Life as a Nurse Practitioner Hysteroscopist

Outpatient hysteroscopy clinic:

Abnormal uterine bleeding and endometrial cancers

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My Journey in women's health

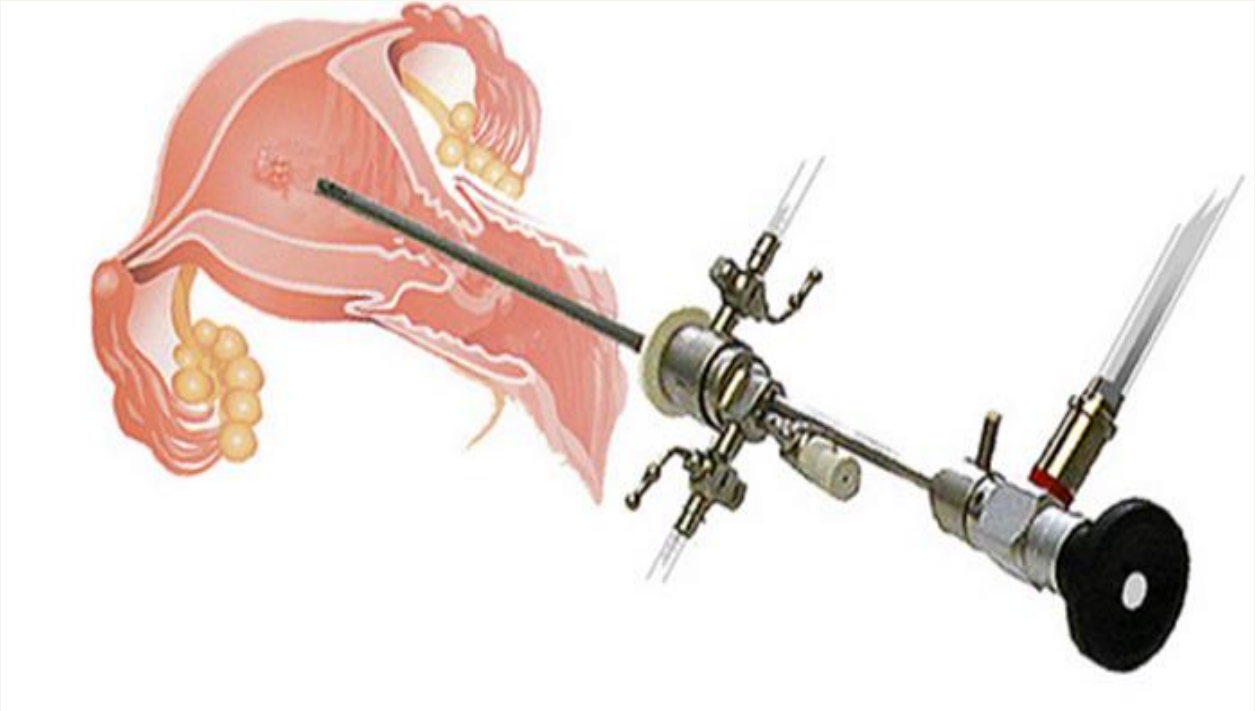
About me..

