South GP Conference August 2012

Pre conference workshop – Gynaecology in Family Medicine

16th August 2012

Dunedin

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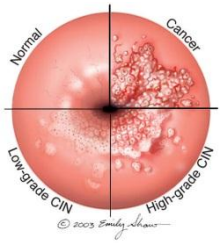
Topics covered

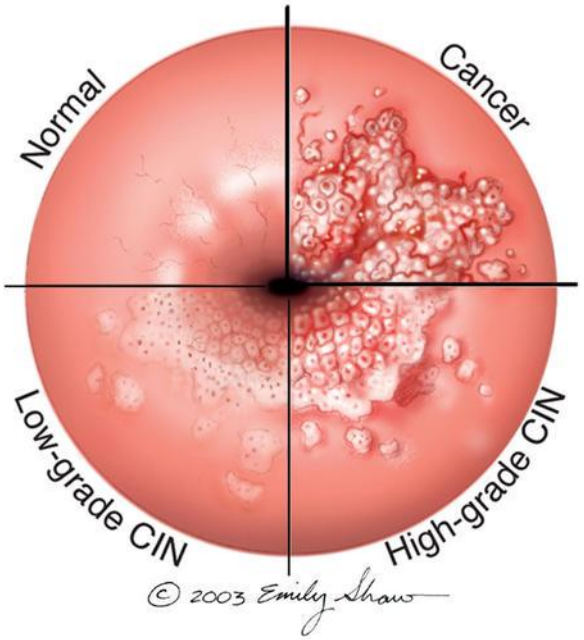
- Cervical cancer, Cervical screening



- Period problems

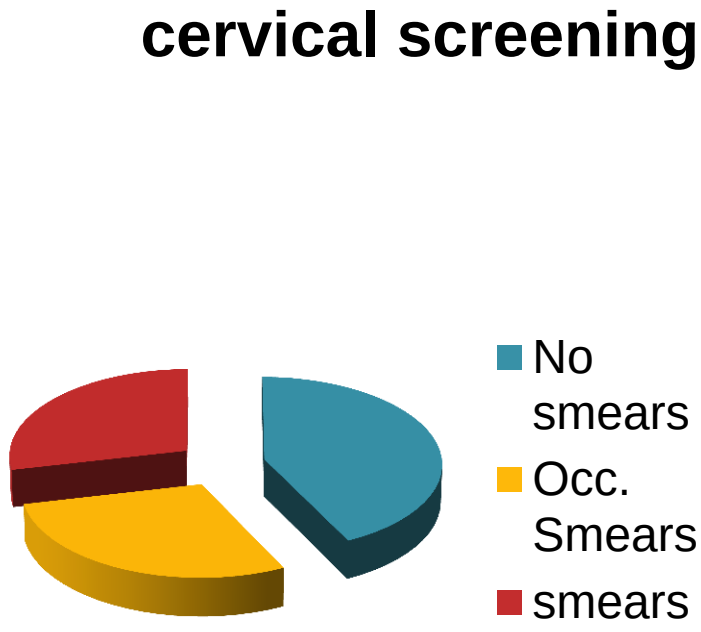
- Achieving pregnancy

Cervical cancer, cervical screening

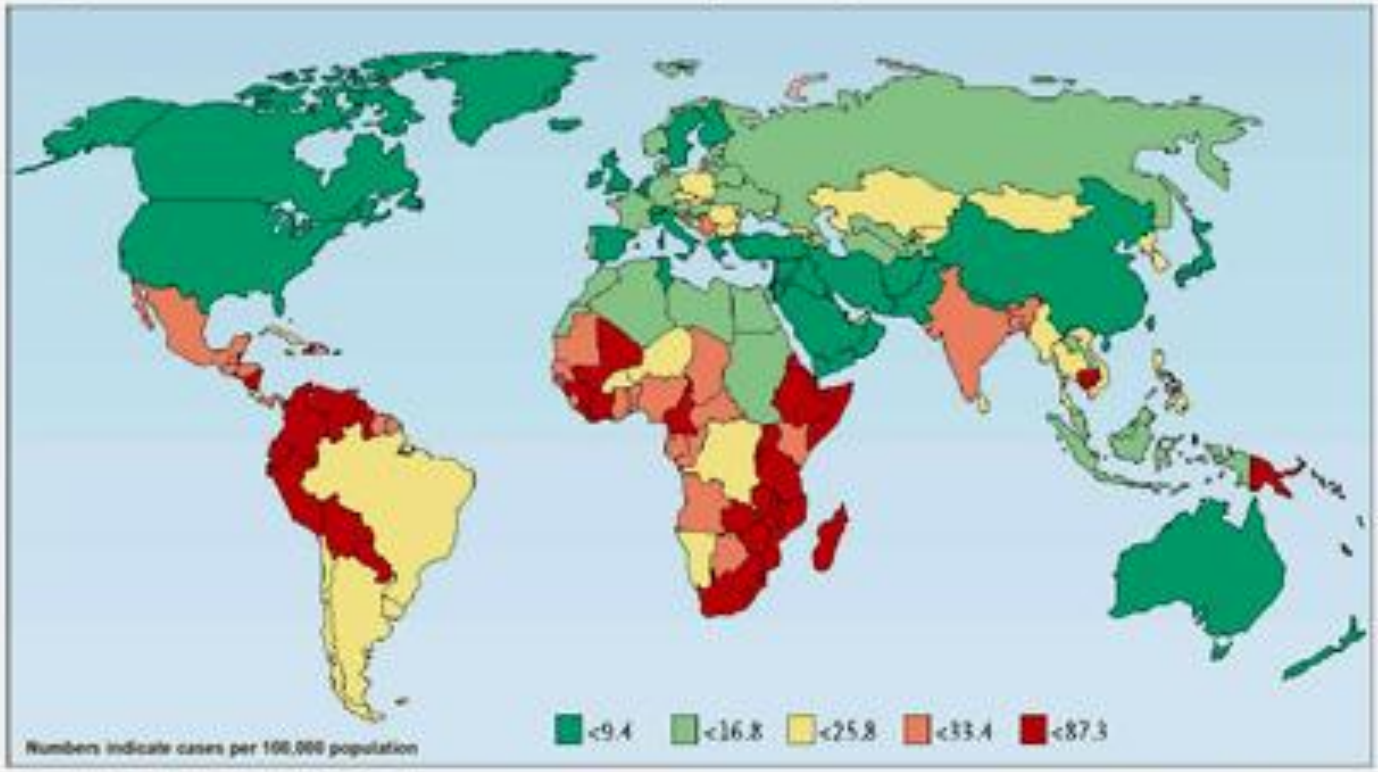


Cervical cancer in NZ – Recent figures

- 160 women diagnosed per year
- 6 - 7 per 100,000 population - rate
- 60 women die every year



Global burden of cervical cancer greatest in developing countries



Half a million cases of cervical cancer each year, overwhelmingly in developing countries.
Over 309,000 women die, impacting the economic health and well-being of the family.

Cervical screening

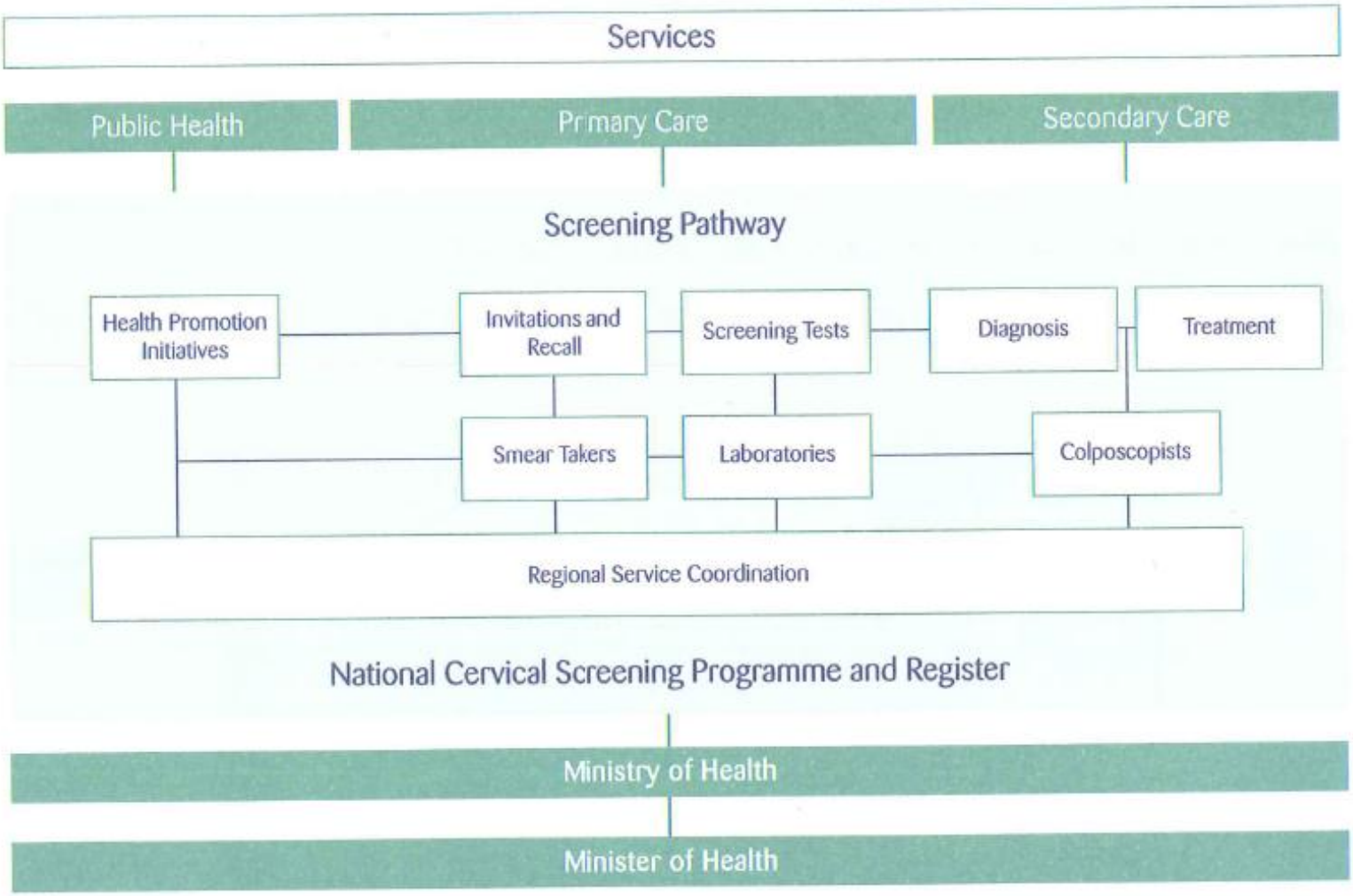
- NCSP since 1990
- Screening uptake – recent figures 74% overall
  - Maori 58.2%
  - European 82.6%
  - Pacific Is 61.9%
  - Asian 56.4%

Cervical screening

- Mortality

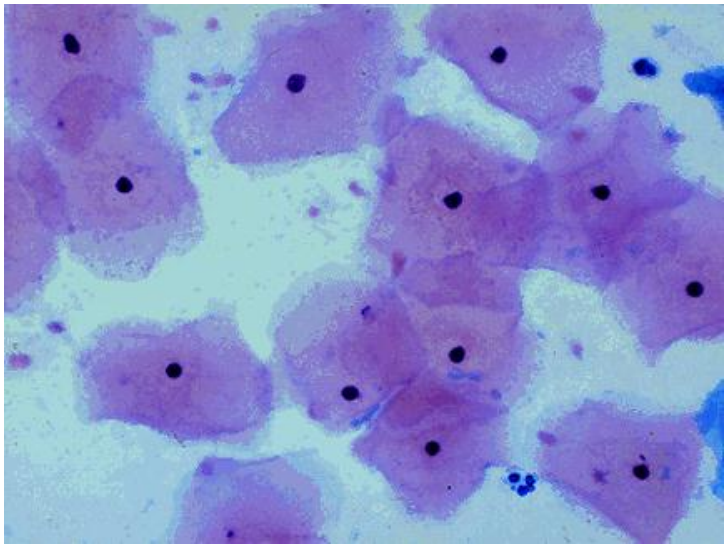
⇩ 70 - 80%

Figure 1: The Screening Pathway



Papanicolaou smear

- George Papanicolaou
  - Greek physician & Anatomist
  - 1883-1962
  - Discoverer of Pap



When to screen and how often

- All women who have ever had sexual intercourse should be offered

3 yearly smears from age 20 – age 69

after 2 X normal smears 1 year apart

More frequent screening if any abnormalities

Cervical screening

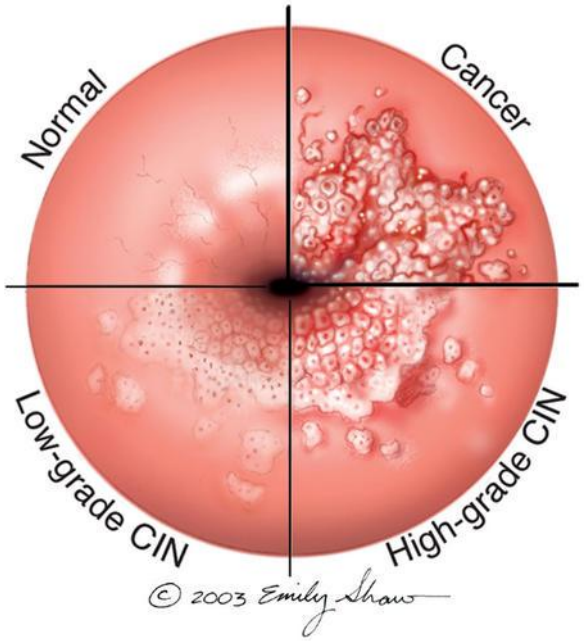
- **When to start** - no need to screen sexually active women under the age of **20yrs**
- Invasive Ca very rare under 20yrs
- Unnecessary screening –
  Waste of precious resources
  potential harm – unnecessary Rx
- **When to stop –** current NZ policy – **69yrs**

Future changes to screening age and interval

- In UK – start at 25yrs
  3yrly until 50yrs
  5yrly until 65yrs
- In Netherlands and Finland –
  30-60yrs 5yrly
- Recent WHO guide -
  start at 30yrs
  5yrly for >50yrs
  3yrly for 25-49yrs
  no annual screening at any age
  no need for smears >65yrs if last 2 smears NAD

Human Papilloma Virus(HPV)

- HPV related



HPV

- Small DNA viruses
- Koilocytosis is pathognomic feature
- **99% SCC of cervix is linked with HPV**
- Over 80 HPV types
- Types 6 & 11 cause most condylomata acuminata
- **Types 16 and 18** the most common types found in HSIL and cervical cancer.
- Type 16 in 50% CA, 18 another 15%
- Other less common high risk HPV 39, 45,and 59 (15 high risk types)

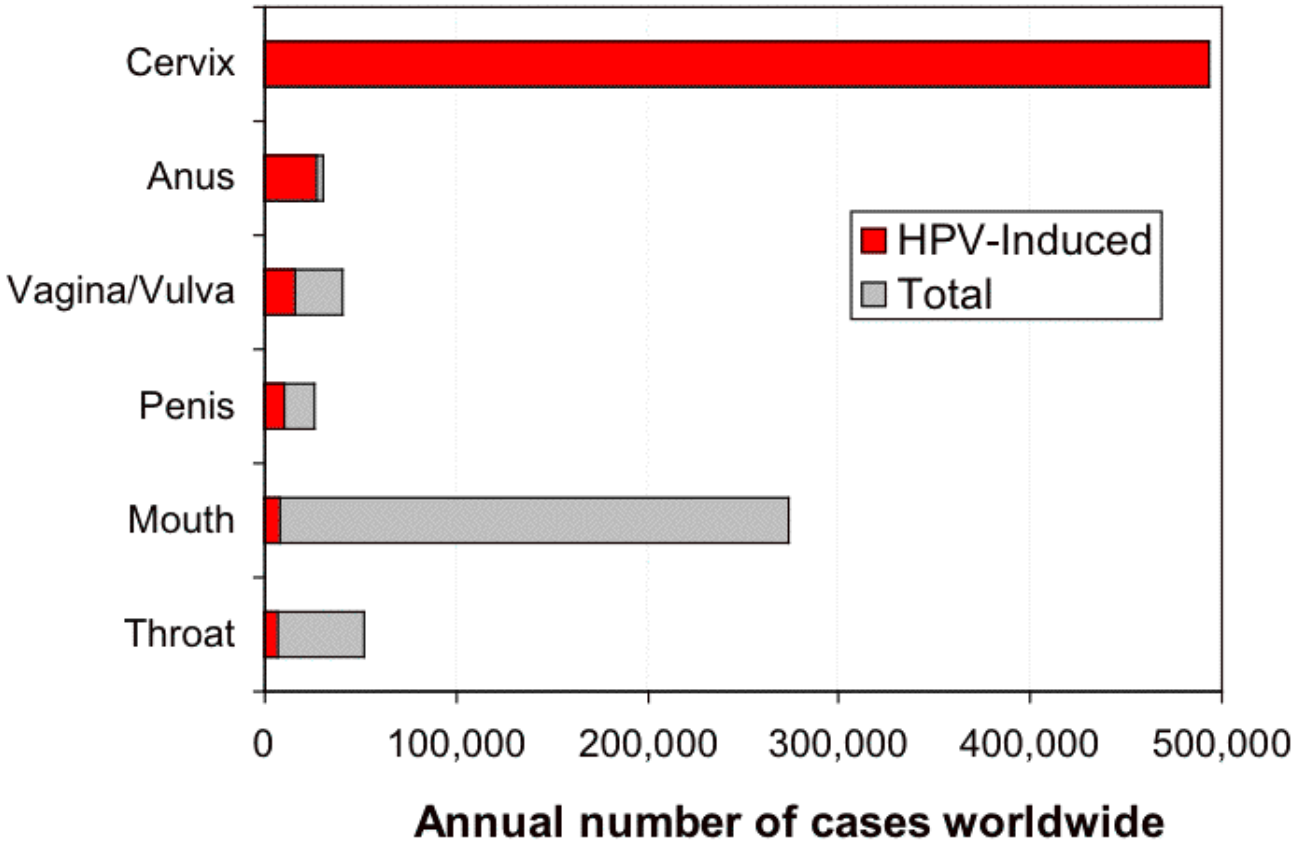
Cofactors

- HPV alone not enough to cause neoplasia
- Viral persistence is a key factor , therefore decreased immune response. Also viral load
- Women with immunosuppression or on immunosuppressant medications. (incl HIV)
- Susceptibility of specific HPV types and HLA haptotypes
- Estrogen exposure (pregnancy, ?OC) susceptibility to HPV but progression
- Smoking (scc not adeno)
- Drug addiction
- Chlamydia infection
- Diet : preventative effects of antioxidants

Other cofactors

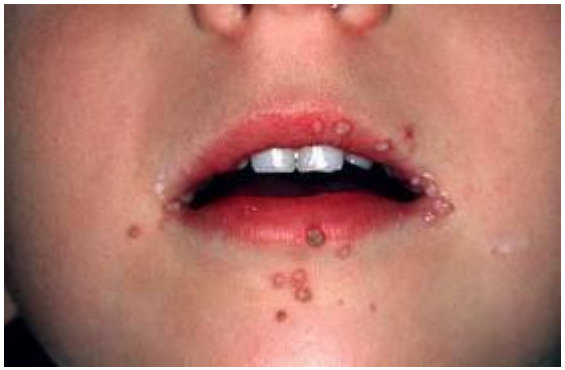
- ↑ no. life sexual partners
- Early age 1st SI
- Number of partners of male is important
- Protection of barrier methods contraception ↓
- Obesity ↑ risk of AdenoCa

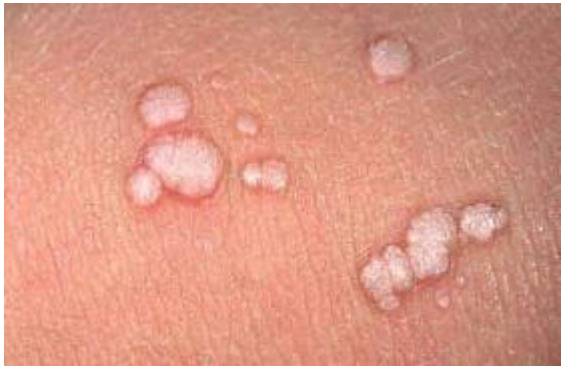
HPV related cases worldwide

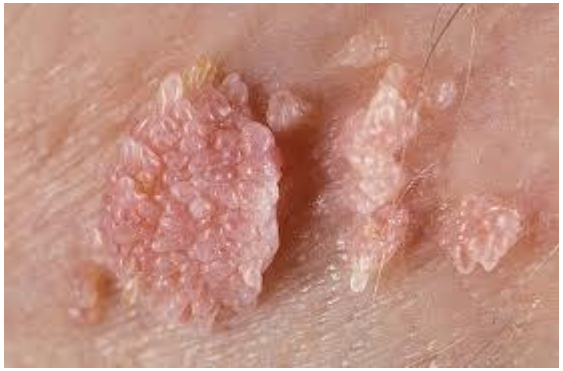


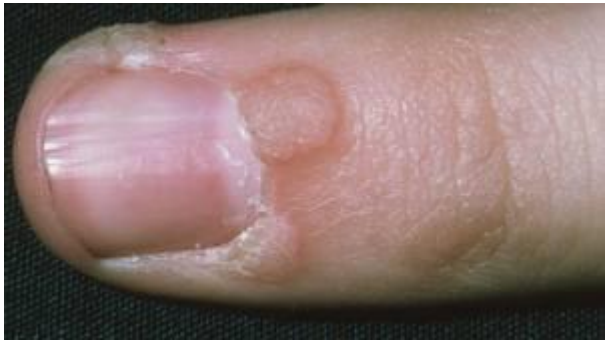
Benign HPV - warts

- Types 6 and 11





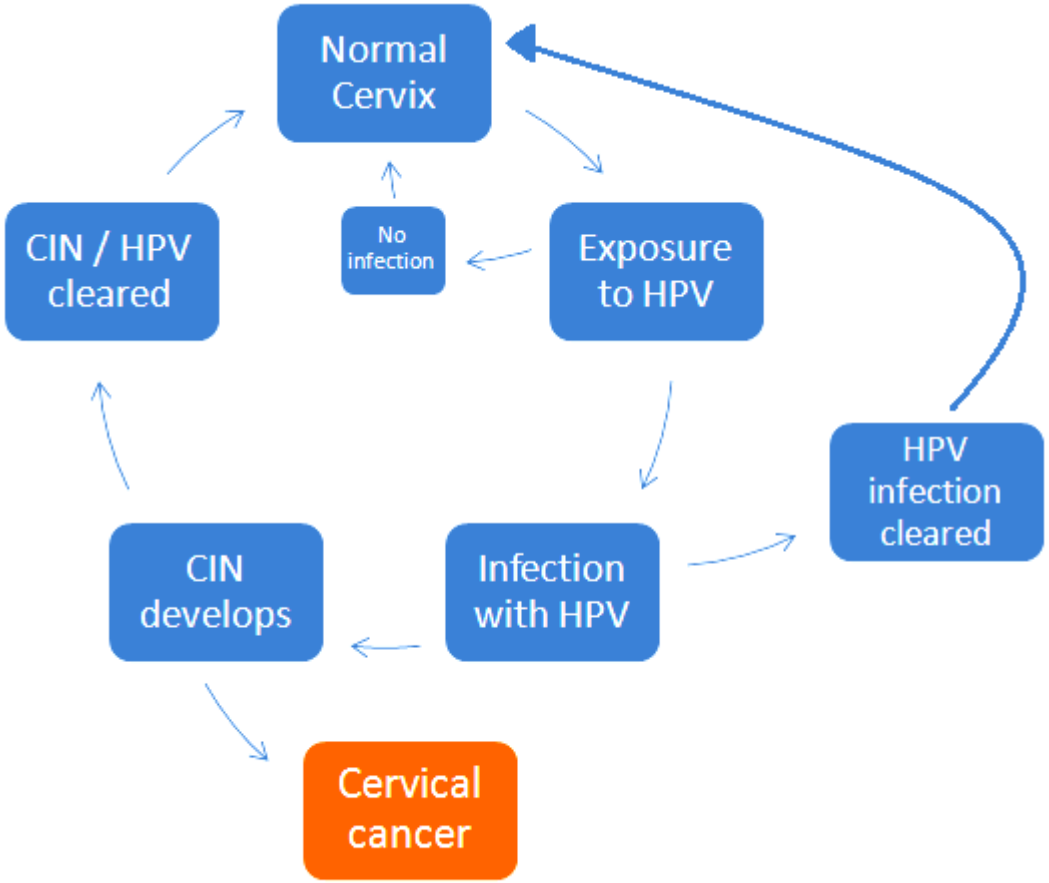




HPV (HrHPV)

