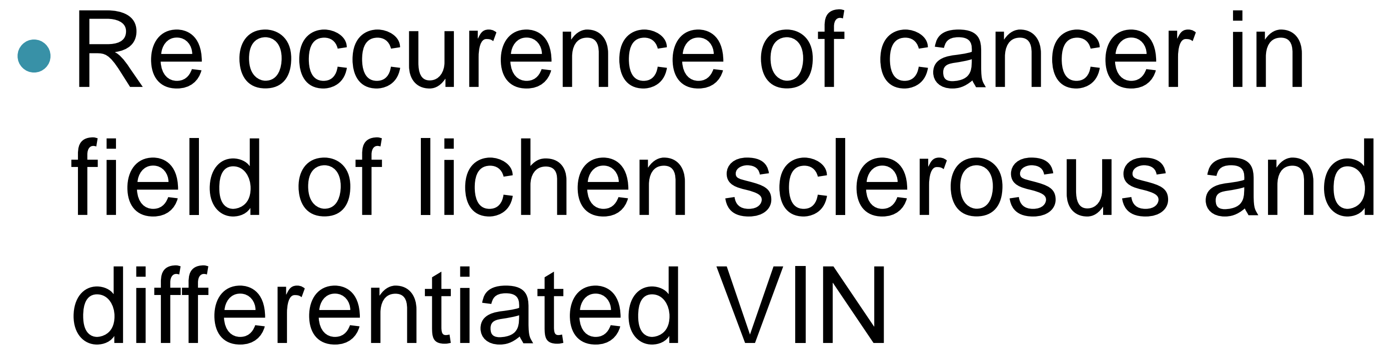
Farrell, Hacker RHW Sydney

- 73% REPORTED LYMPHOEDEMA
- 53% EXPERIENCED PAIN
- 23% HAD AT LEAST ONE EPISODE OF CELLULITIS

1. EFFECT OF LND ON QOL WAS –VE IN 35%
2. OVERALL QOL WAS GOOD,75% OF PERCEIVED PERFECT HEALTH
3. CHOICE OF SNB IF AVAILABLE,80% STILL HAVE LND

Case 2 (FL)-Importance of FU

- Had treatment with surgery to vulva(clear margins), debulking enlarged nodes and RT to both groins
- Followed up by RT for 6 months referred back for FU by local hospital no appt given
- Presented acutely(1yr after Rx) when worried about lump around clitoris biopsies confirm another scc of vulva


Re occurence of cancer in field of lichen sclerosus and differentiated VIN

ISSVD Guidelines for follow up in specialist clinic

- Patient with previous VSCC
- Difficult symptom control
- Possibility of DVIN – includes ungradeable VIN
- Localised thickening