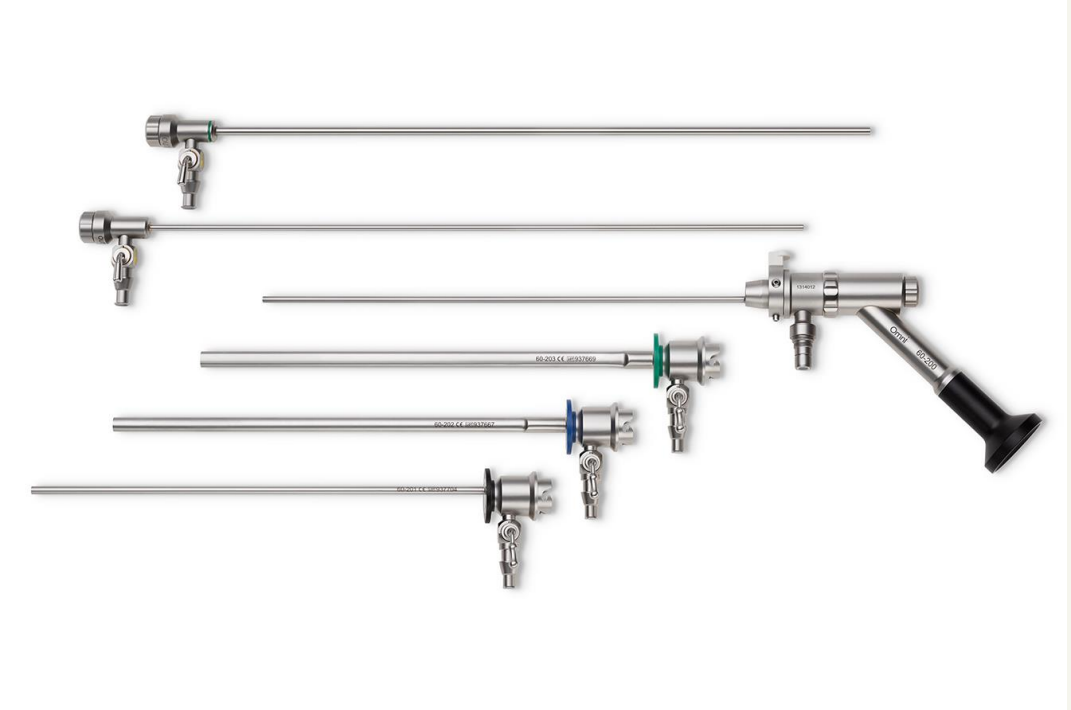
- 2009 - Graduated Bachelor of Nursing,
- 2013 - Gynaecology inpatient Nurse
- 2015 - Women's outpatient clinics
- 2015 - Colposcopy Speciality Nurse
- 2019 - CQUIP accredited Colposcopist
- 2020 - Nurse Practitioner
- 2021 - Women's Health National Committee Member
- 2022- Nurse Hysteroscopist training completed

Why a Nurse Hysteroscopy Model

- Equity and Access for high risk populations
- Unique holistic model of care
- Expanding the nursing scope