- Transient infection in sexually active women
- Under 30yrs – high prevalence >70%
- **>90% clear HPV infection in 2yrs**
- Persistence of infection with increasing age is a risk factor for developing a high grade lesion
- Very high sensitivity 98%
- Negative predictive value 99%
- But low specificity

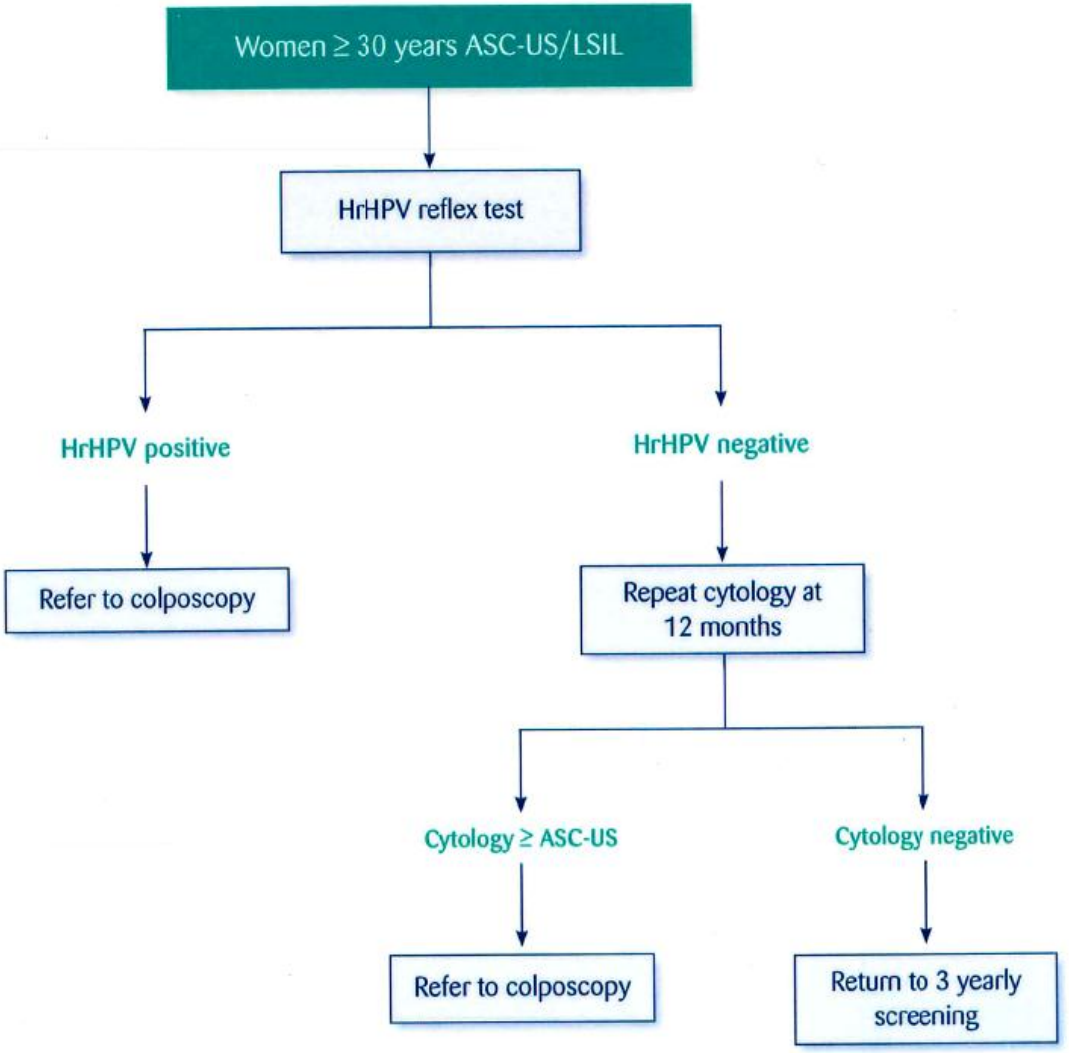
CIN and HPV


Normal Cervix
Exposure to HPV
No infection
CIN / HPV cleared
HPV infection cleared
Infection with HPV
CIN develops
Cervical cancer

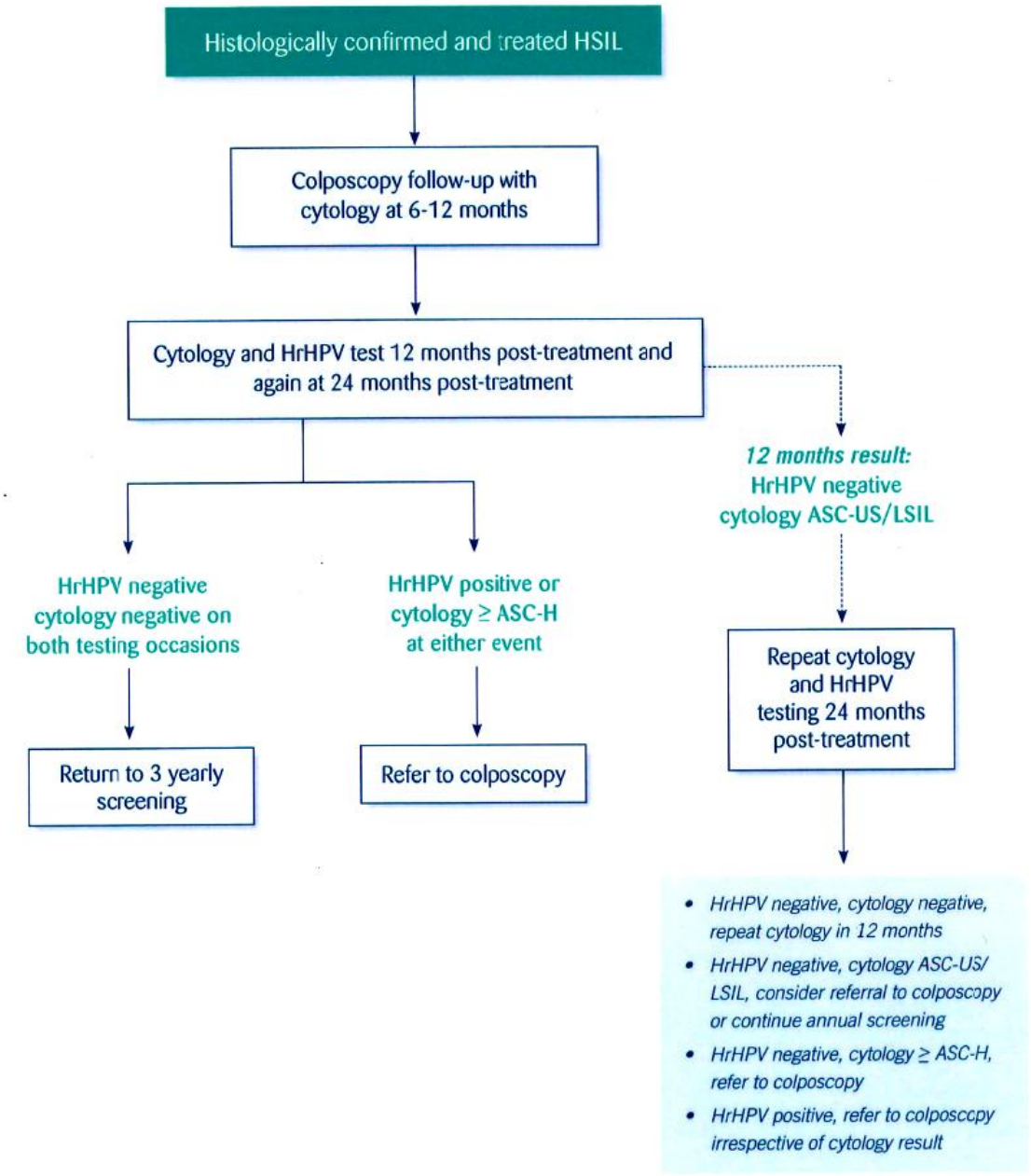
HrHPV – testing in NCSP

- Triage of women 30yrs and over
- Follow up of women treated for a high grade lesion
- Post Colposcopy management with discordant results

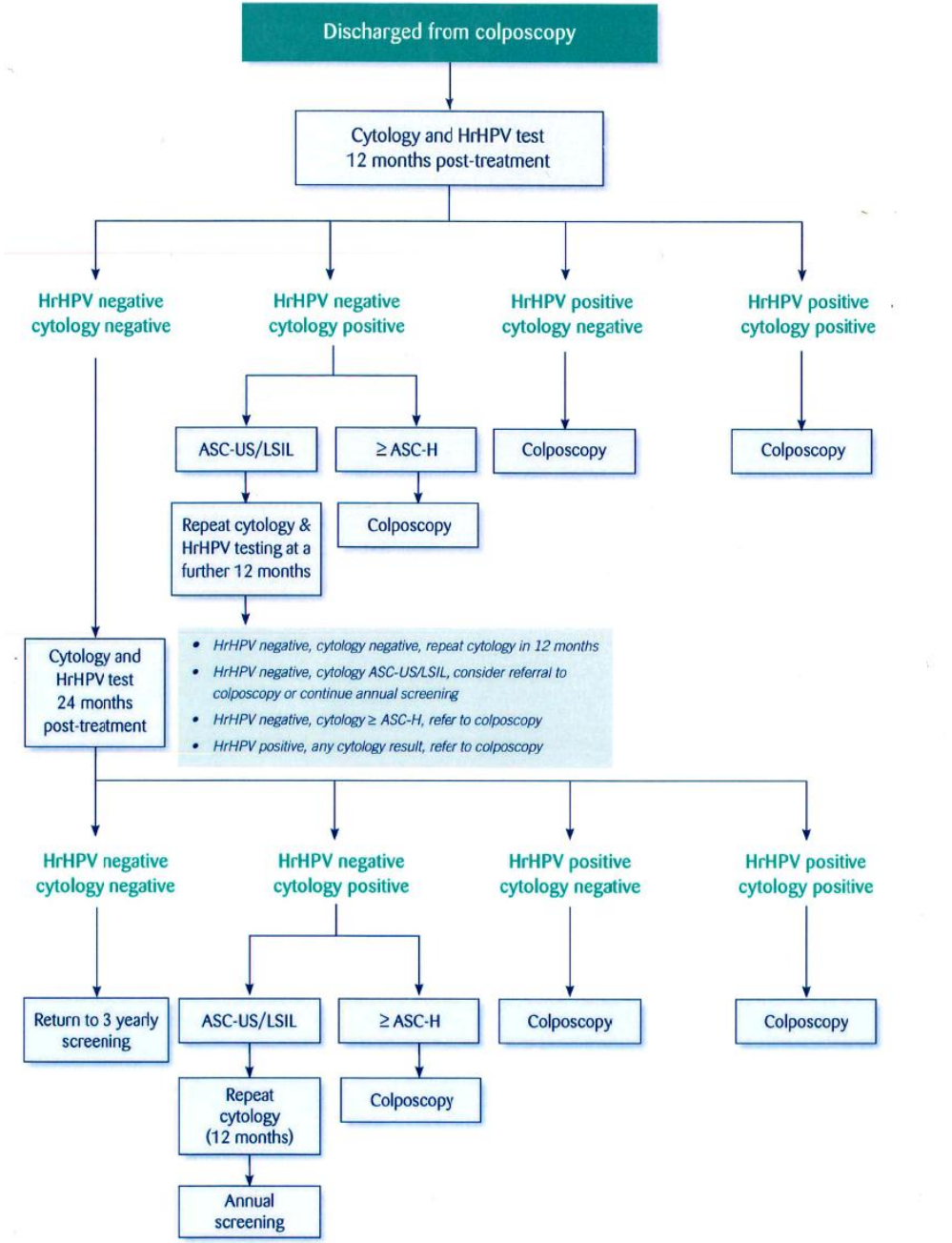
Flowchart HPV Testing Guidance 1: Triage of women 30 years and over with ASC-US or LSIL (who have not had an abnormal smear within the last 5 years)



Flowchart HPV Testing Guidance 2: Follow-up of women treated for high-grade lesions



Flowchart HPV Testing Guidance 2 EXTENDED: Follow-up of women treated for high-grade lesions



HrHPV Vaccine

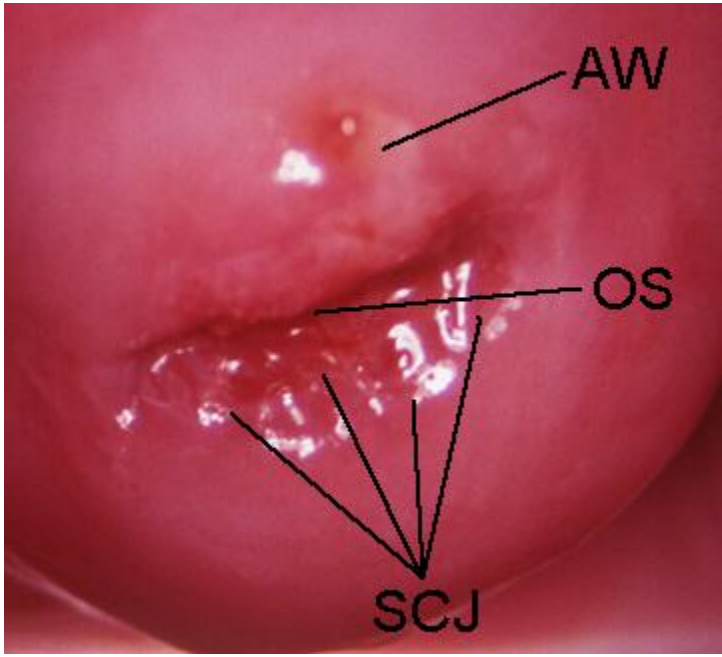
Quadra valent vaccine in NZ

HPV Vaccine – Types 16,18

HPV Vaccine in NZ

- Publicly funded
- Started 1st Sep 2008
- Born after 1st Jan 1990
- At GP, Family planning and some schools
- Regular immunisation programme for girls at Year 8 or at 12yrs of age
- Uptake of vaccine -recent figures **50%**

Colposcopy

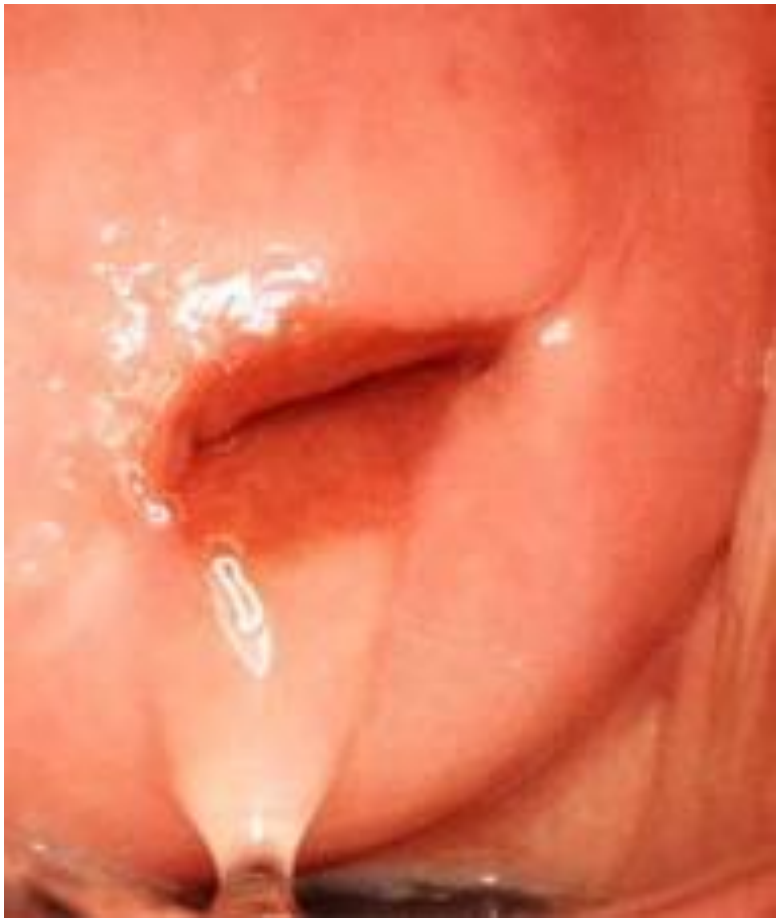


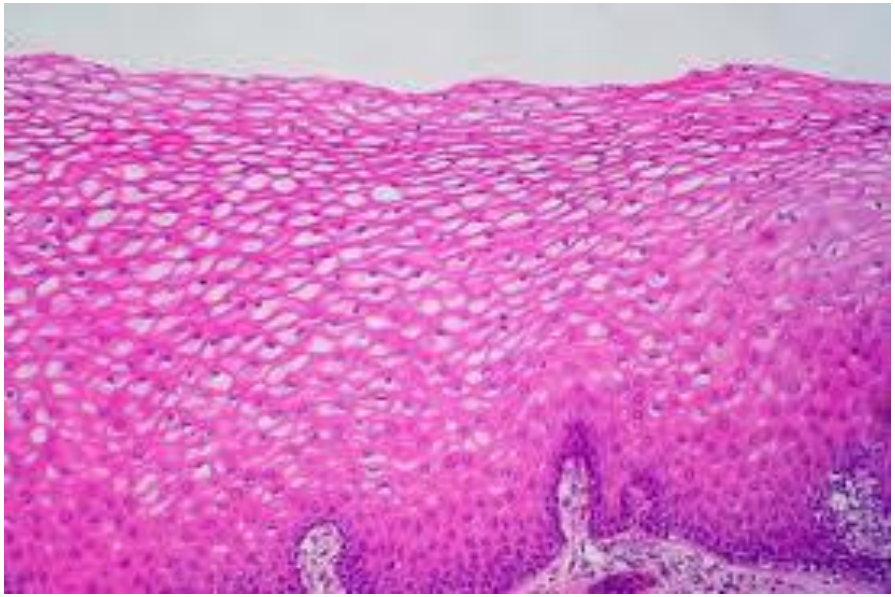
Indications for Colposcopy

- Suspicious looking cervix
- Invasive carcinoma on cytology
- CIN 2 or CIN3 on cytology
- Persisting CIN 1(>6 months) on cytology
- Unsatisfactory quality on cytology
- Infection with high risk HPV
- Acetopositivity on visual inspection with acetic acid or Lugol’s iodine
- Vaginal, Vulvar or Anal intraepithelial neoplasias