Jones et al AJOG 2007

The increasing evidence

- **Non HPV Ca associated with poorer outcome**

Rouzier et al Gynae Oncol 2001

- **Strong association between DVIN and Ca**

Scurry et al Int J Gynae Path 2006

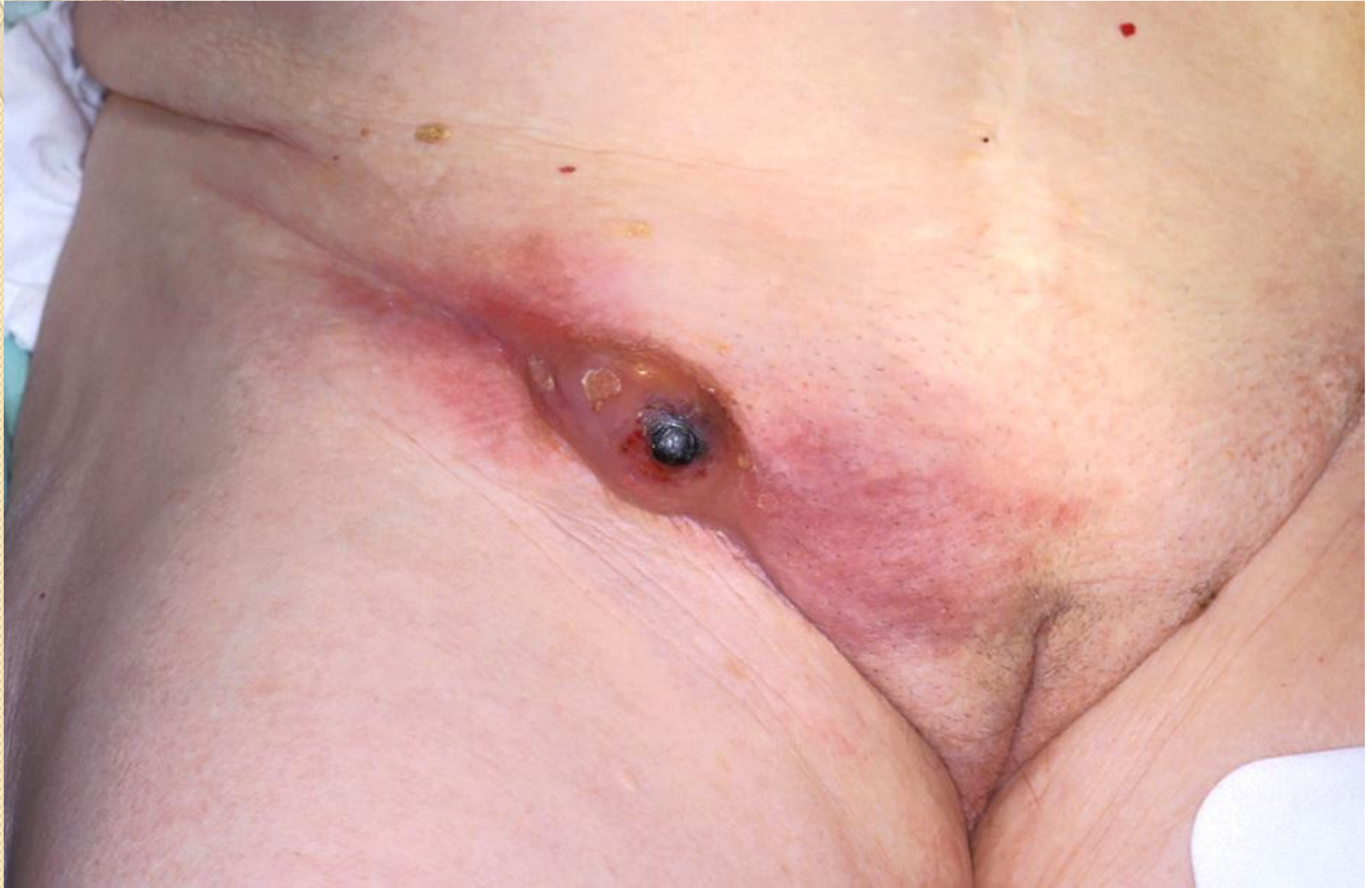
- **DVIN associated Ca significantly more likely to recur**

Eva et al J Reprod Med 2008

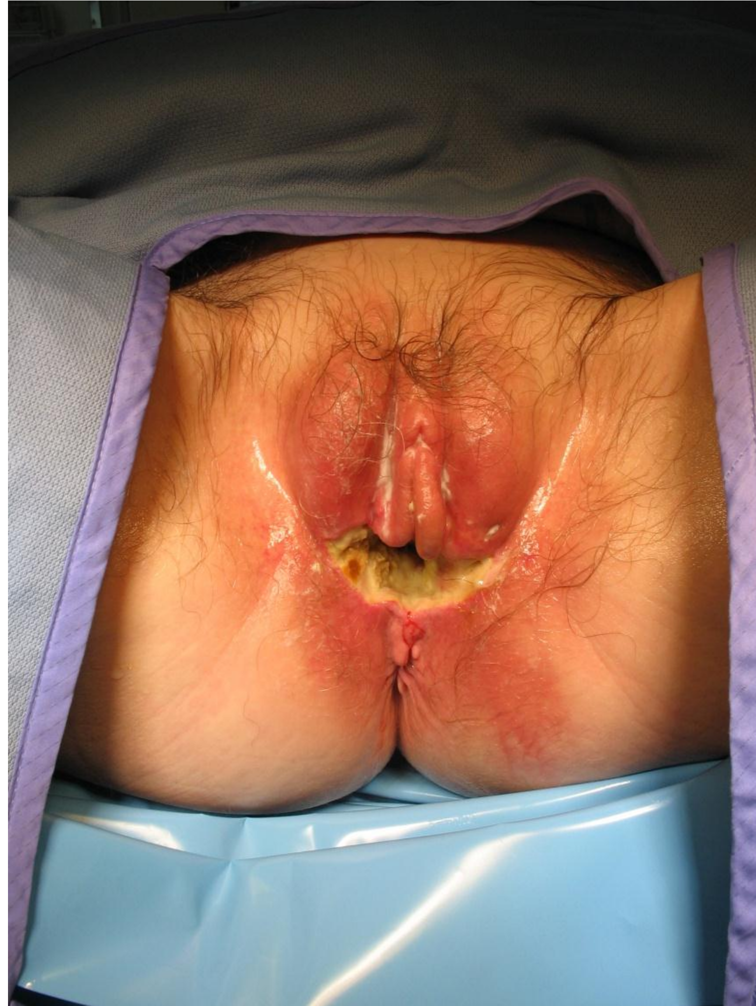
- **DVIN has significantly greater association with VSCC than uVIN**