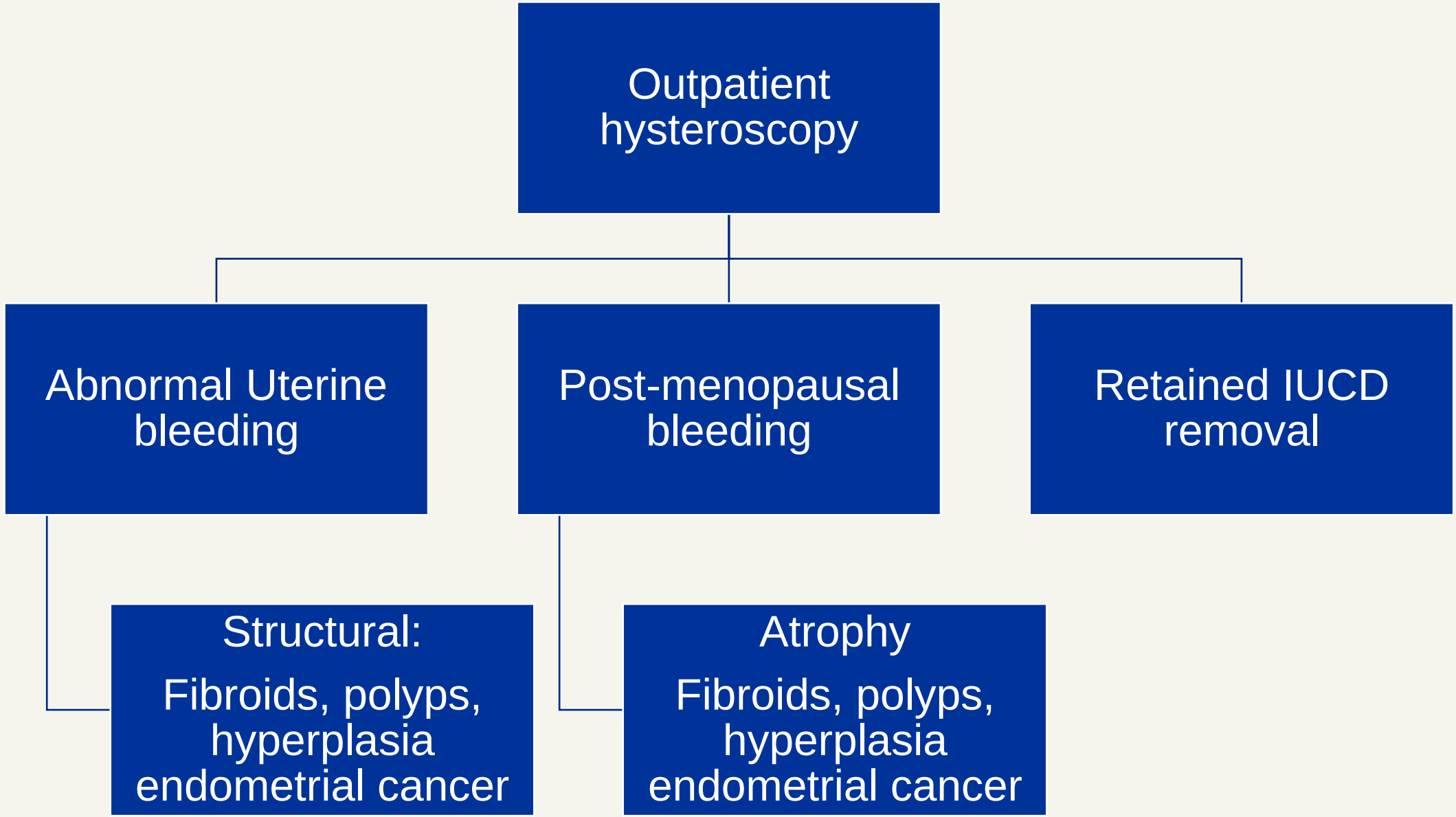
What is hysteroscopy?





Abnormal Bleeding Causes

Structural:	Non-Structural causes
Fibroids	Latrogenic (hormonal)
Polyps	Ovulatory dysfunction
Adenomyosis	Coagulation disorders
Hyperplasia / atypical hyperplasia	Endometrial disorders
Endometrial cancer	
Vaginal / Endometrium atrophy	

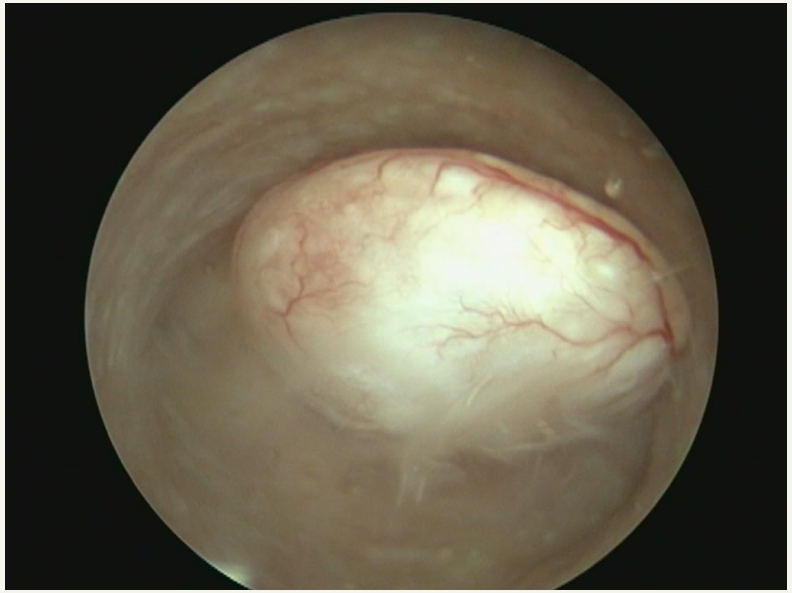

Outpatient hysteroscopy
Abnormal Uterine bleeding
Post-menopausal bleeding
Retained IUCD removal
Structural:
Fibroids, polyps, hyperplasia endometrial cancer
Atrophy
Fibroids, polyps, hyperplasia endometrial cancer