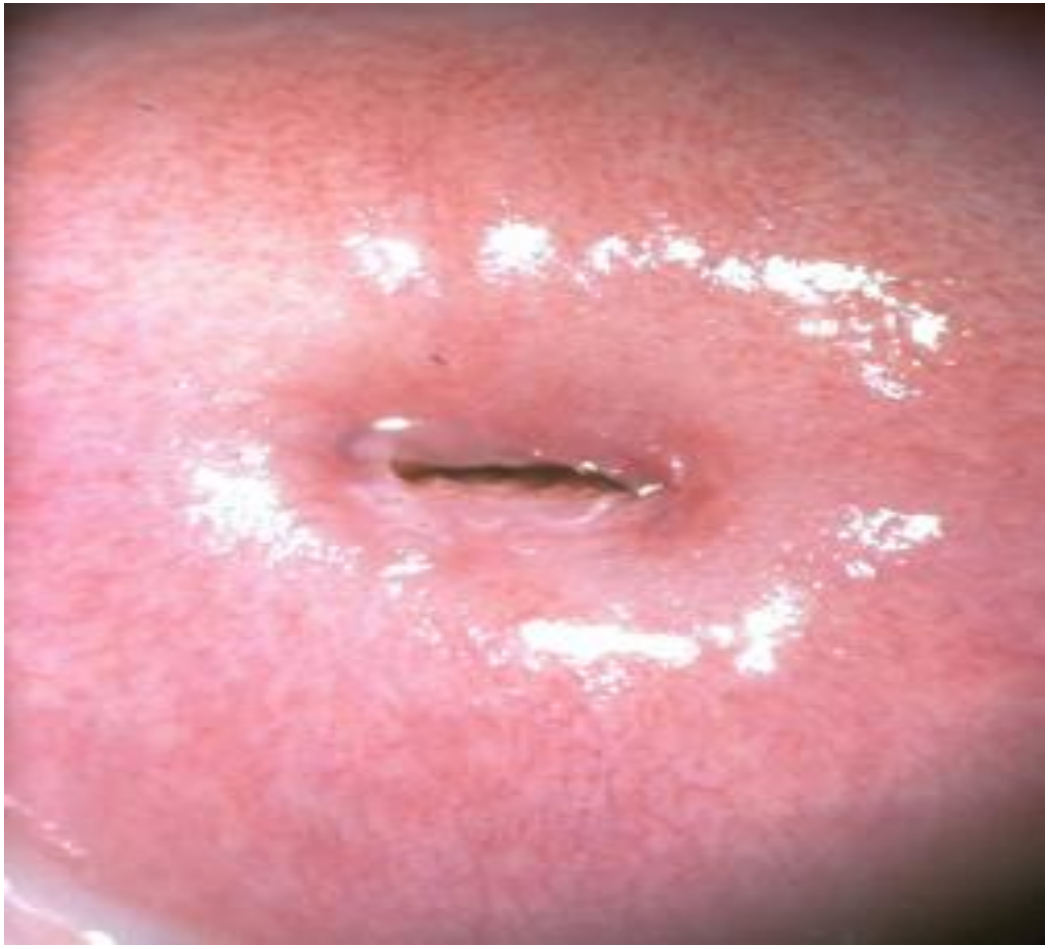
Colposcopy

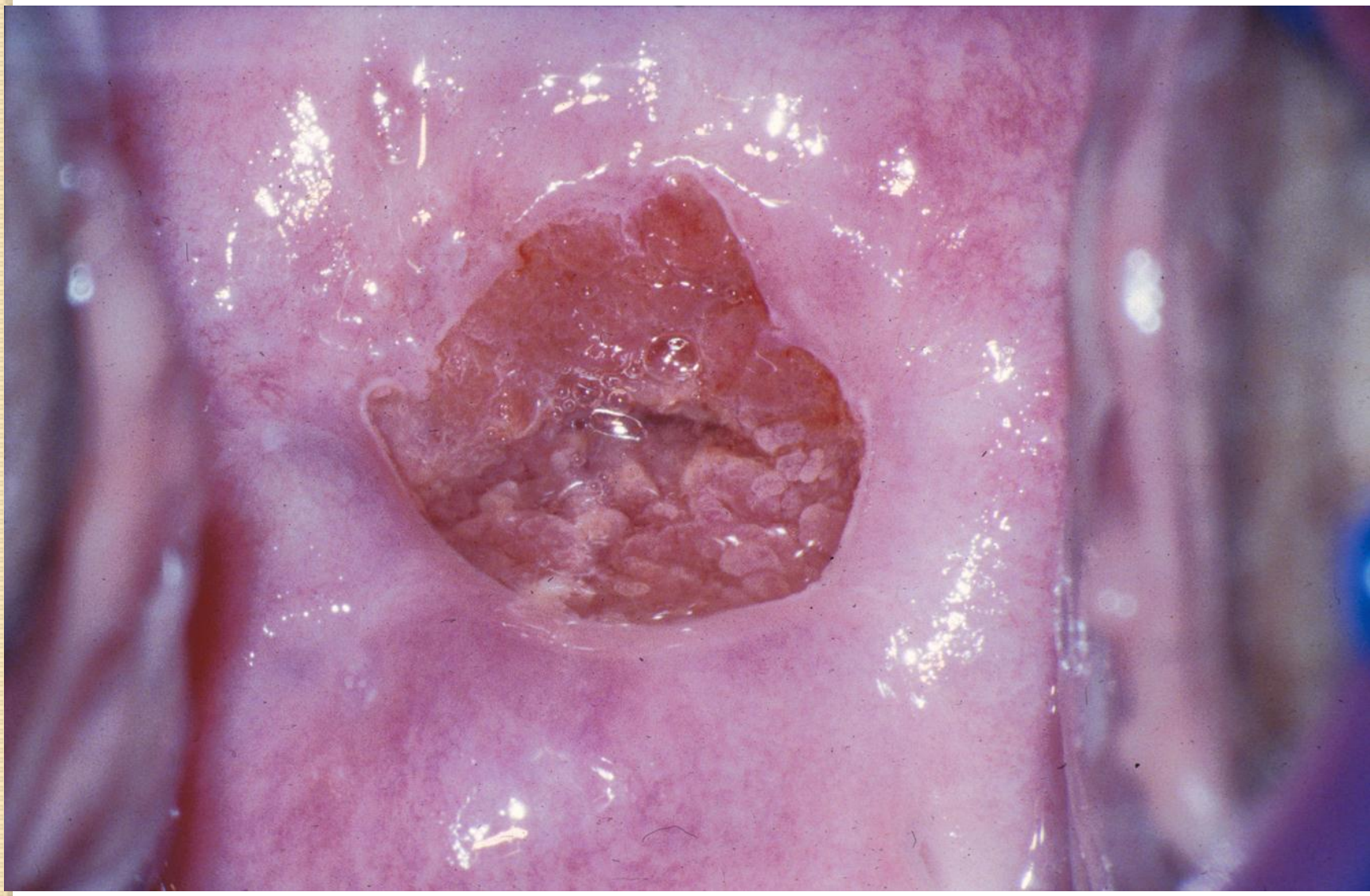
- Normal cervix





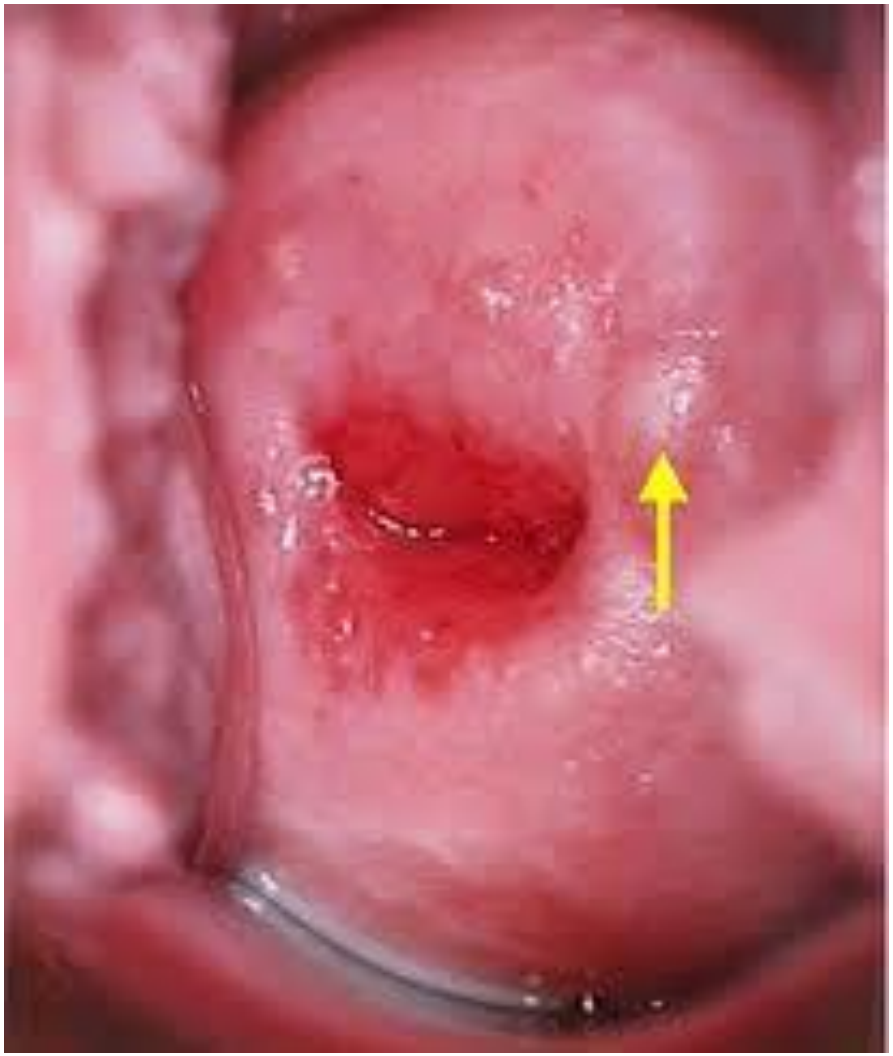
Normal ectocervix



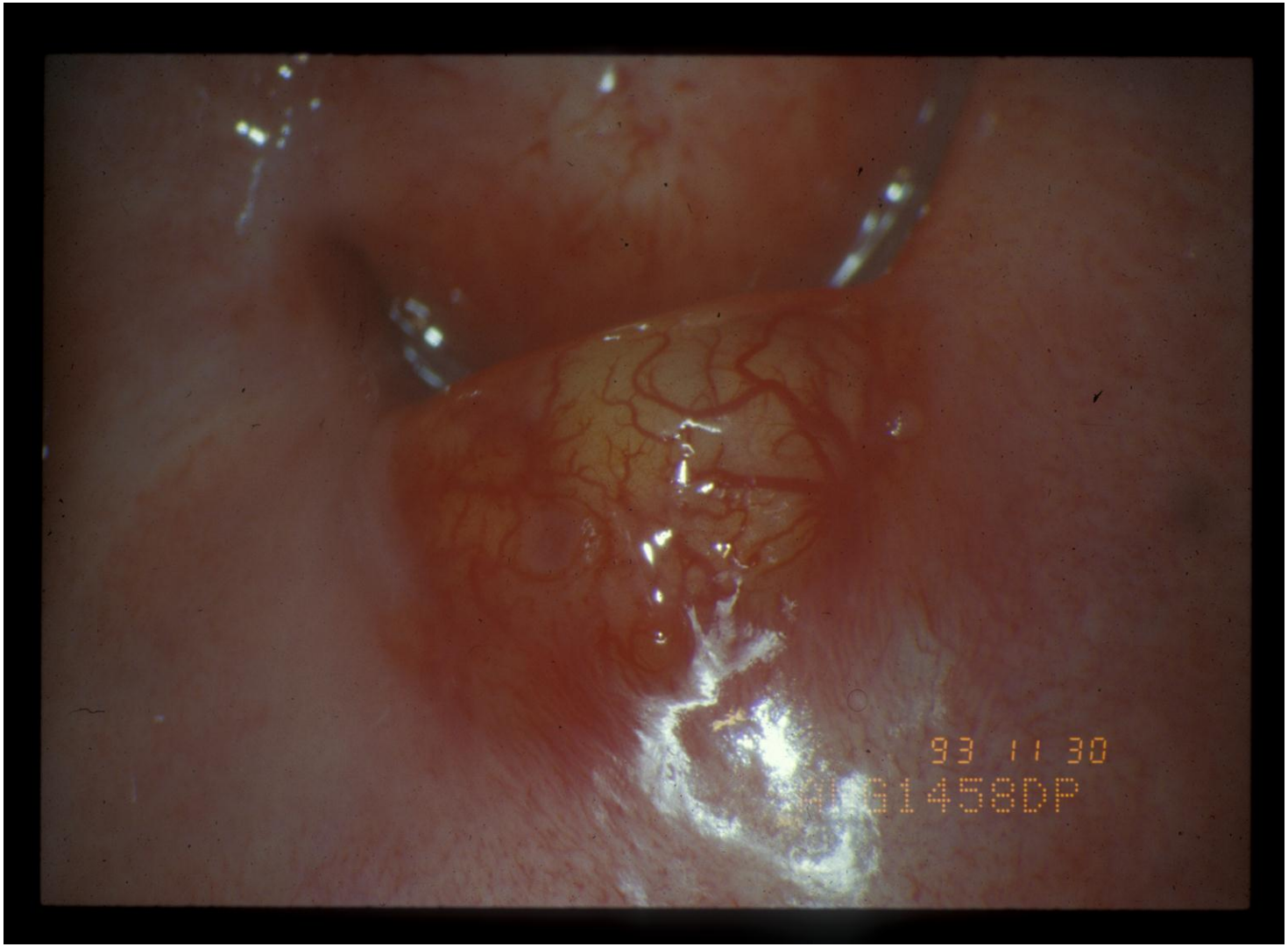


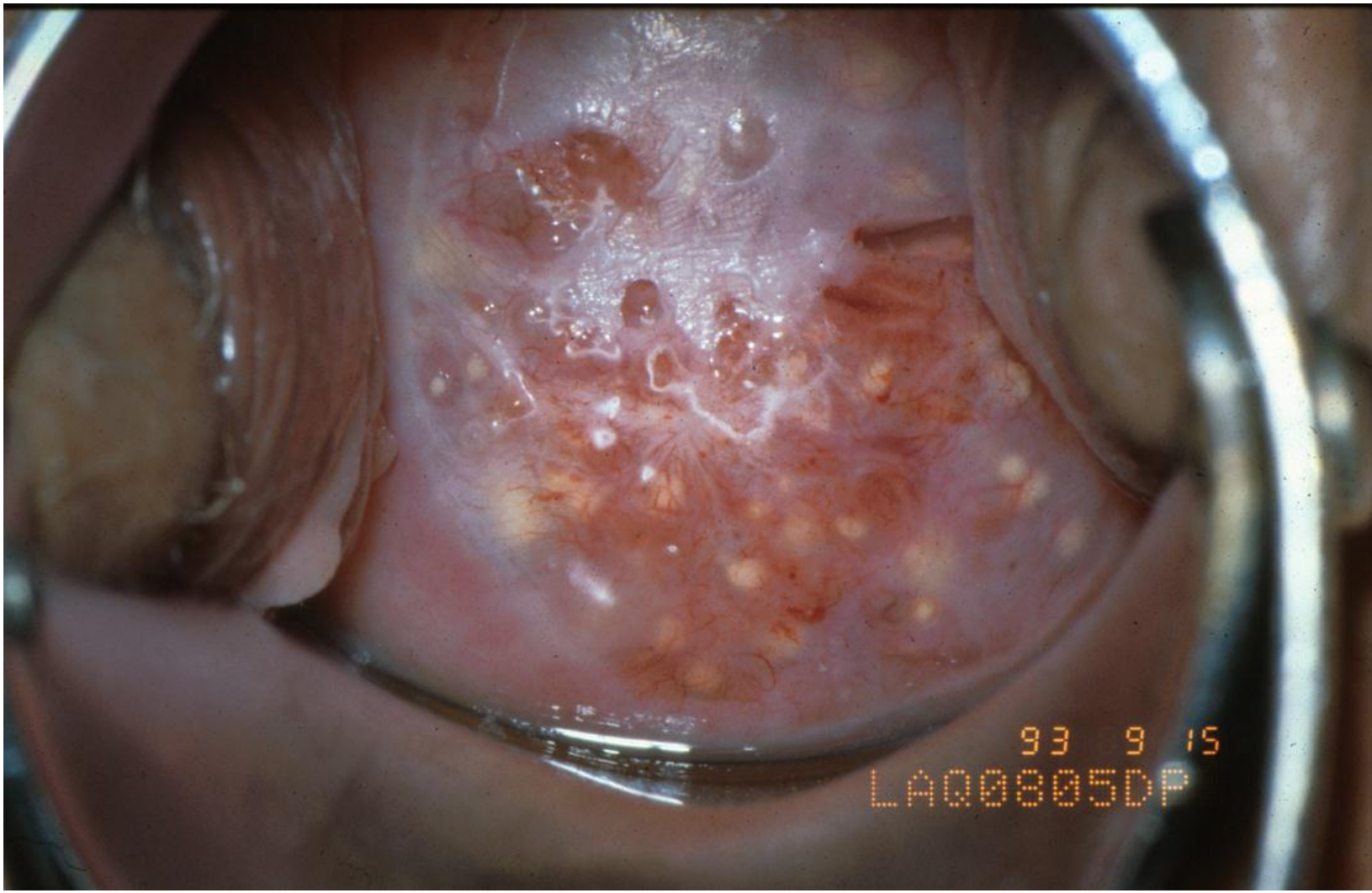
Colposcopy

- Nabothian cyst



Colposcopy – Nabothian cyst

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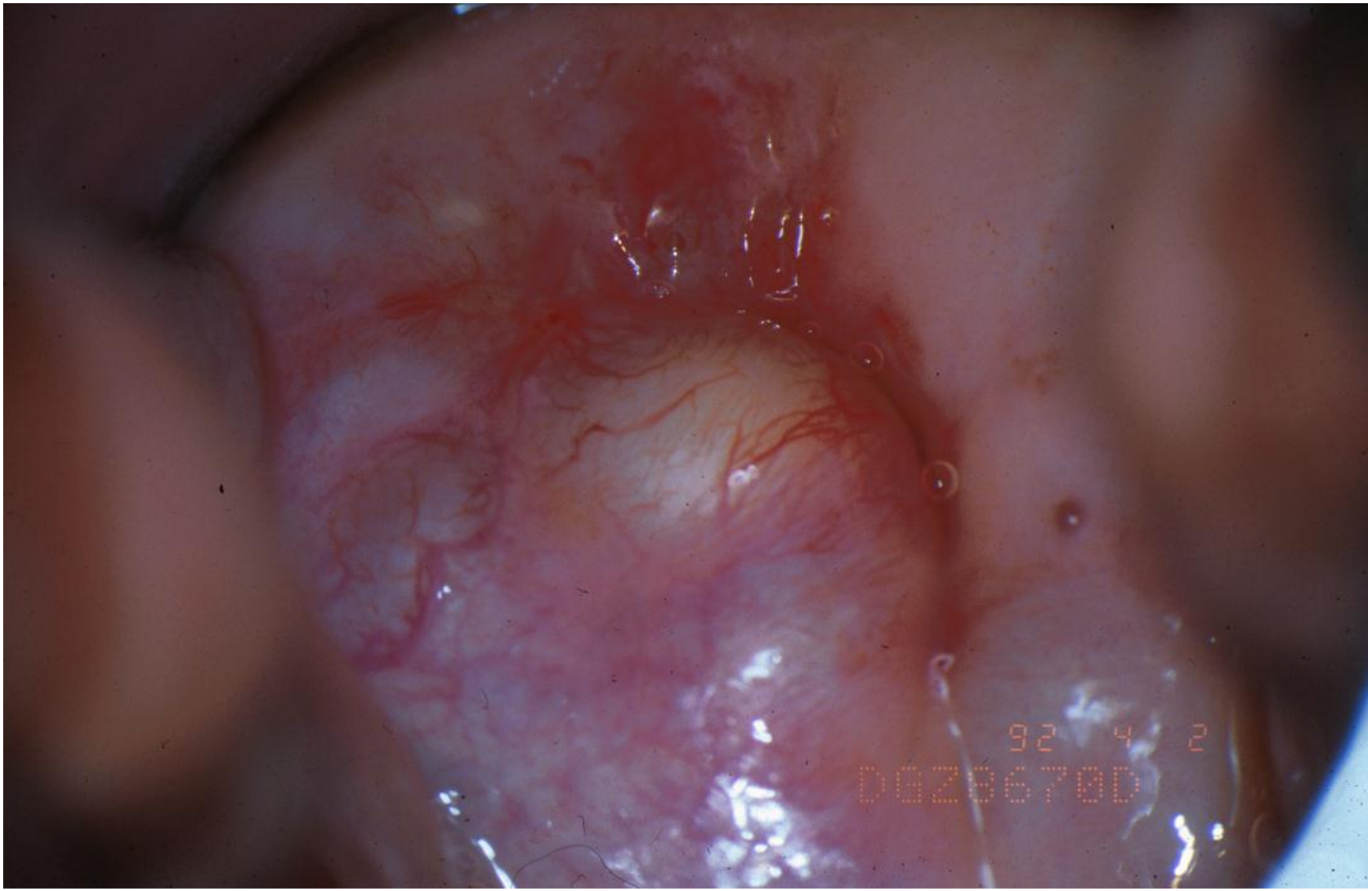
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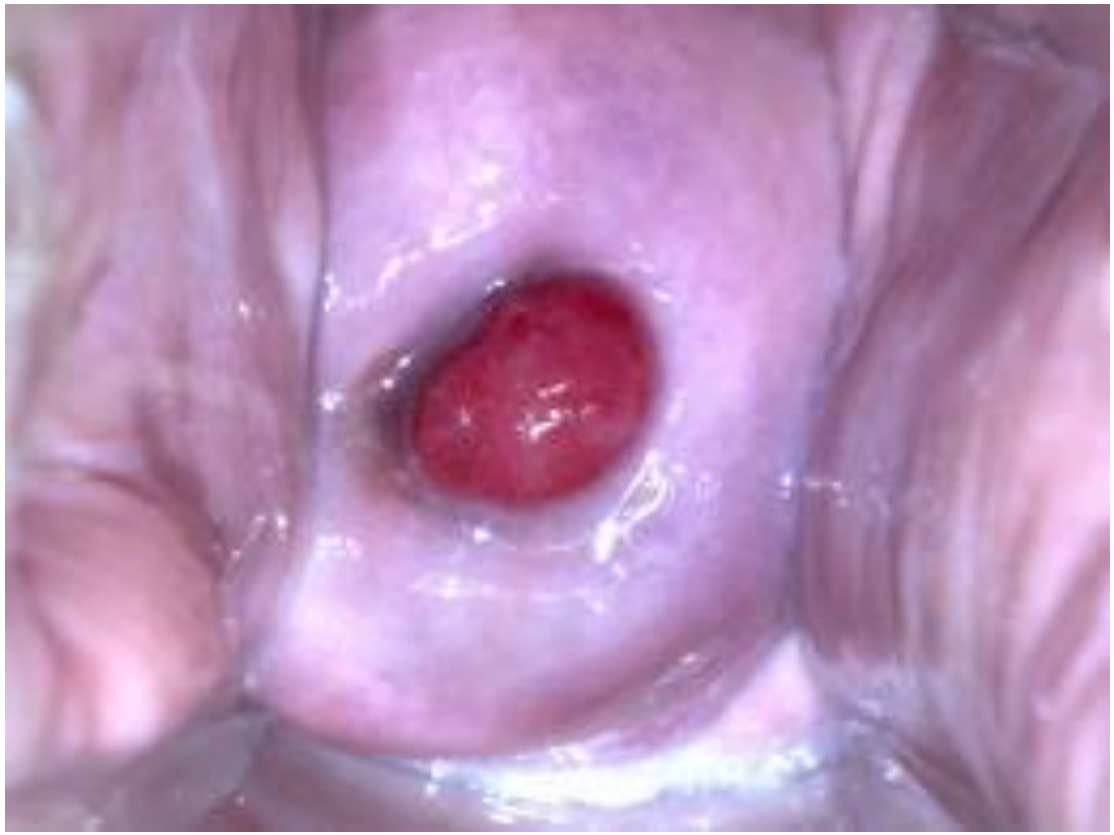
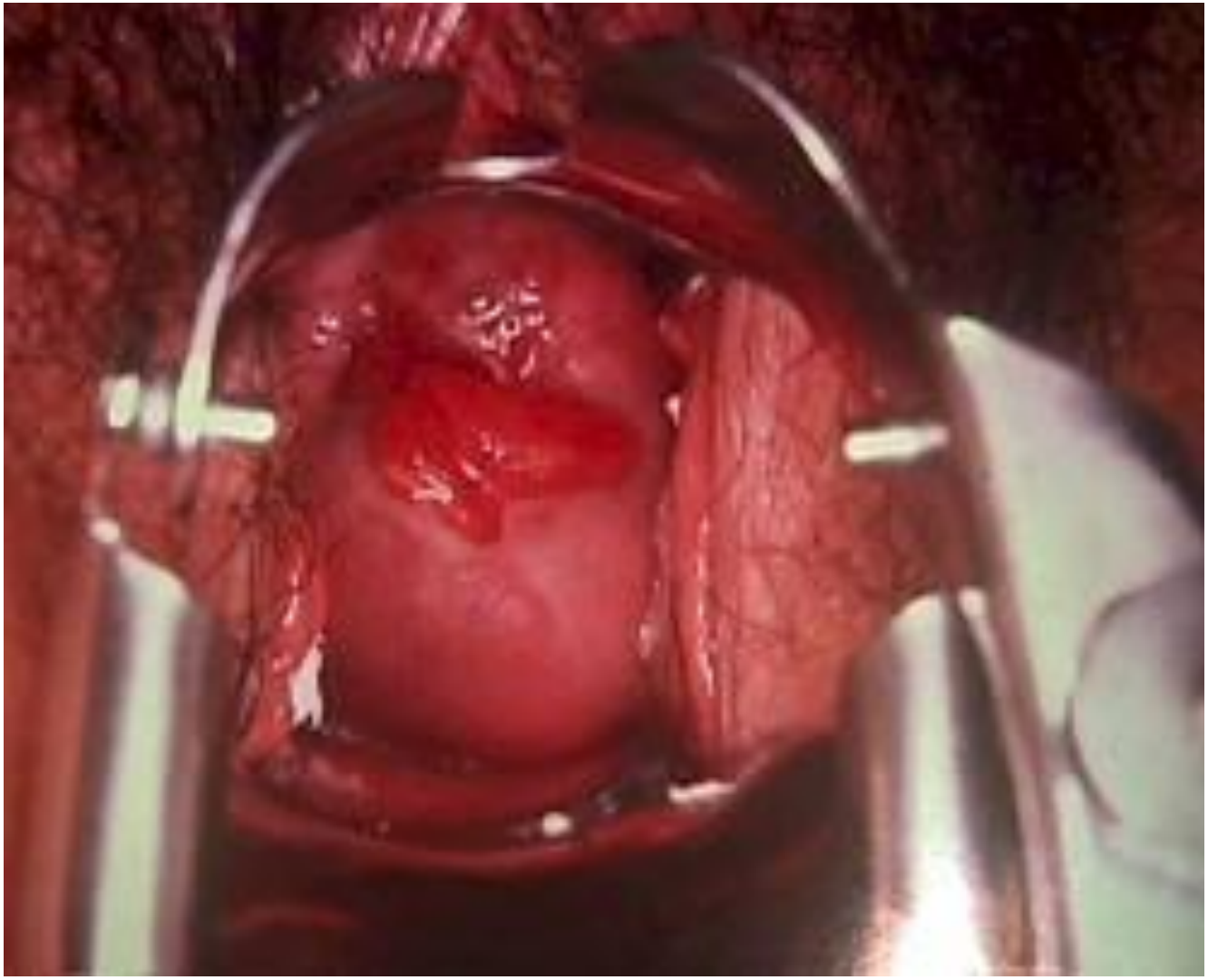
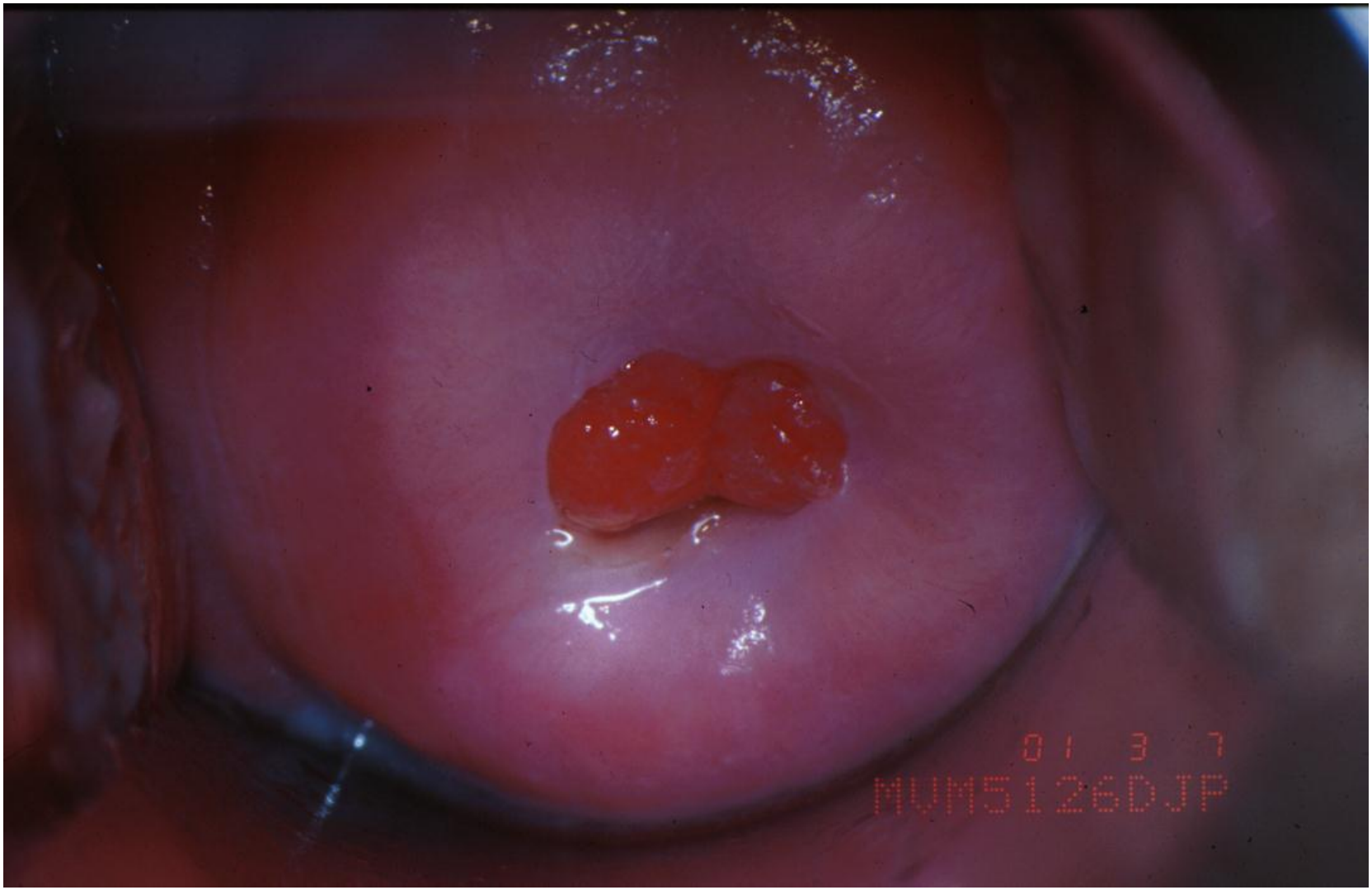
Colposcopy – Cervical polyp