Eva et al Int J Gynae Cancer 2009

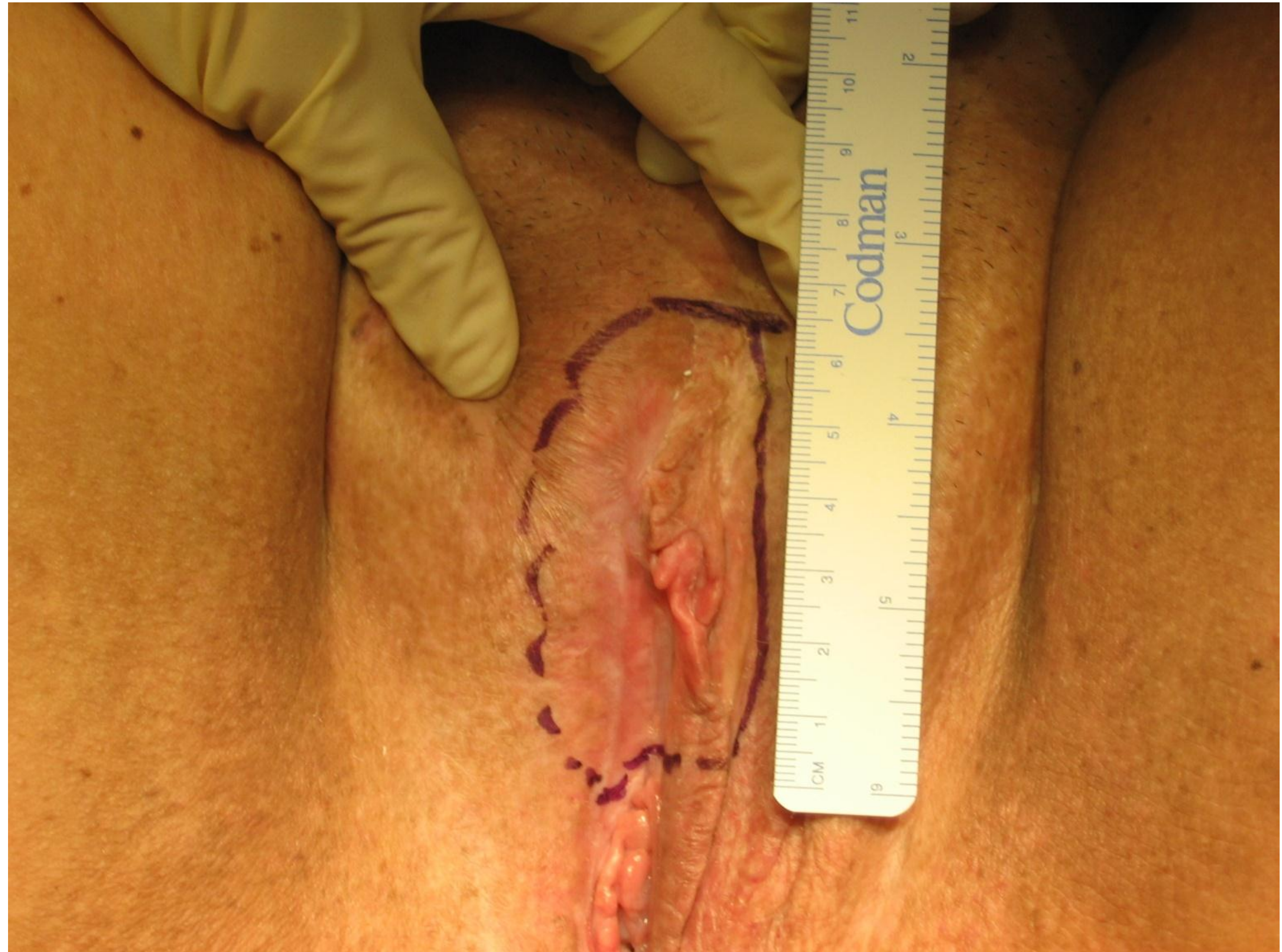
FOLLOW UP VISIT



Follow up visit



Follow up visit



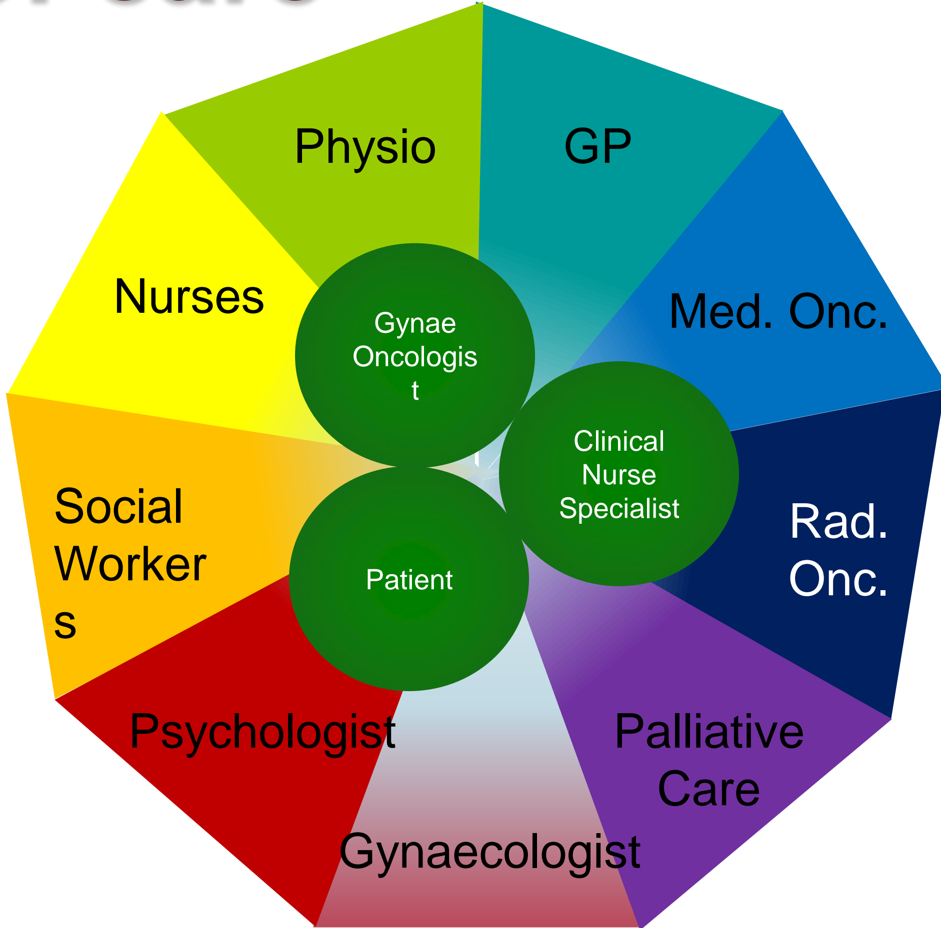
The problem with the vulva……

- Poorly taught

- Perception of “thrush”
- Lack of examination
- Generic treatment
- Patient embarrassment

GYNAECOLOGICAL ONCOLOGIST CGO

Model of care



TUMOR BOARD (MULTIDISCIPLINARY MEETING) -WHAT IS IT?

- **Periodic multidisciplinary meetings where management of cancer patients are discussed.**
- **Vehicle for treatment planning, follow up care and education in oncology**

TUMOR BOARD – WHO GOES?

- Pathologists
- Radiologists
- Gynaecological Oncologists
- Medical Oncologists
- Radiation Oncologists
- Nurses

TUMOR BOARD –DOES IT HELP?

- **Identification of significant major diagnostic discrepancies that altered patient care and optimized treatment planning.** Tan 2009,santoso 2004
- **Evidence to suggest that the outcomes for women with ovarian cancer are improved if managed by a multidisciplinary care team** Junor 1999, Chafe 2000