Case Study

- 74 year old presenting with PMB – fresh blood daily for four weeks
- ET 13mm (<4mm post-menopause)
- BMI 41, Para 2, menopause 48, hx bilateral PE, hypertension, dyslipidaemia, osteoarthritis
- Medications: Rivaroxaban, metoprolol, frusemide
- Normal smears
- Endometrial pipelle: Benign endometrial polyp fragments

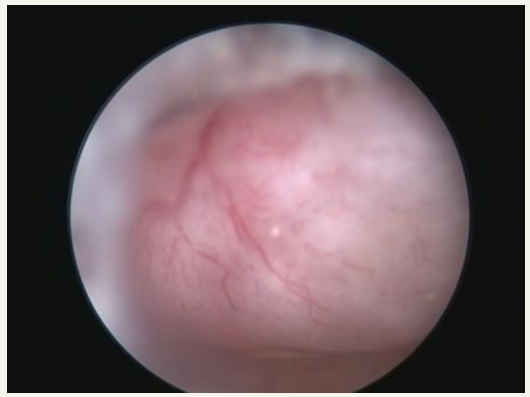
Attended OPH clinic

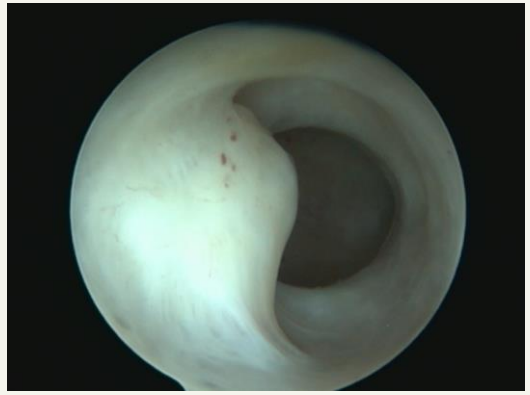
- **Analgesia:** Lignocaine gel, Entonox, four quadrant cervical block
- **Method:** Dilation via Hegars, tenaculum, direct visualisation switched to vaginoscopy
- **Scope type:** 6mm omnisure scope with external sheath, 30 degree
- **Findings**: Smooth pedunculated polyp, visible capillaries', background endometrium thin and atrophic
- **Treatment**: Myosure-lite via omnisure scope, complete resection of polyp.

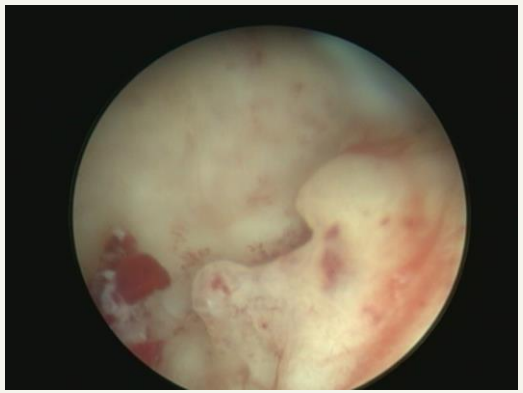


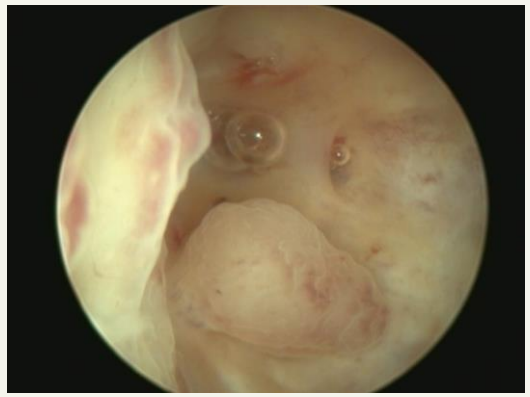
Polyps

- Overgrowth of endometrial mucosa, mostly benign, can find malignant premalignant changes
- A polyp contains glands, stomas and blood vessels
- Bleeding from a polyp is caused by stromal congestion -> venous stasis -> apical necrosis
- Sessile, pedunculated, single or multiple
- Pre-menopausal and post-menopausal cases
- The most common cause of PMB