Colposcopy – cervical polyp

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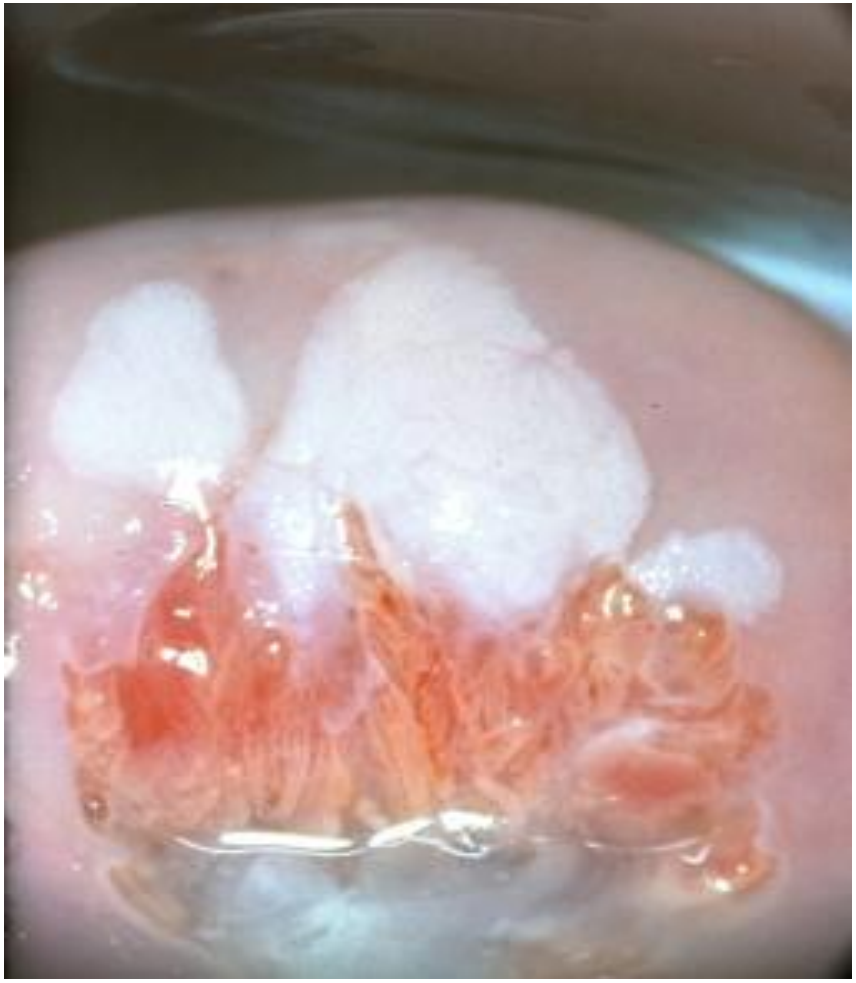
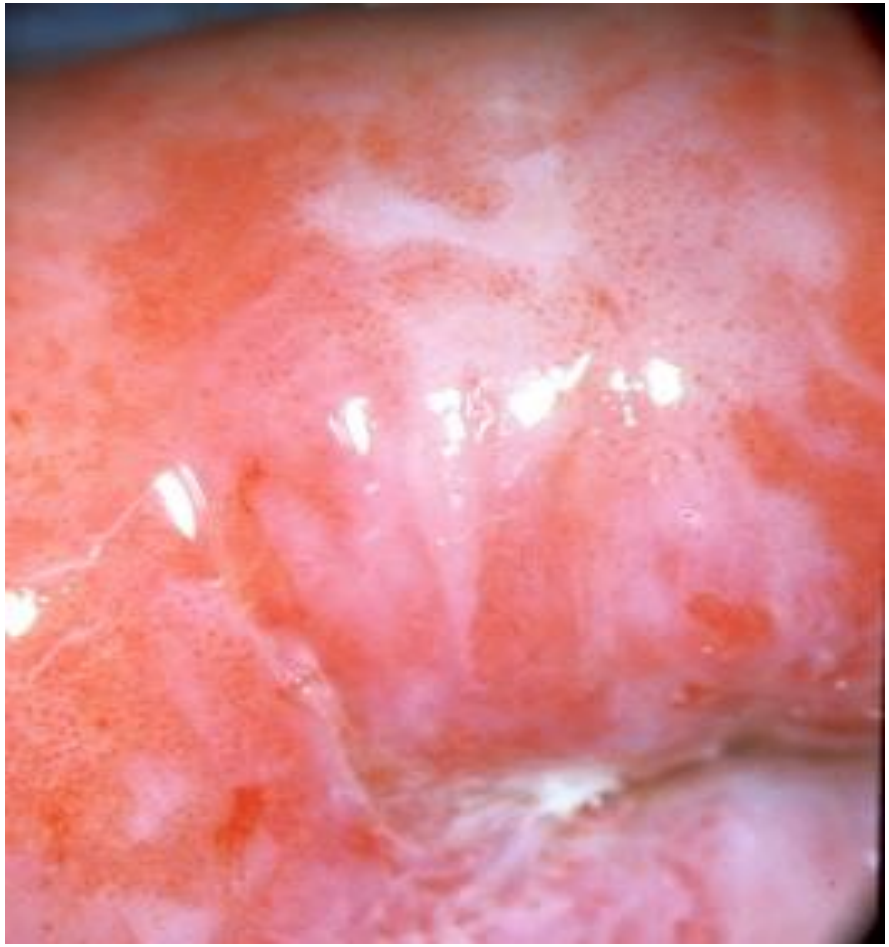
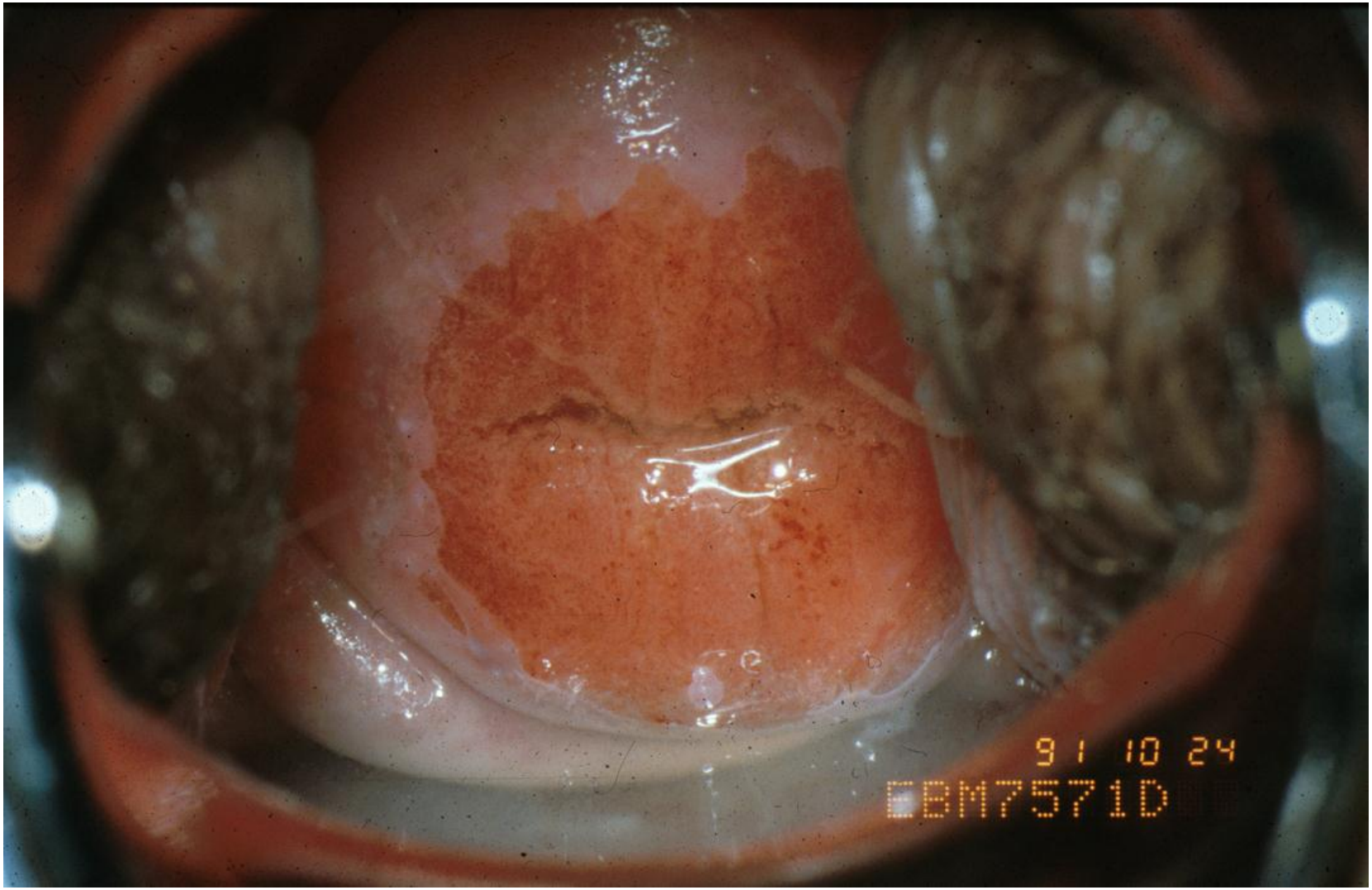
Leucoplakia



Trichomonas

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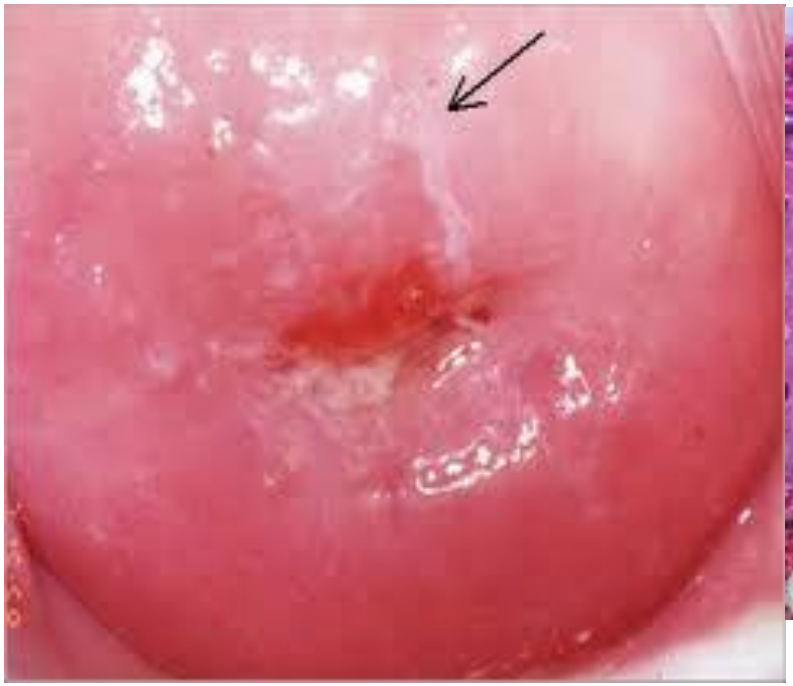
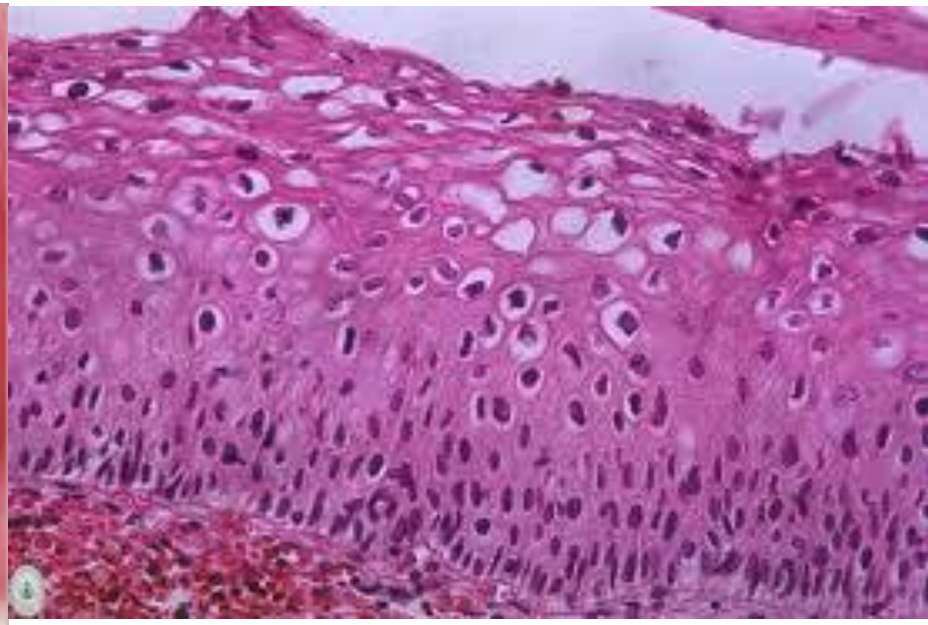
Colposcopy

- CIN 1





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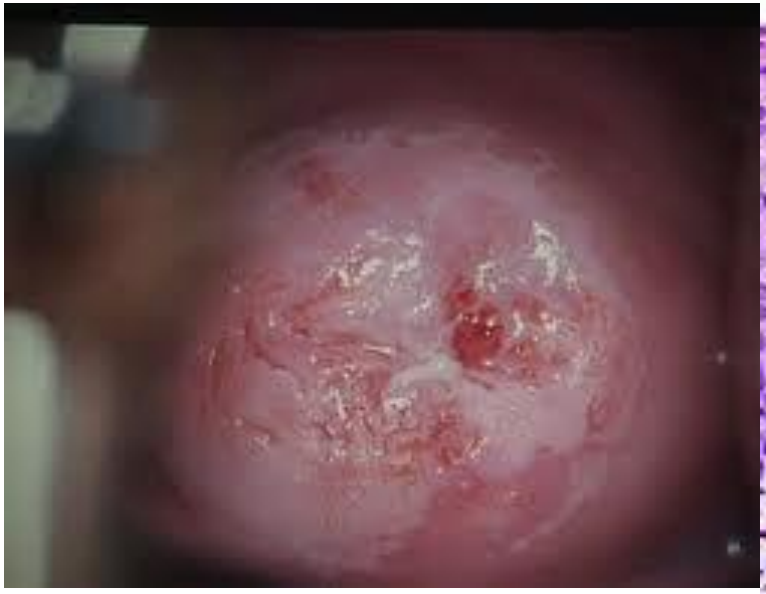
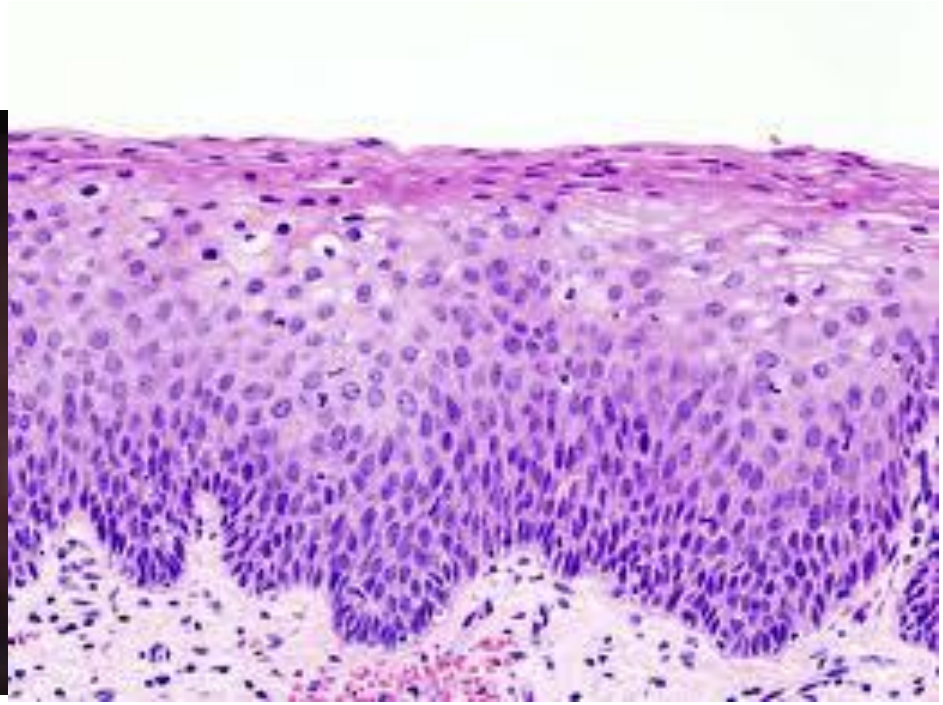
- CIN 2





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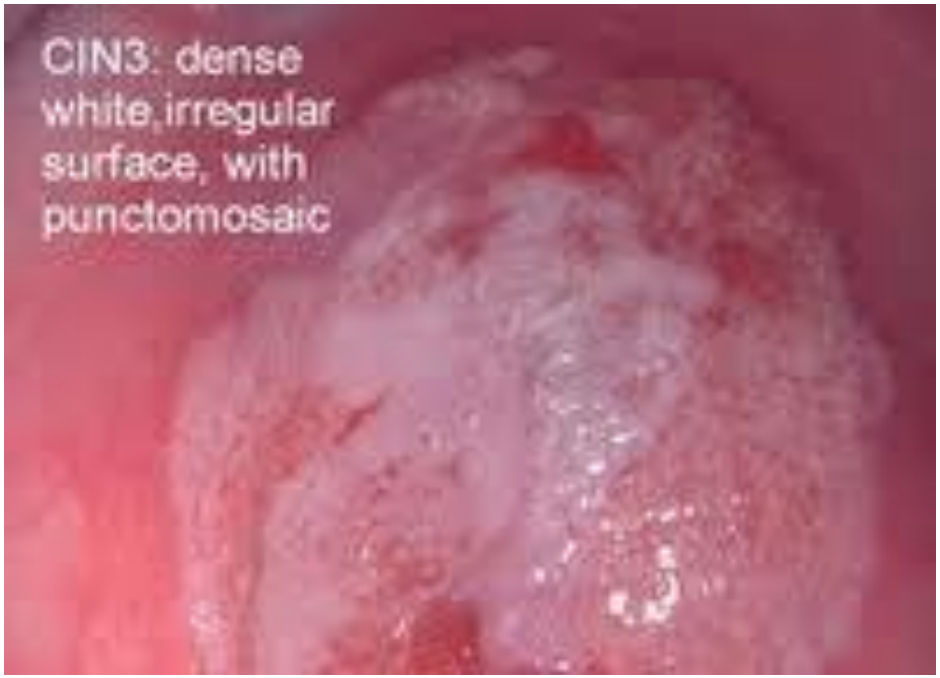

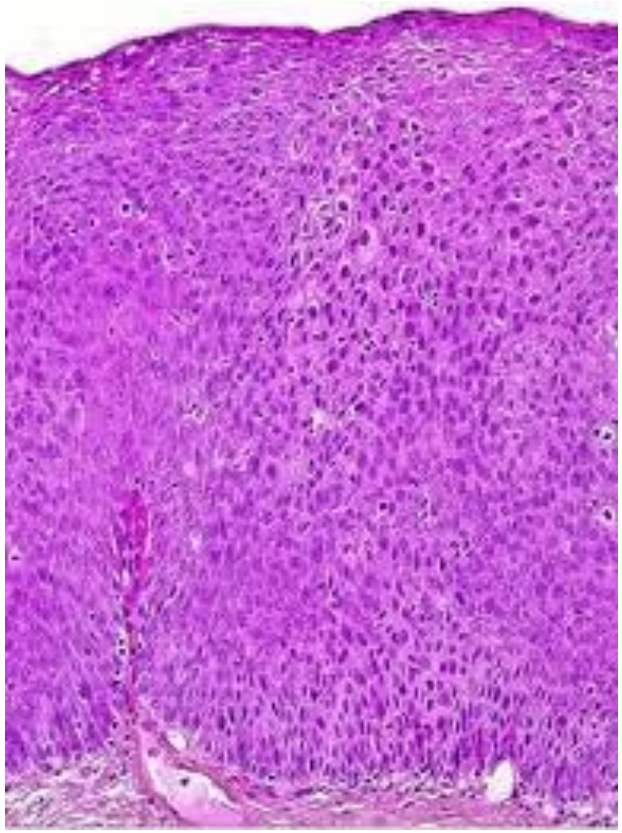

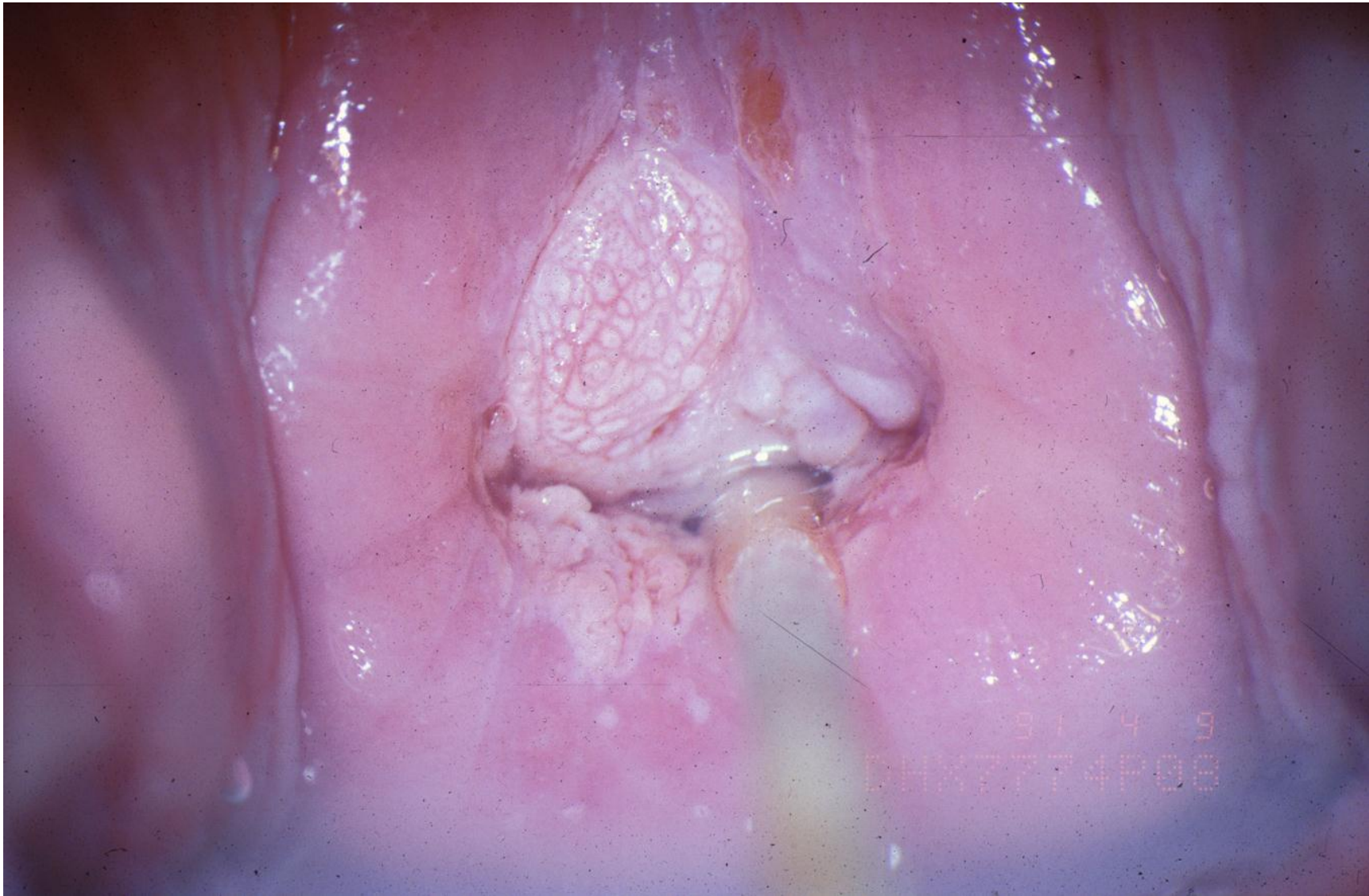

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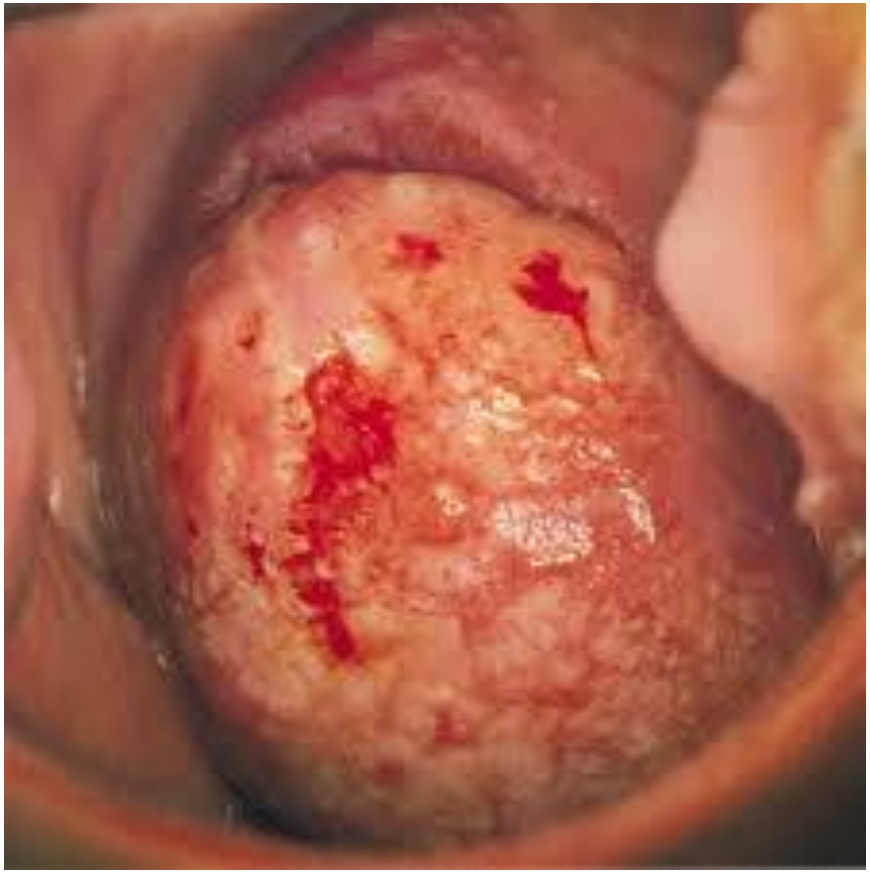
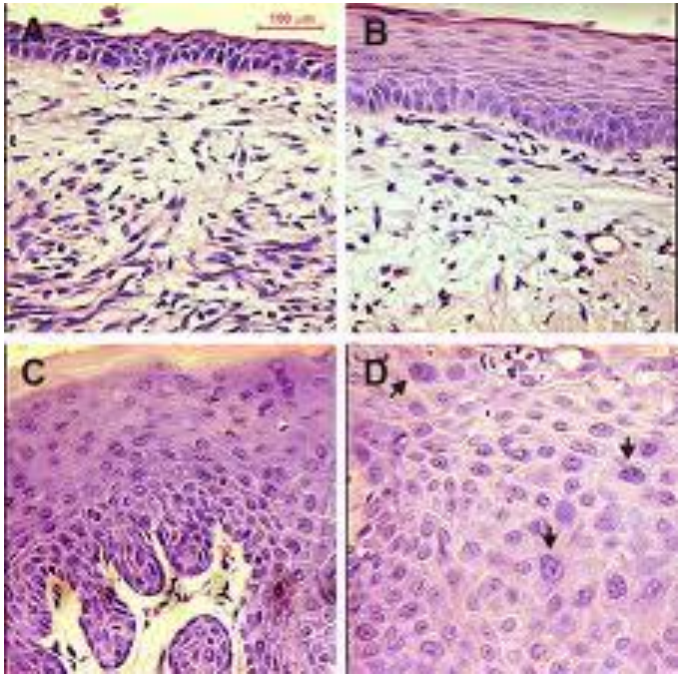
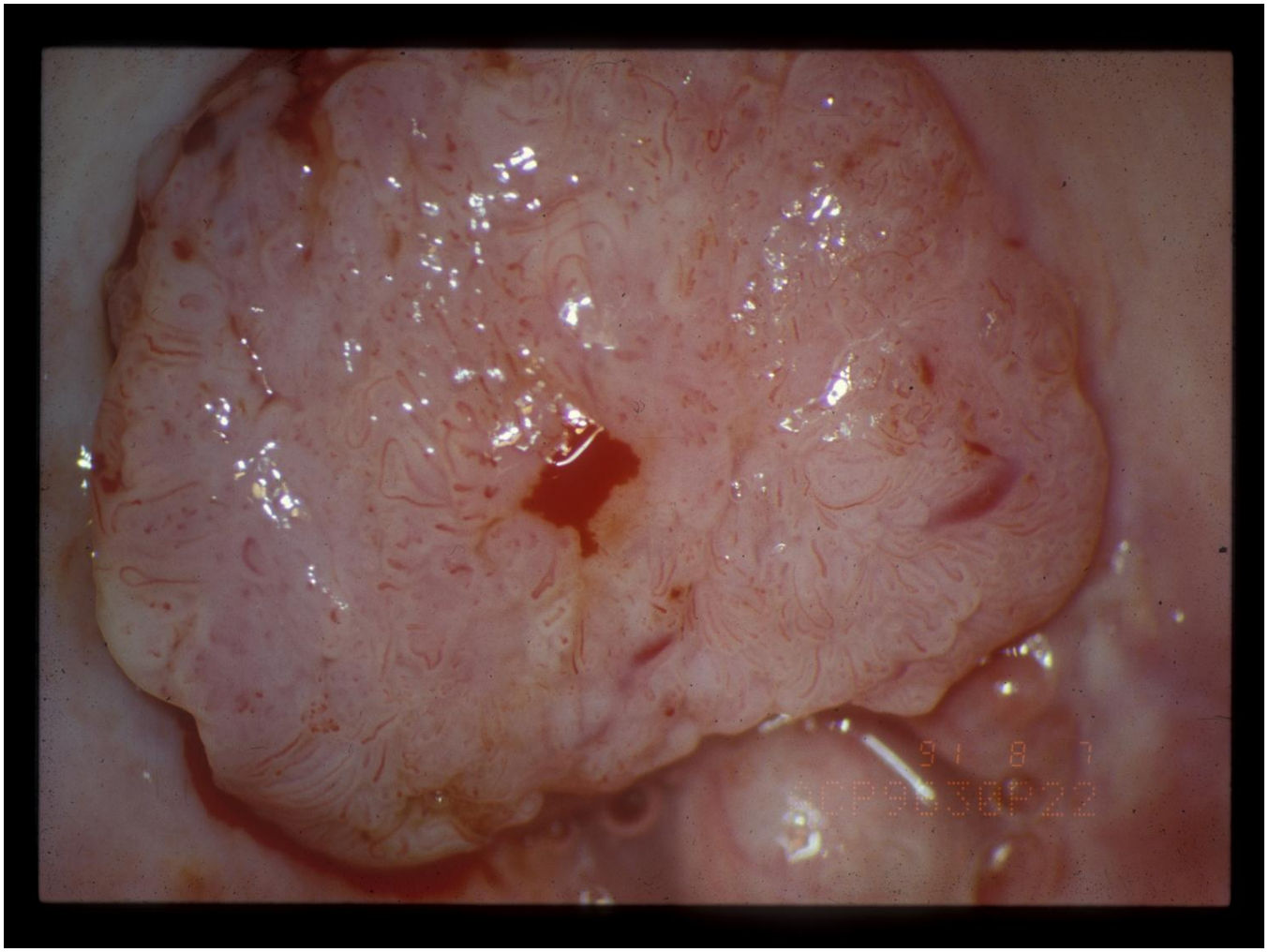
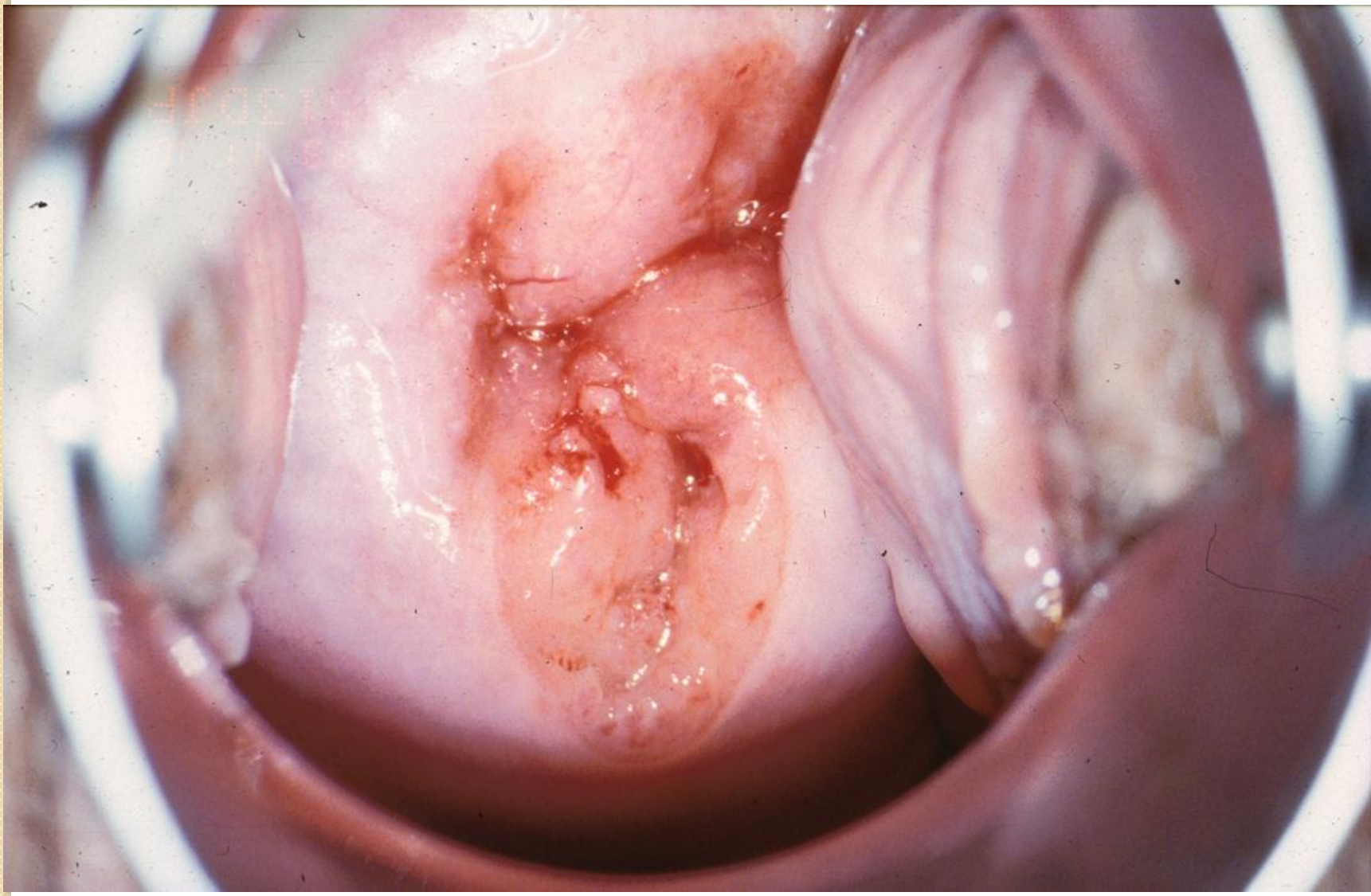
- Cervical Ca