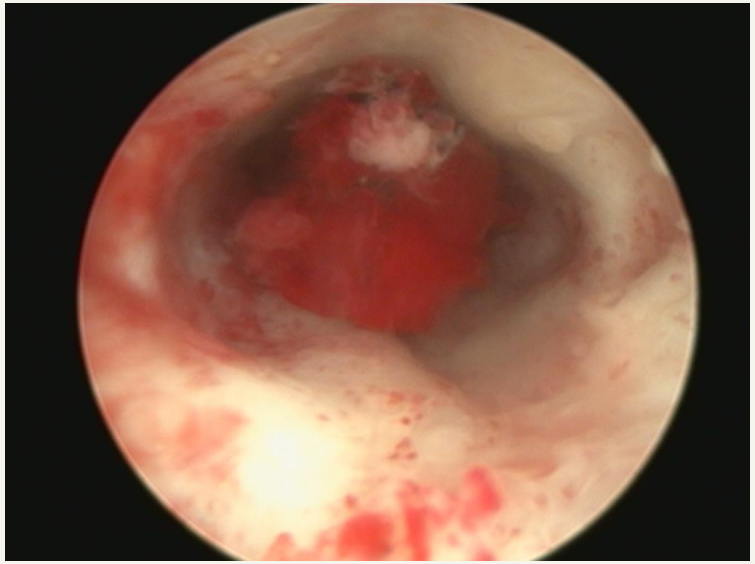


Case study

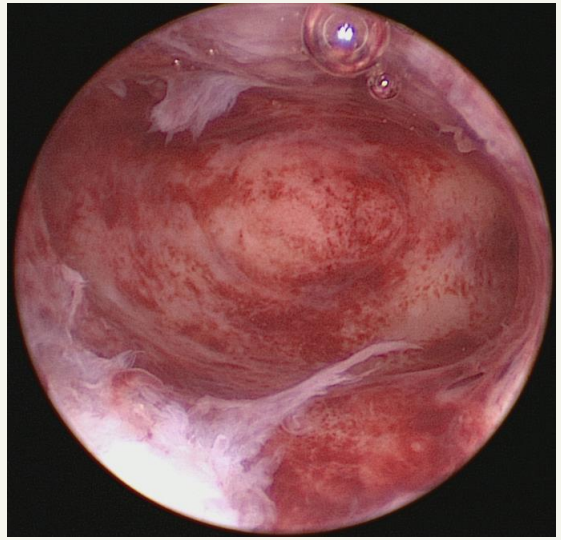
- 54 year old referred to Gynae clinic with PMB
- USS: ET 7.7mm, enlarged myometrium venetian blind ?adenomyosis
- BMI 24, para 2. Menopause 3 years ago. On TXA + primolut
- Smear Hx normal
- Pipelle: Scant, inactive glands + decidulisation of stroma

Attended OPH Clinic

- **Analgesia**: Lignocaine gel, Entonox, four quadrant cervical block
- **Method:** Dilation via Hegars, tenaculum, direct visualisation
- **Scope type:** 6mm omnisure scope with external sheath, 30 degree
- **Findings:** Atrophic endometrium, irregular shape
- **Repeat Pipelle collected:** Results atrophic endometrium