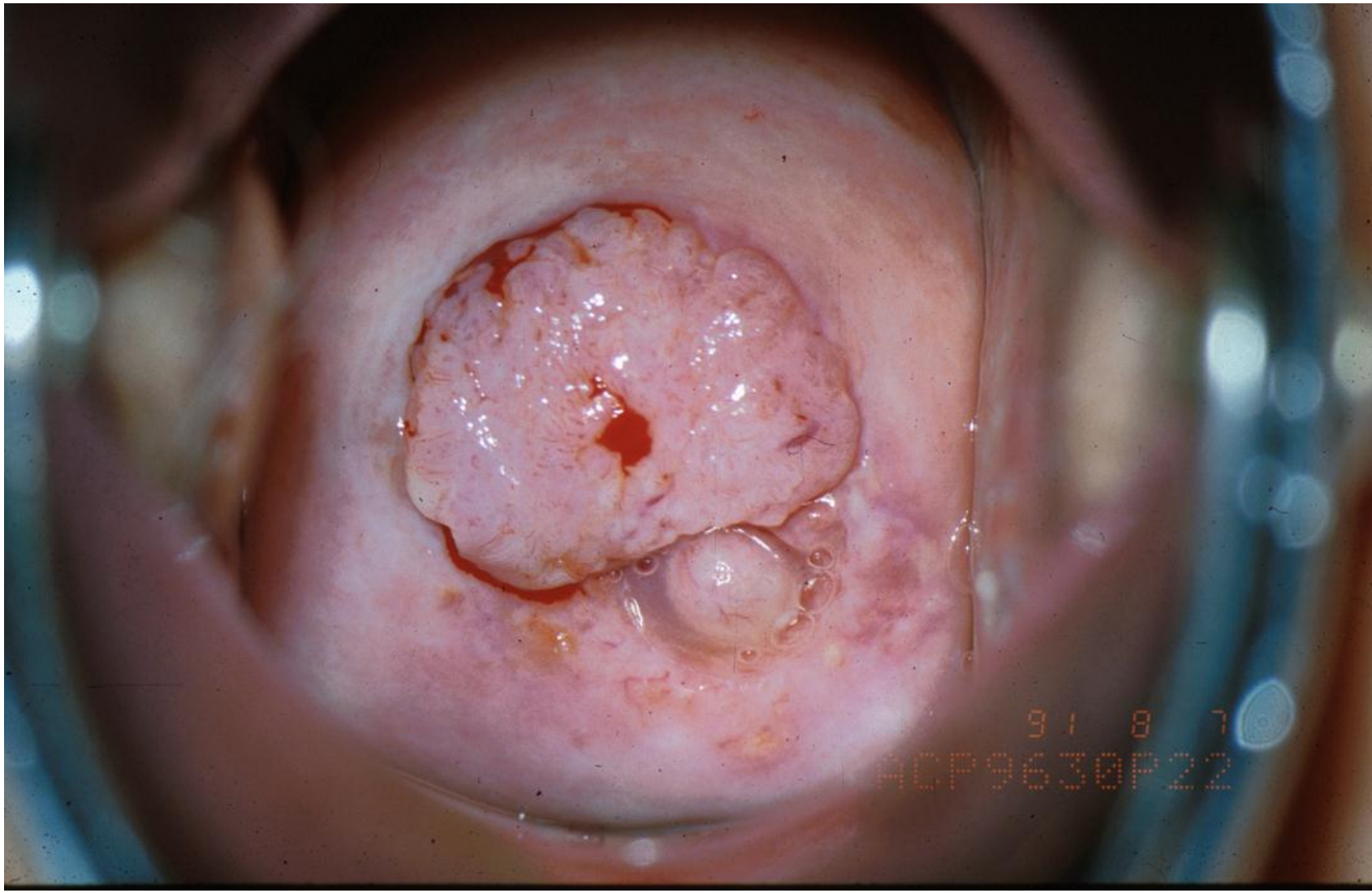




Cervical cancer



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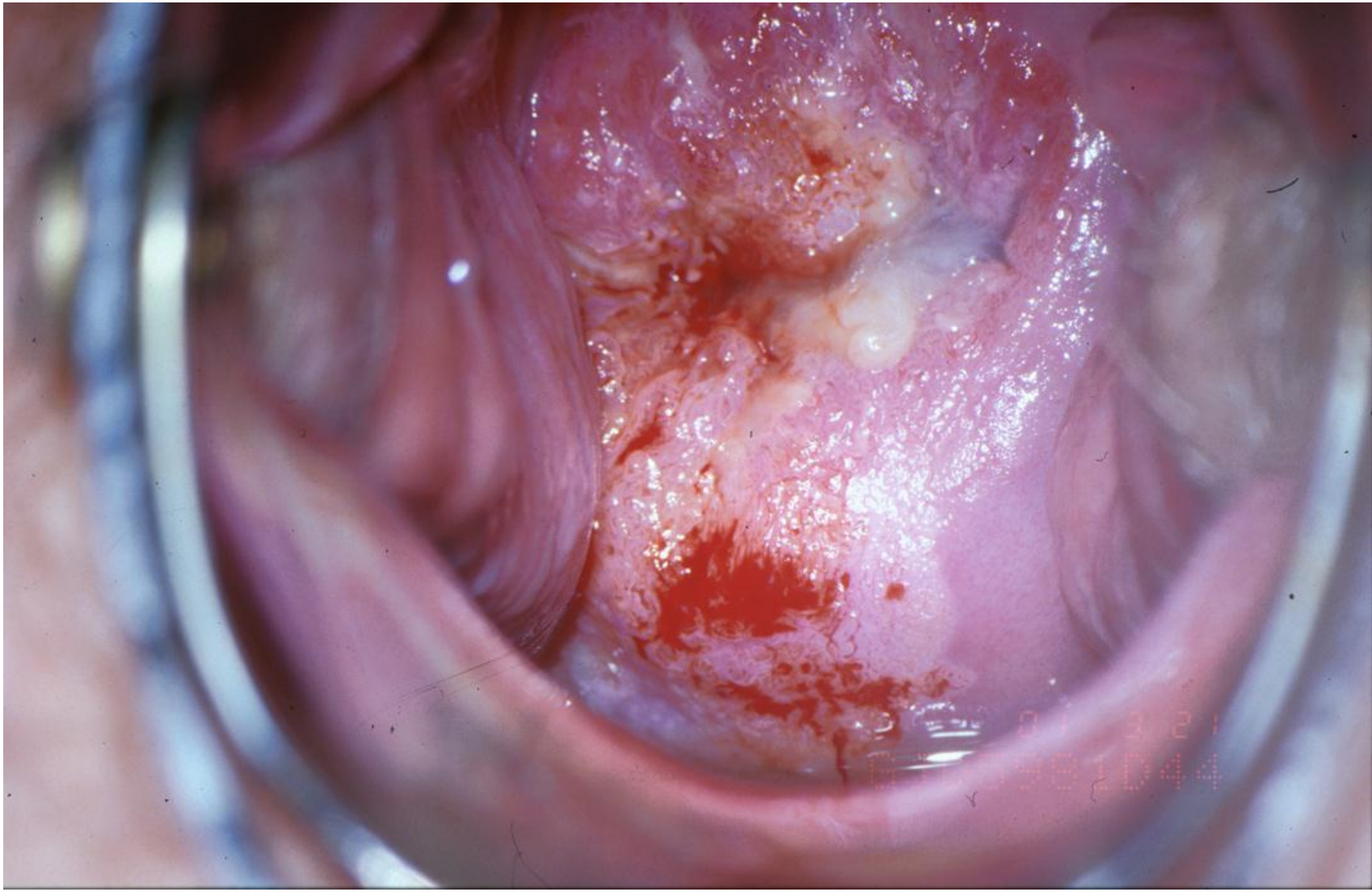
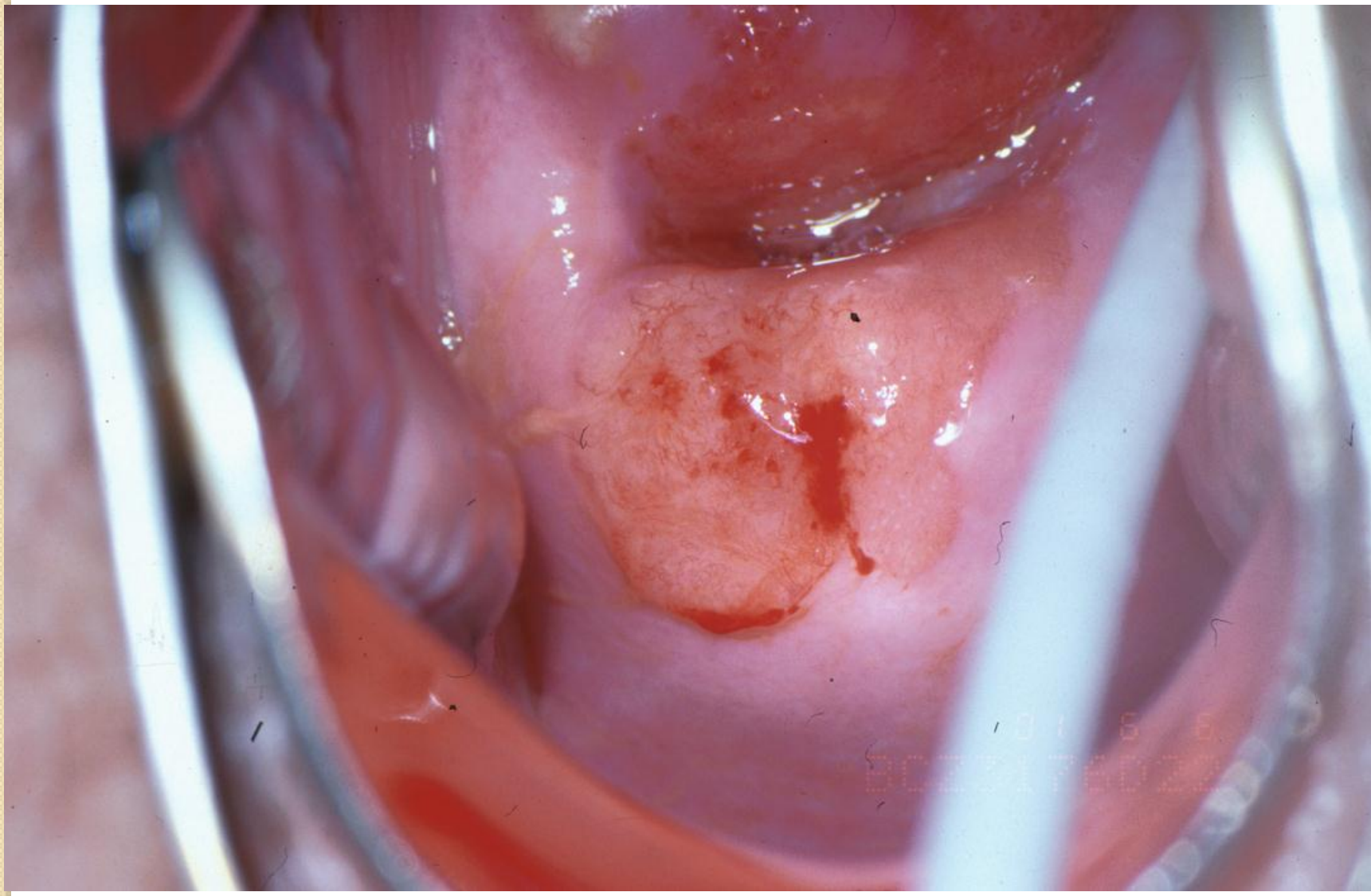
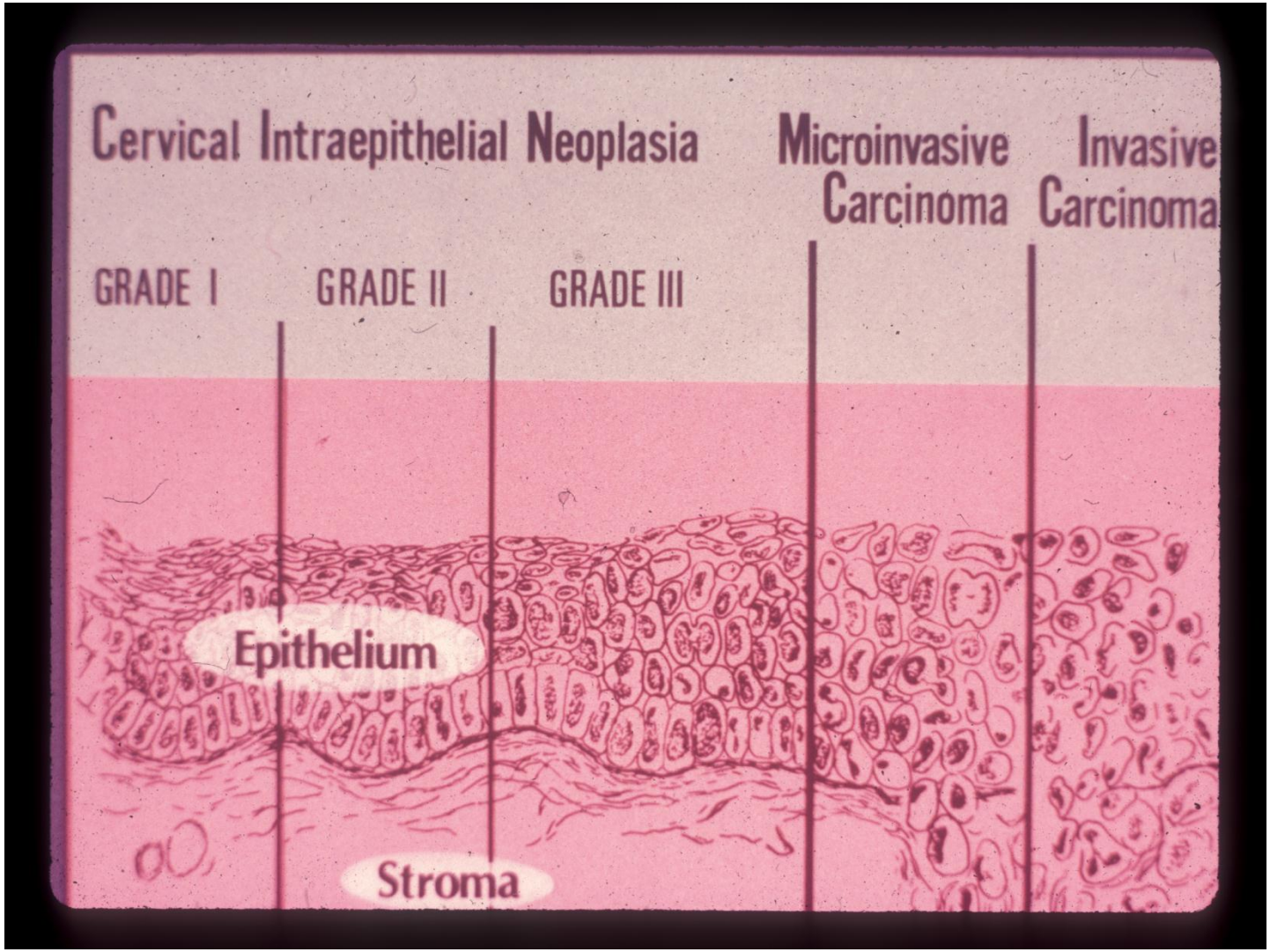
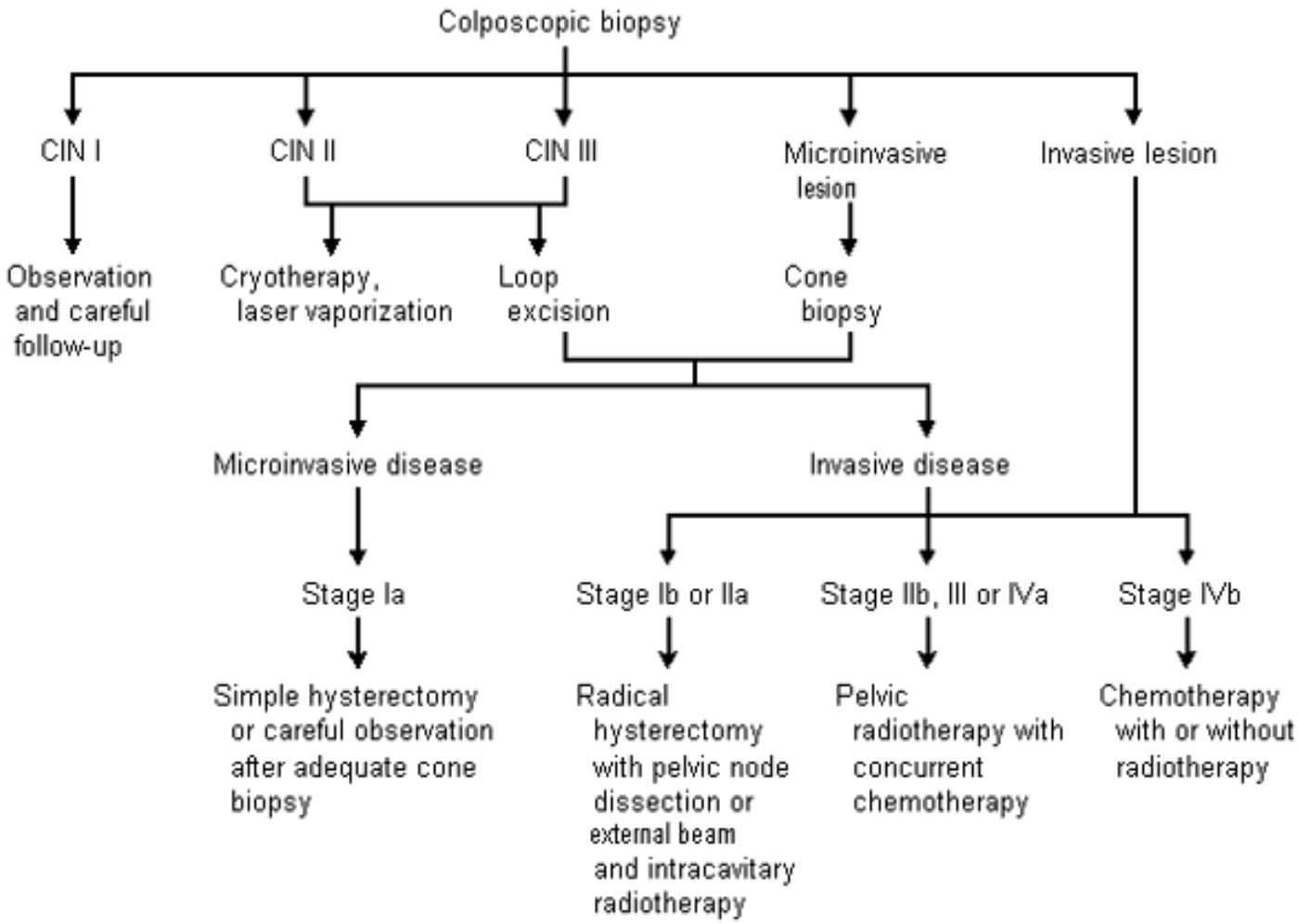


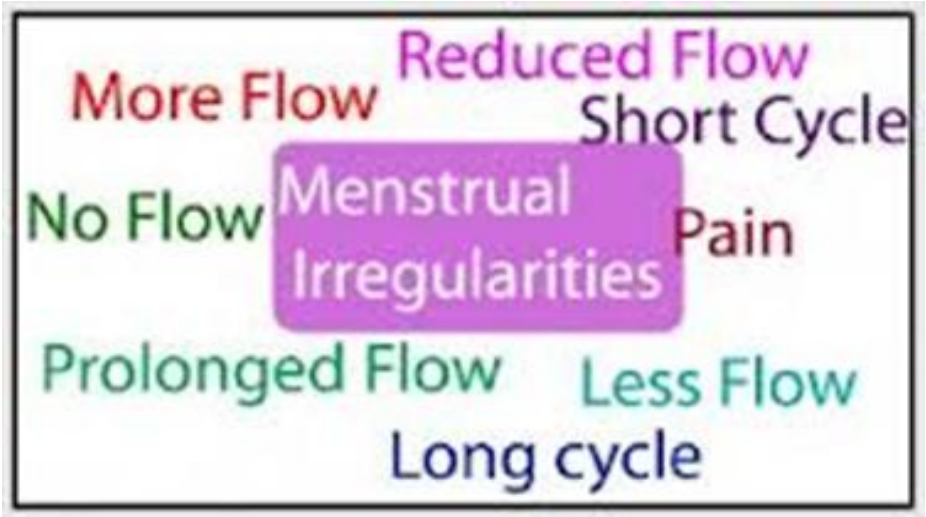



Cervical Intraepithelial Neoplasia
Microinvasive Carcinoma
Invasive Carcinoma
GRADE I
GRADE II
GRADE III
Epithelium
Stroma

CIN and Cervical Cancer



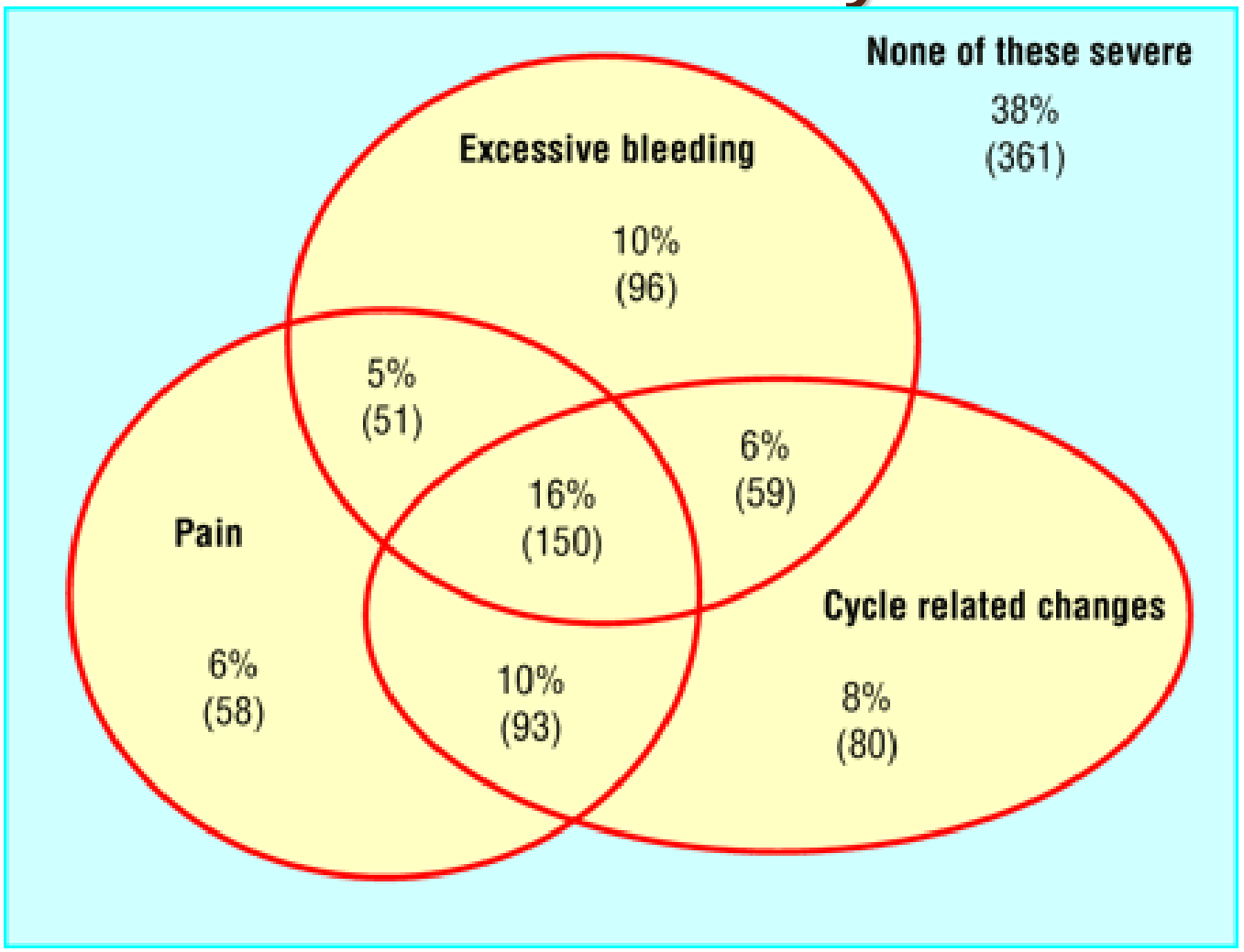
Period problems



Period problems

- Dysmenorrhoea
- Menorrhagia
- Inter-menstrual bleeding
- Oligo-menorrhoea
- Amenorrhoea
- Premenstrual syndrome

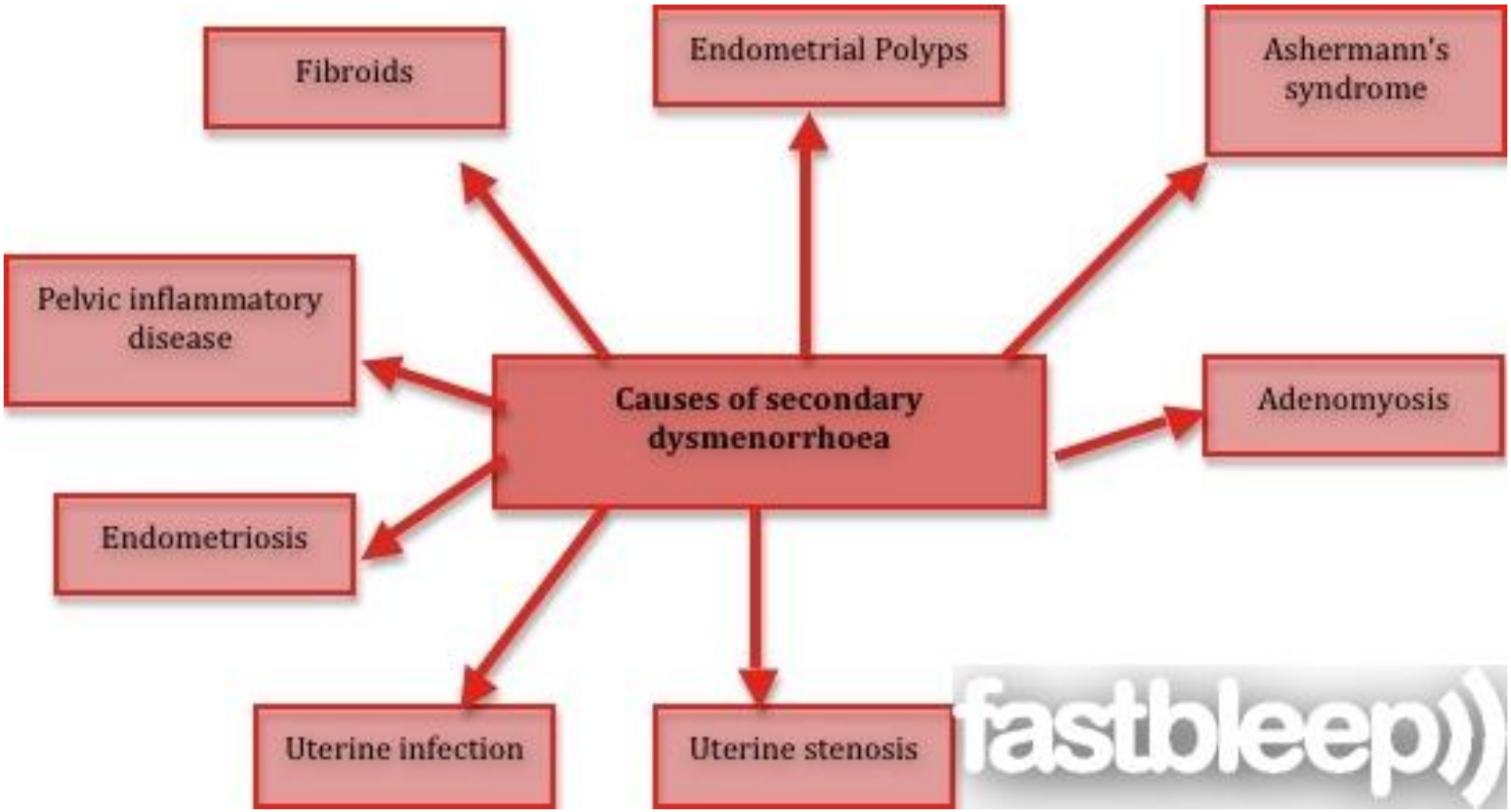
Referral for menstrual problems - Cross sectional survey



Dysmenorrhoea

- History
- Severity of symptoms
- ??Time off school/work
- Pelvic Ex
- Cx smear
- Swabs – R/O STI & PID
- USS – if mass palpable
- MSU, GI, Pscychological assessment
- Laparoscopy

Secondary Dysmenorrhoea

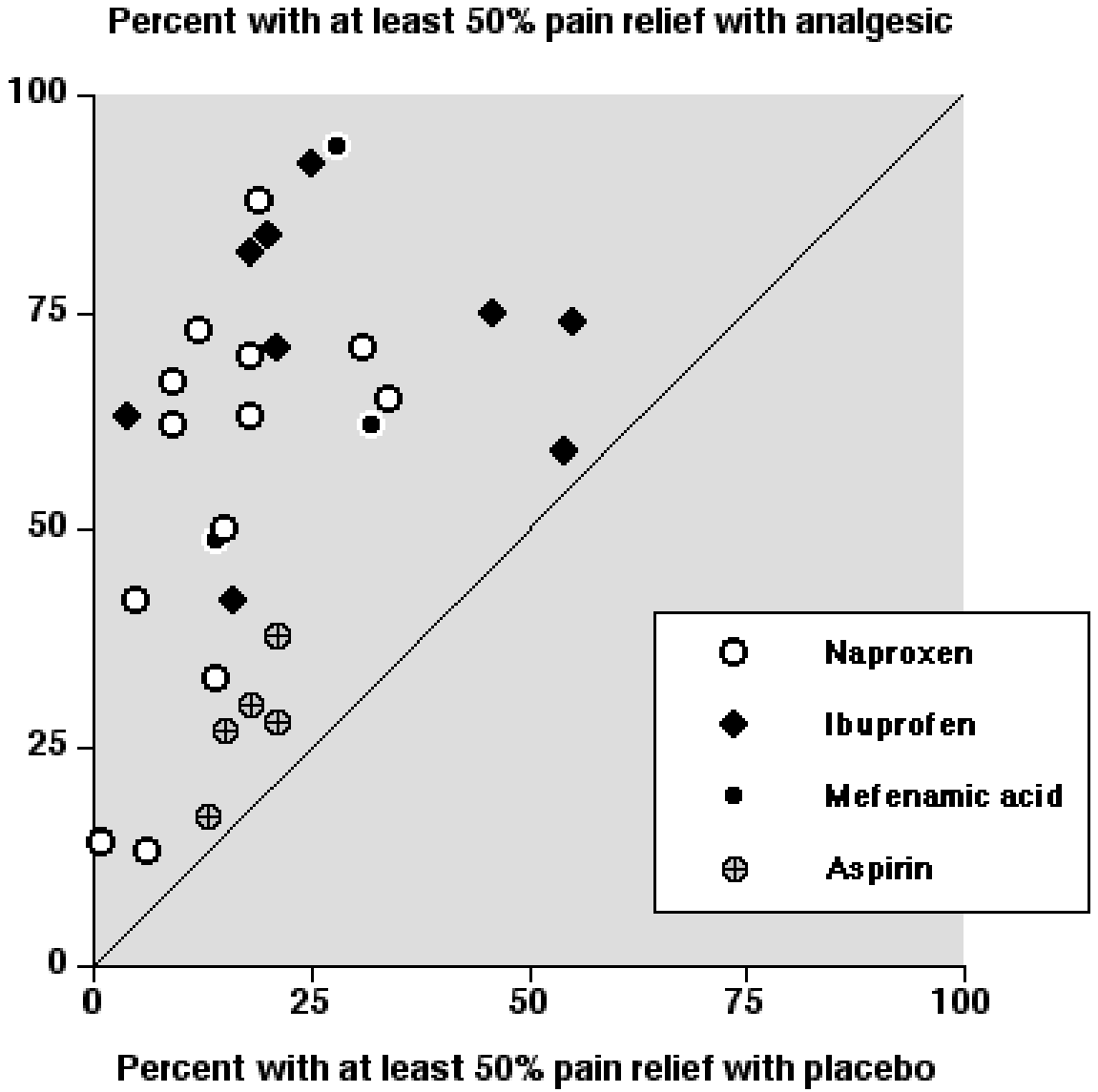


Differential Diagnosis

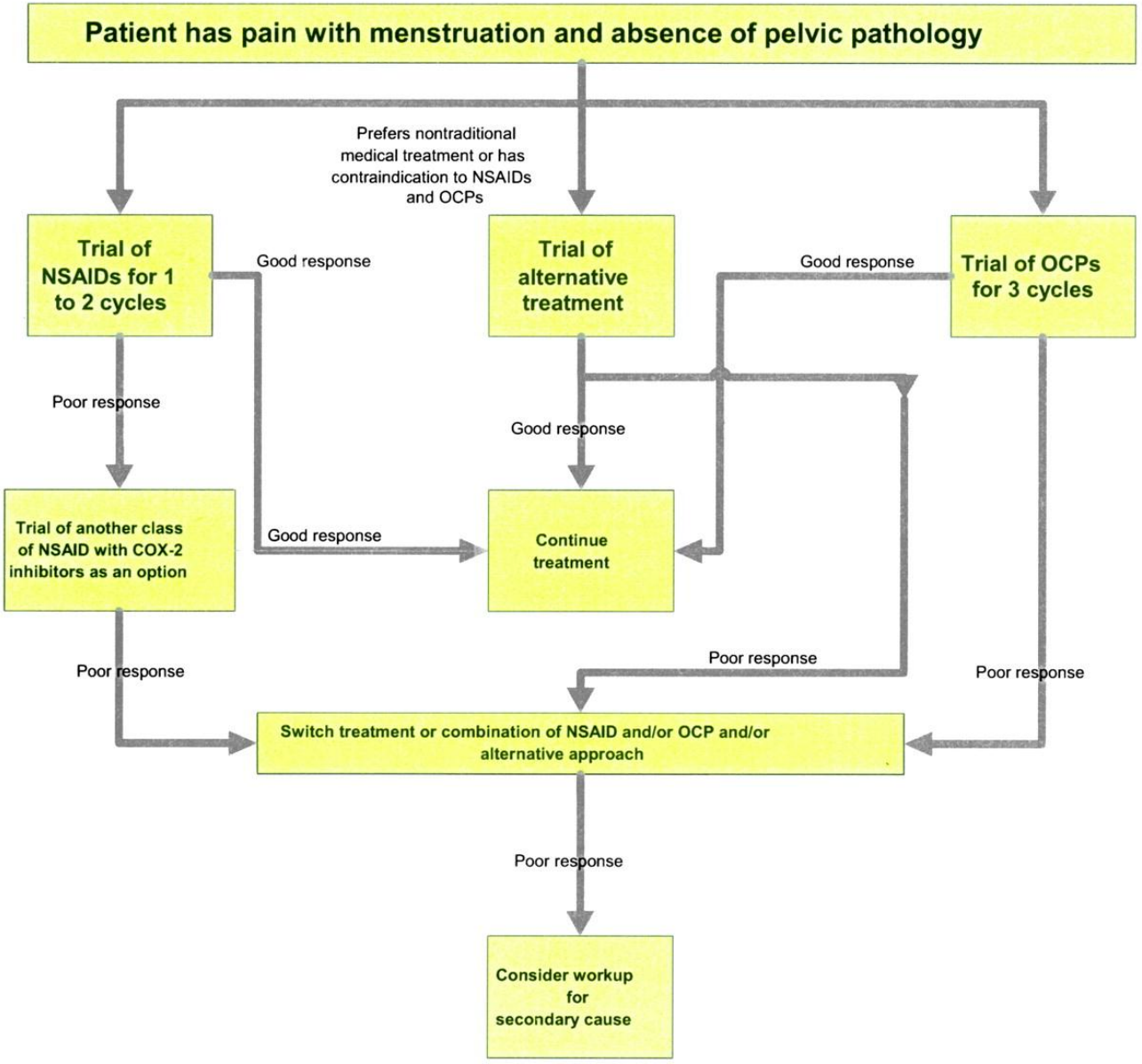
Secondary Causes of Dysmenorrhea and Chronic Pelvic Pain

- Endometriosis
- Adenomyosis
- Endometrial polyps
- Leiomyomata
- Pelvic inflammatory disease
- Pelvic organ prolapse
- Adhesions
- Musculoskeletal disorders
- Gastrointestinal disorders
- Urologic disorders
- A history of sexual abuse

Analgesic Rx – first line



Primary Dysmenorrhea Treatment Algorithm



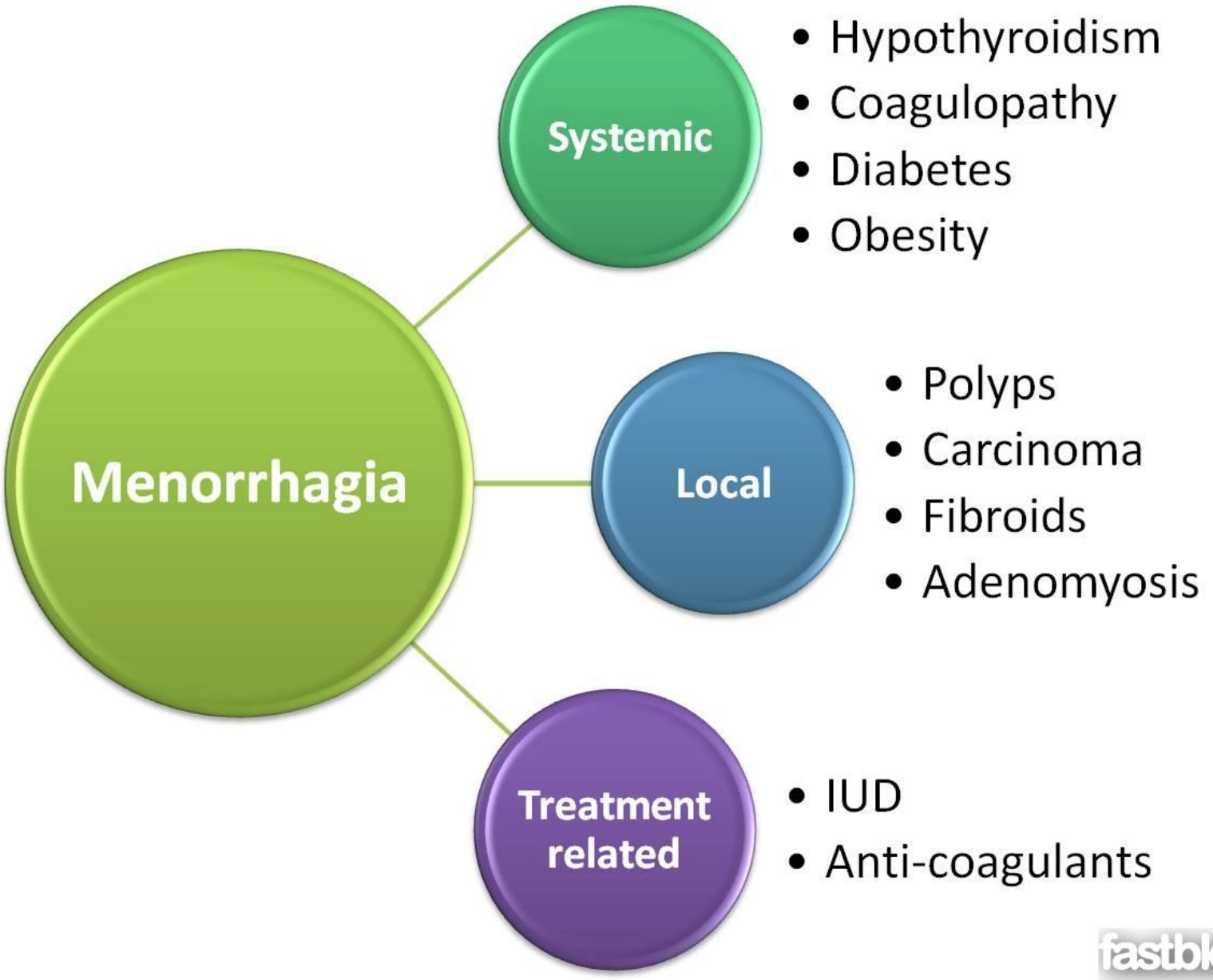
Secondary Dysmenorrhoea

- Treatment tailored to the cause
- Referral to hospital for further investigations and treatment
- NSAIDs and OCPs can be tried
- Treat PID
- Referral to other specialities – GI
  Urology
  Psych

Menorrhagia

- Excessive bleeding > 80mls

Causes



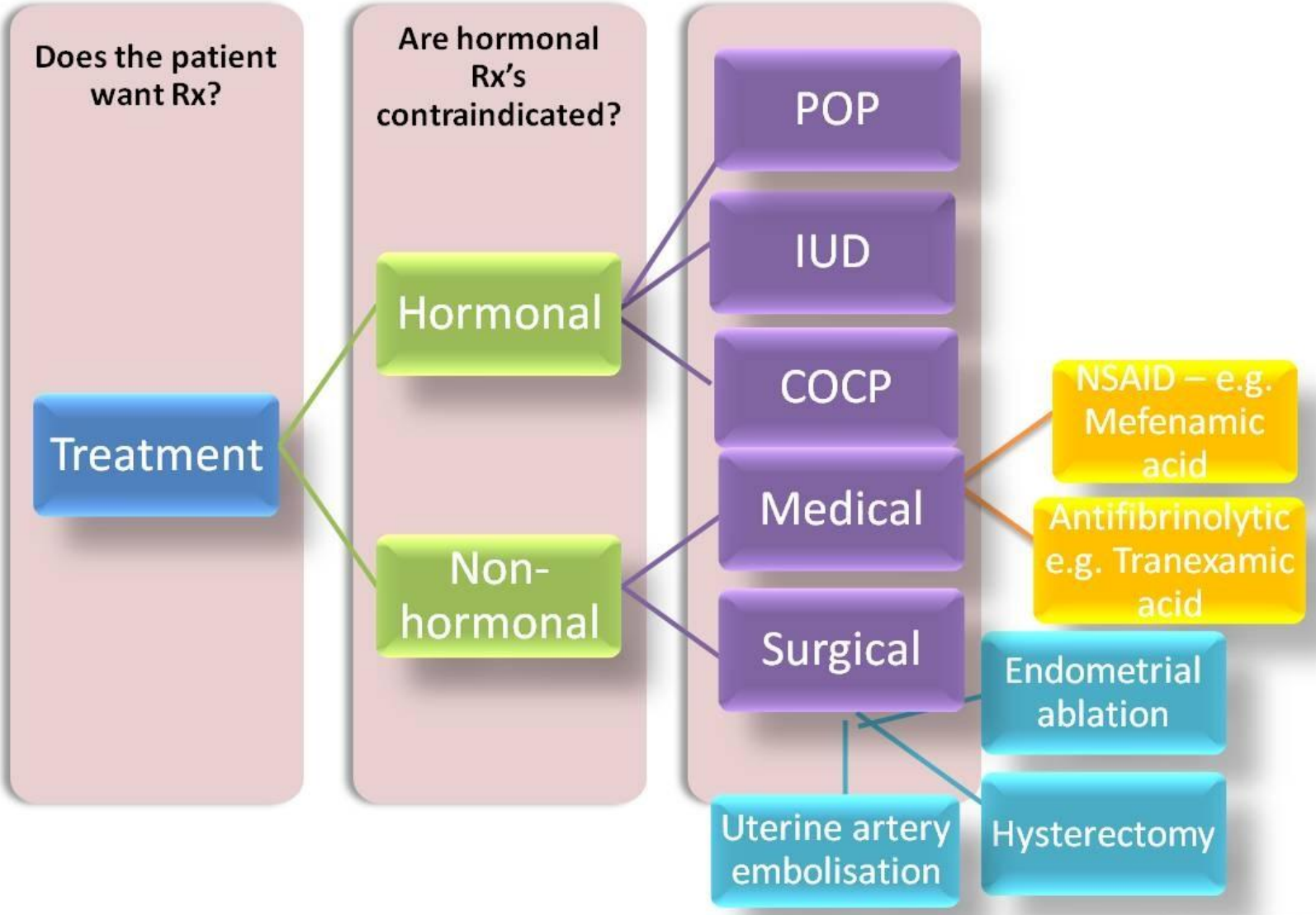
Investigations for menorrhagia

- Bloods – CBC, Fe studies, Thyroid function tests, Coagulation profile – Platelets, Platelet function studies(von Willebrands), APTT, PT, BHCG
- USS pelvis
- Pipelle Biopsy
- Hysteroscopy & D and C

Early Investigations and referral

- Age
- Obesity
- PCOS / Irregular Ovulation
- Unopposed Estrogen
- Early Menarche / Late Menopause
- Nulliparity
- Tamoxifen Rx
- Diabetics
- Breast or Ovarian ca
- Lynch syndrome - HNPCC

Menorrhagia



Inter-menstrual Bleeding (IMB)

- Bleeding in between the periods – not normal
- Can be a sinister cause

IMB causes

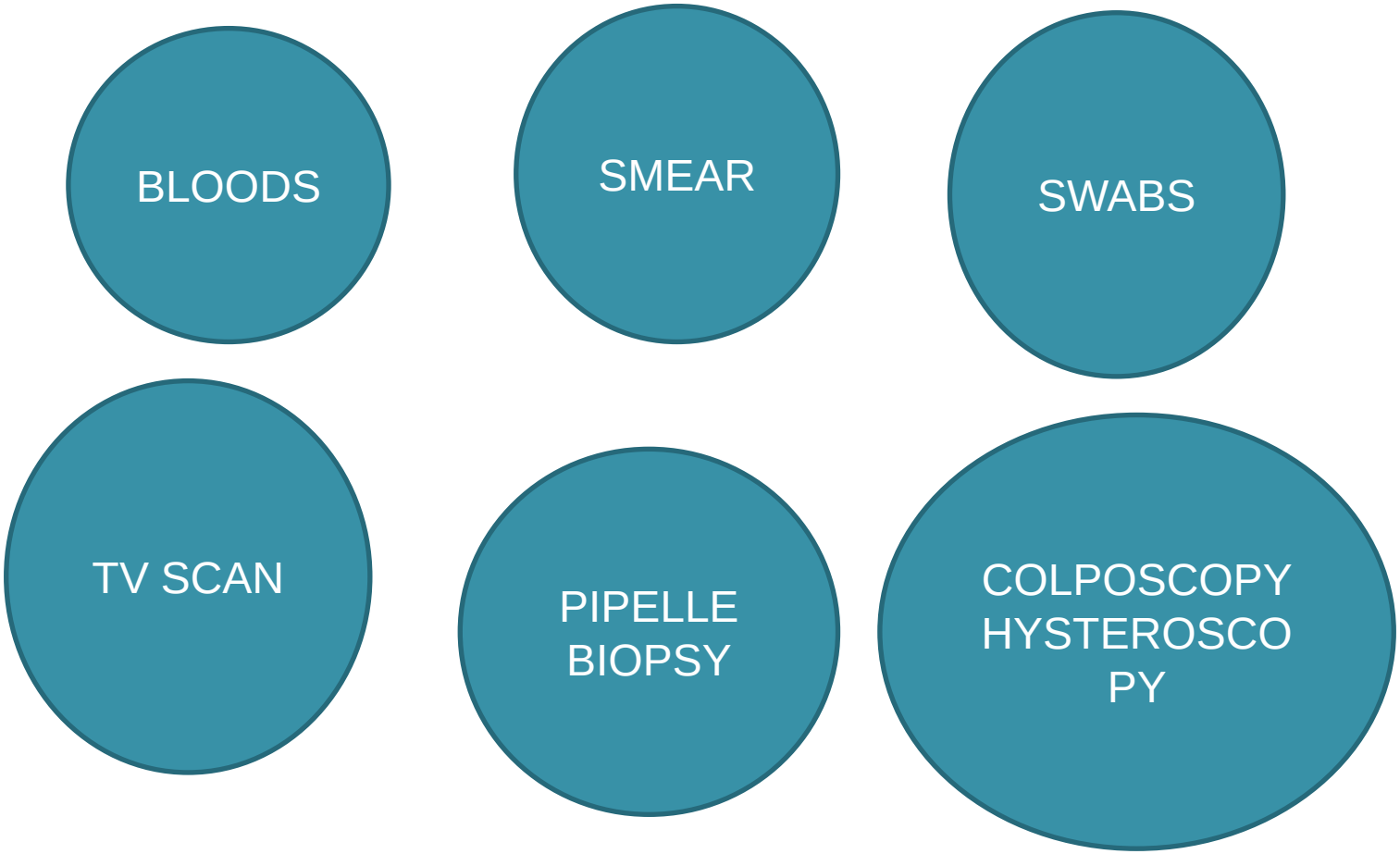
- Physiological (hormone fluctuations) - 1-2% spot around ovulation (mid-cycle)
- Iatrogenic (Medically Induced): Combined oral contraceptive pill
- Progesterone-only pill
- Contraceptive depot injections
- Intrauterine systems - Mirena
- Emergency contraception
- Tamoxifen
- Following smear or treatment to the cervix
- Drugs altering clotting parameters e.g. anticoagulants, SSRIs, corticosteroids
- Alternative remedies e.g. ginseng, ginkgo, and soy supplements, St Johns Wort0501

- **Vaginal causes:**
- **Vaginitis (bleeding uncommon before the menopause)**
- **Infection - e.g chlamydia.**
- **Cervical causes:**
  - **Cervical polyps**
  - **Cervical erosion - ectropion**
  - **Cervicitis (most commonly causes blood-tinged discharge)**
  - **Condylomata acuminata of the cervix**
  - **Cancer (but bleeding is most often post-coital)**
- **Uterine causes:**
  - **Endometrial polyps**
  - **Fibroids**
  - **Adenomyosis (usually only symptomatic in later reproductive years)**
  - **Endometrial adenocarcinoma - Only 2% endometrial cancers occur before 40 years old. Risk factors include:**
    - **Nulliparity**
    - **Diabetes**
    - **Obesity**
    - **Polycystic ovary syndrome**
    - **Chronic anovulatory cycles**
    - **Use of tamoxifen for treatment of breast cancer.**

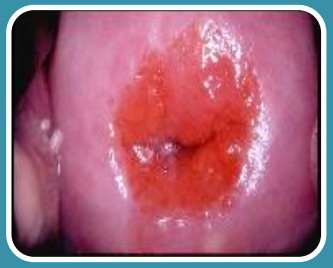
IMB - Management

- History
- Gynaecological Examination – local causes, pelvic masses
- Cervical smear
- Infection – swabs for STI
- Pregnancy test
- REMEMBER – Cervical and Endometrial cancer can present as IMB – hence very important to investigate appropriately

Investigations for IMB

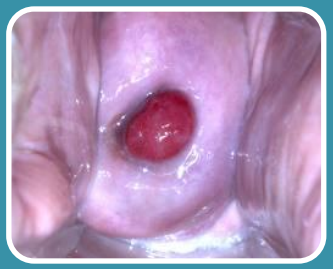


Treatment of IMB – Rx the cause



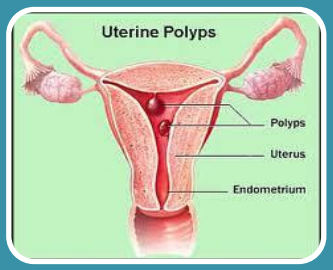
Cervical Ectropion

- Stop OC pills
- observe
- Cautery



Cervical Polyp

- Conservative – mostly benign
- Remove polyp – send for histology

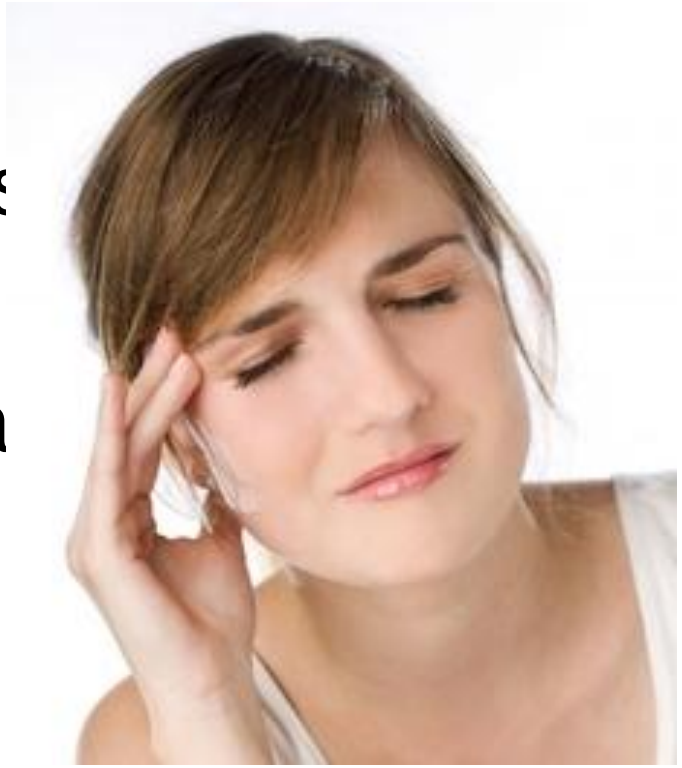


Abnormal Smear or USS - Refer

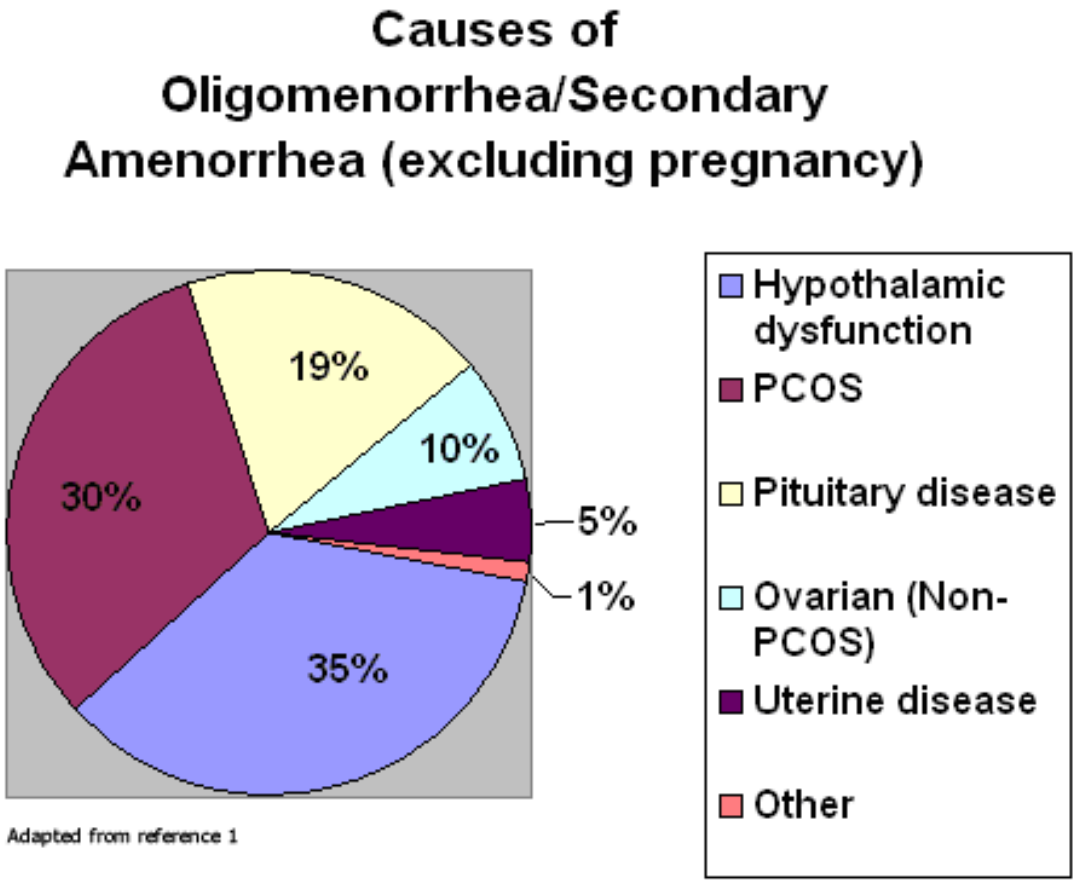
- Colposcopy
- Hysteroscopy

Oligo-menorrhoea

- Light periods or infrequent menstruation
- less than nine period
- unpredictable period
- difficulty conceiving
- periods >35days apa
- easily broken bones



Oligo-menorrhoea/Amenorrhoea



Pre Menstrual Syndrome

Pre Menstrual Syndrome

PMS


WHAT DOES P.M.S. MEAN?
PURCHASE MORE SHOES!
search ID: ear0873
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EDGAR ARGO

PMS > 200 described – common ones are….

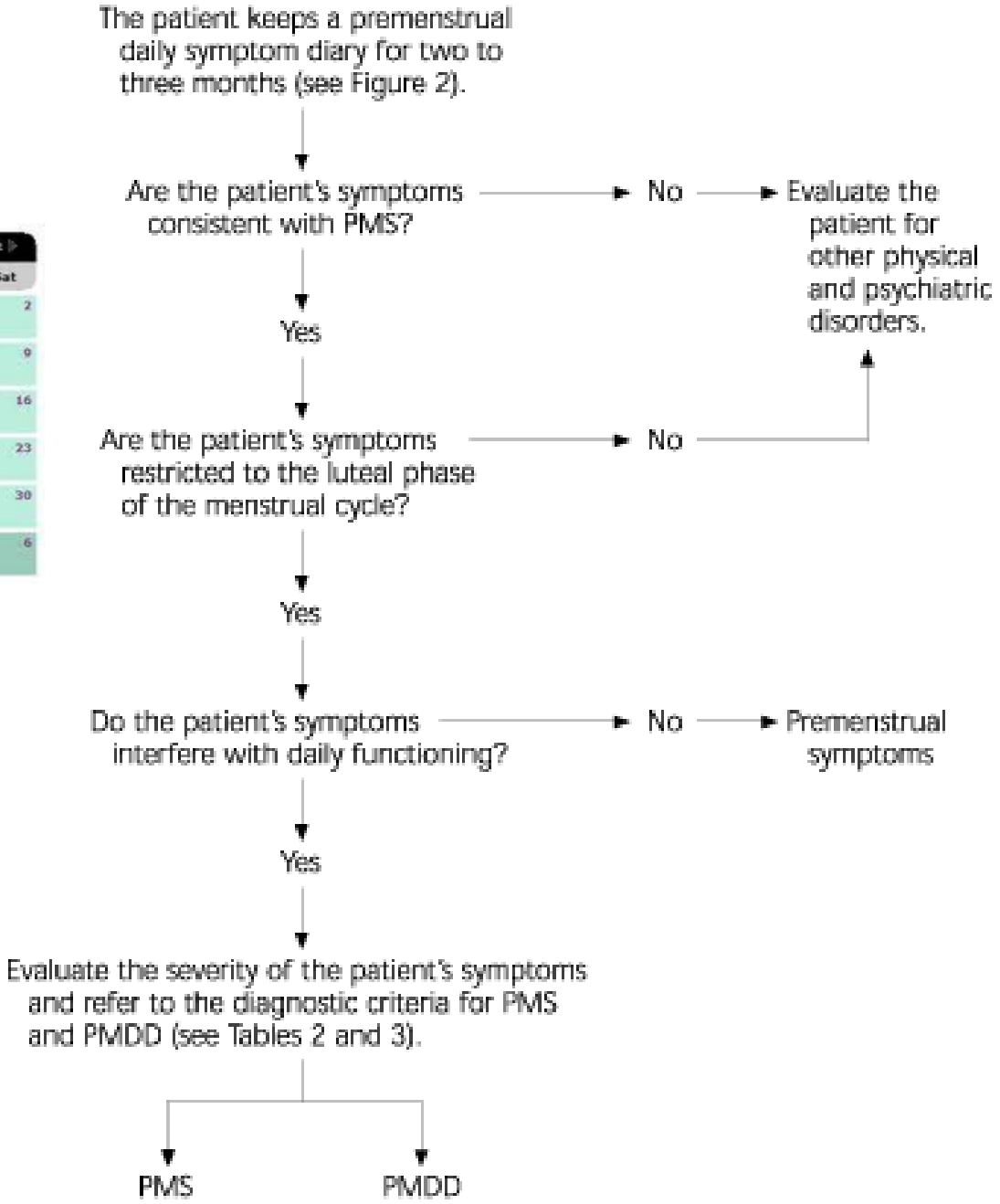
PMS Symptoms

- Fatigue
- Irritability
- Mood lability
- Depression
- Cravings
- Anxiety
- Headache
- Sleep dysfunction
- Breast tenderness
- Fluid retention
- Bloating

Symptoms of PMS parallel migraine prodrome

PMS


previous
December 2006
next
Sun Mon Tue Wed Thu Fri Sat
26 27 28 29 30 1 2
3 4 5 6 7 8 9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31 1 2 3 4 5 6


The patient keeps a premenstrual daily symptom diary for two to three months (see Figure 2).
Are the patient's symptoms consistent with PMS?
No
Evaluate the patient for other physical and psychiatric disorders.
Yes
Are the patient's symptoms restricted to the luteal phase of the menstrual cycle?
No
Yes
Do the patient's symptoms interfere with daily functioning?
No
Premenstrual symptoms
Yes
Evaluate the severity of the patient's symptoms and refer to the diagnostic criteria for PMS and PMDD (see Tables 2 and 3).
PMS
PMDD

PMS

Lifestyle changes

drink plenty of fluids

small frequent meals

Balanced diet/no salt/sugar Supplements

Vitamin B6, calcium, Magnesium

Sleep pattern

PMS – What can be done…

Symptom relief

-Aspirin, Ibuprofen, NSAIDs
- OC pills
- SSRIs
- Anti anxiety meds
- Diuretics
- Bromocryptine, Danazol

Psychotherapy

- CBT
- Light therapy

Achieving Pregnancy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FERTILITY LAB
search ID: mstn262
stokoe
"HOW DO YOU LIKE YOUR EGGS, - INSEMINATED, FROZEN OR SUNNY SIDE UP ?"

Becoming fertility fit - Tips

- Her
  - BMI 20-25
  - No smoking
  - Folic Acid –0.8mg
  - Multivitamins
  - Use iodised salt
  - Alcohol/caffeine
  - Review Meds
  - Rubella status
- Him
  - No smoking/drug
  - Alcohol<20upwk
  - Normal BMI
  - Keep testes cool
  - Diet rich in antioxidants
- MENEVIT – Vit C / E improves sperm count

Achieving pregnancy

8 out of 10 couples trying to conceive will do so within a year

When to investigate….??

- Trying to conceive for
  - > 6 months if over 35yrs
  - > 12 months if under 35yrs

  and/or
- Predisposing factors for infertility
  - oligomenorrhoea
  - H/O tubal damage
  - Sx of endometriosis
  - undescended testes

Criteria for public funded Rx

- BMI 18 – 32
- Non-smoker or ex-smoker >3/12
- Age < 40yrs
- < 2 children from current relationship
- > 2 yrs sub fertility – earlier if predisposing factors are present

Assessment – both partners

- History – previous pregnancies
  menstrual cycle
  time trying to conceive
  previous sub fertility results
- Examination – BMI
  Pelvic Examination
  Chlamydia / HVS
  Endocervical swab

Male partner

Semen analysis

if abnormal repeat in 4-6 weeks

Female partner

- Timing of blood tests is important
- If amenorrhoea or oligo-menorrhoea
  check pregnancy test
- Progesterone challenge test
  Norethisterone acetate 10mg bd for 5 days
  Periods should start 48-72 hrs later

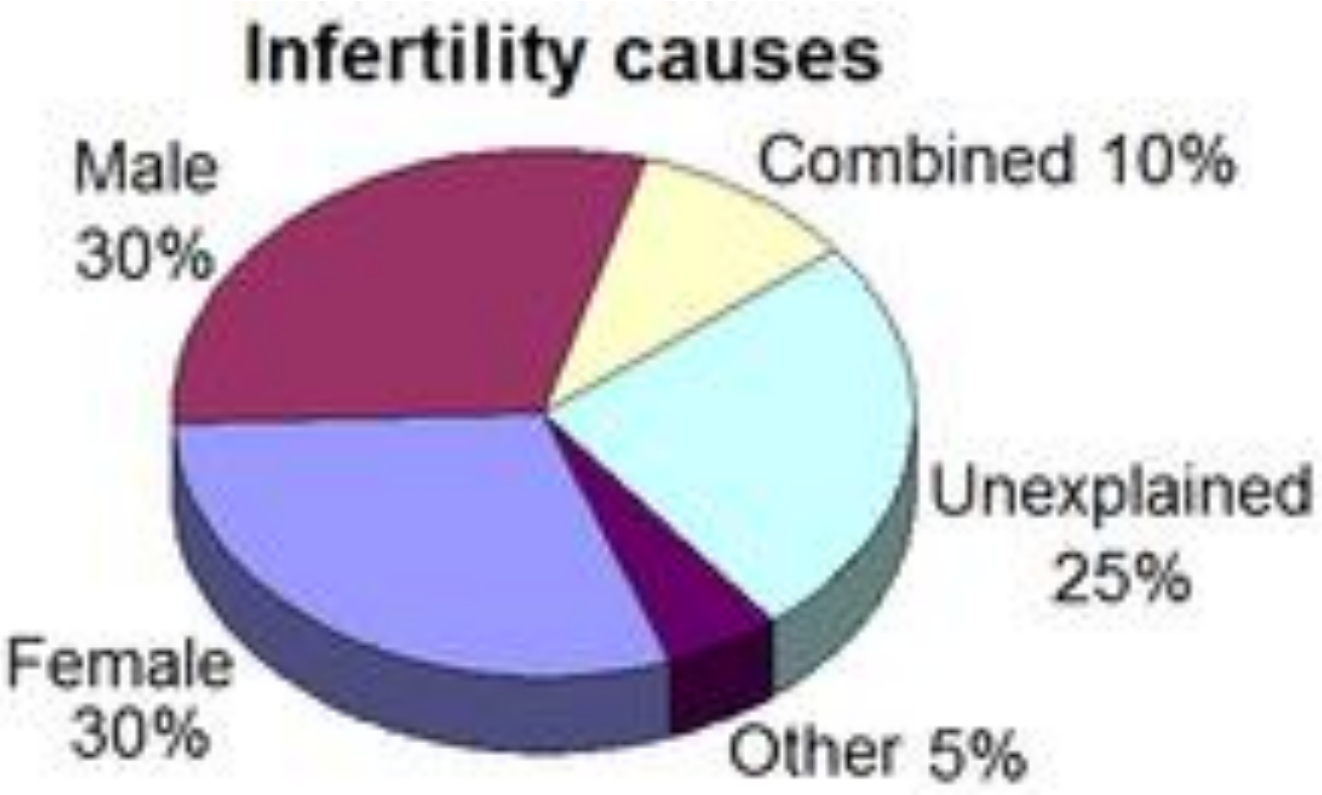
Female partner

- Day 3 FSH / LH
- Prolactin
- Free androgen index
- Free testosterone
- SHBG
- Thyroid function tests
- Day 21 progesterone
  if prolonged cycle – do weekly until menstruation – Day 21,28,35
- Antenatal Bloods, HIV, Rubella
- Cervical smear

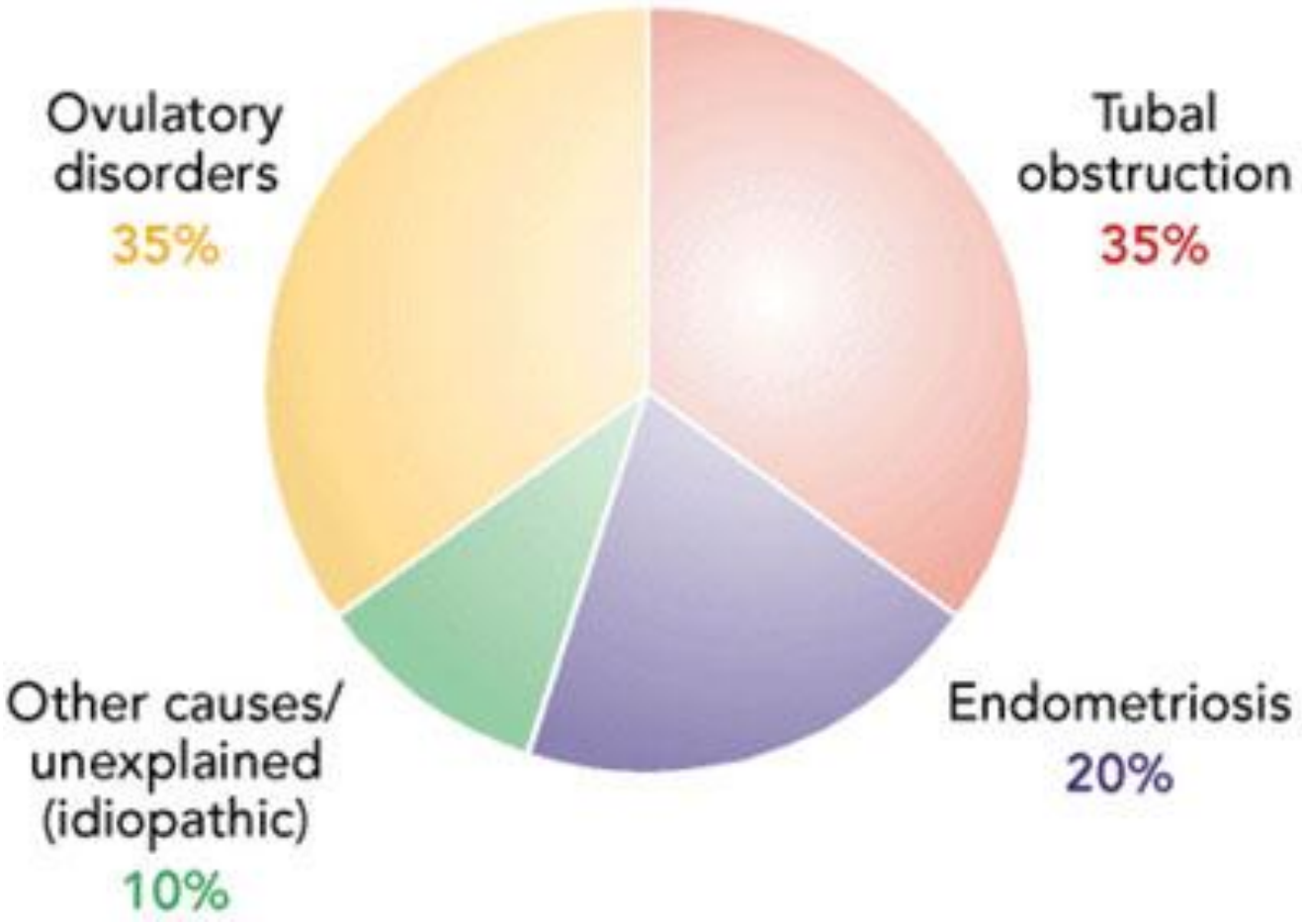
Referral to tertiary fertility services

- Azoospermia
- Oligospermia(<5% normal forms)
- Bilateral salpingectomy
- Tubal obstruction
- Oophrectomy
- Premature ovarian failure

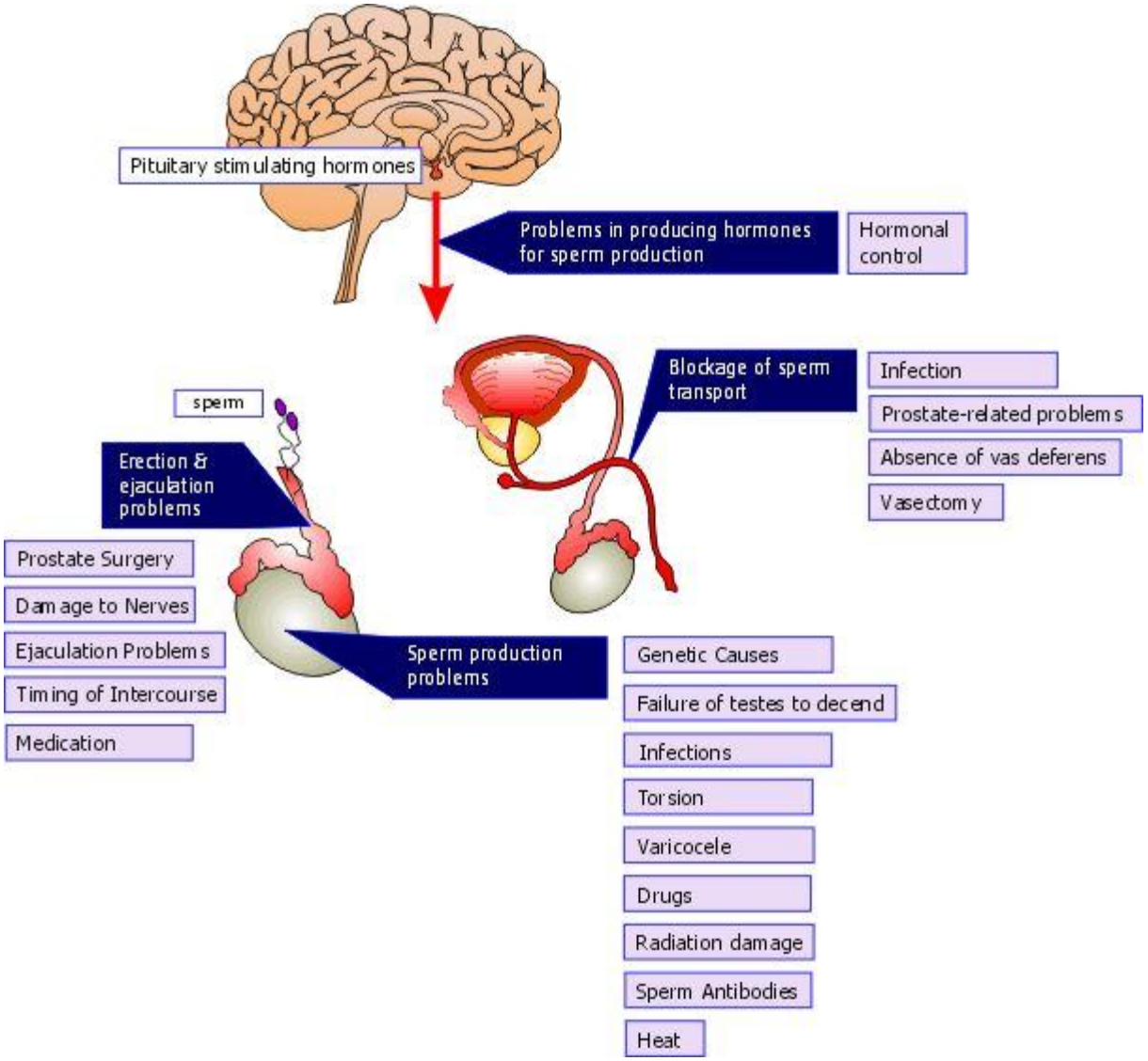
- Refer after 1yr of subfertility if one of these factors are present


Infertility causes
Male
30%
Combined 10%
Unexplained
25%
Female
30%
Other 5%

Female causes



Male causes


Pituitary stimulating hormones
Problems in producing hormones for sperm production
Hormonal control
Blockage of sperm transport
Infection
Prostate-related problems
Absence of vas deferens
Vasectomy
sperm
Erection & ejaculation problems
Prostate Surgery
Damage to Nerves
Ejaculation Problems
Timing of Intercourse
Medication
Sperm production problems
Genetic Causes
Failure of testes to decend
Infections
Torsion
Varicocele
Drugs
Radiation damage
Sperm Antibodies
Heat

Achieving pregnancy – Fertility treatment emotional roller coaster