Endometrial & Vaginal Atrophy



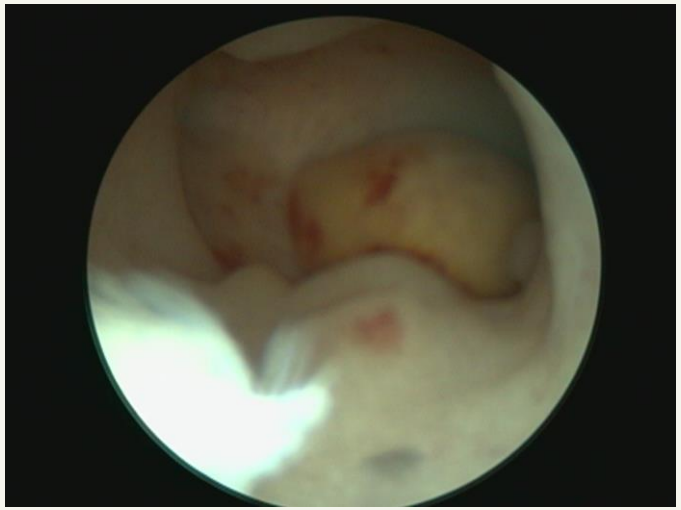
- Reduction in thickness of endometrium, loss of endometrial glands, smooth muscle cells show reduced sarcoplasm, myometrium consists of closely packed cells, elongated nuclei, scanty cytoplasm
- Caused by loss or suppression of ovarian hormones
- 60-80% cause for post menopausal bleeding
- Treatment: Topical oestrogen

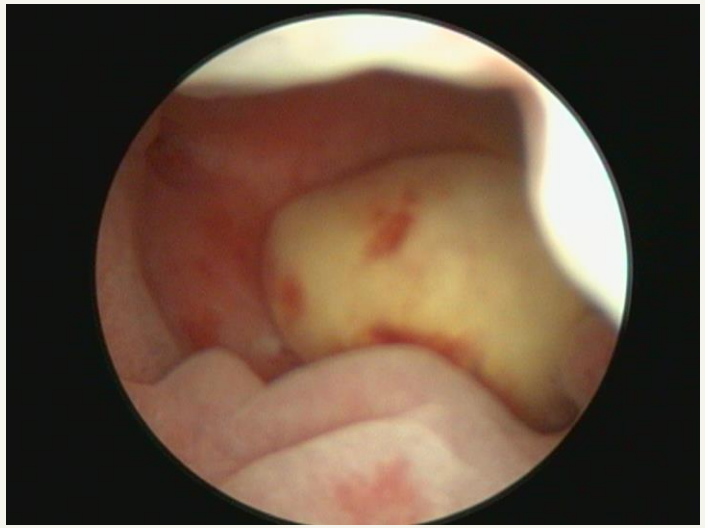
Case Study

- 43 year old referred to Gynae clinic with ongoing menorrhagia
- Irregular, heavy cycles with clots
- Provera and tranexamic acid
- Nulliparous
- Normal smear history
- No medical conditions
- Pelvic USS: 15mmm submucosal fibroid

Attended OPH Clinic

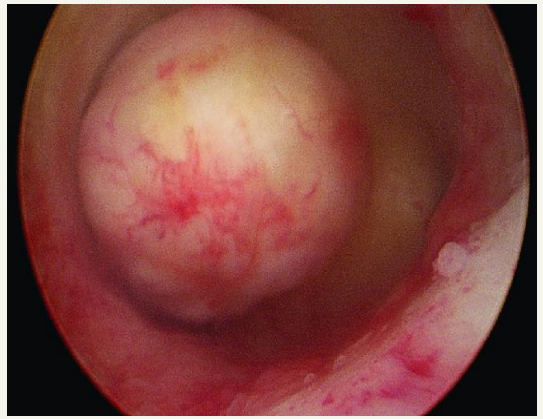
- **Analgesia:** Lignocaine gel, Entonox,
- **Method:** Vaginoscopy, hydrodilation
- **Scope type:** 6mm omnisure scope with external sheath, 30 degree
- **Findings:** Submucosal fibroid, sessile polyps
- **Treatment:** Myosure-lite, complete resection, Mirena insertion

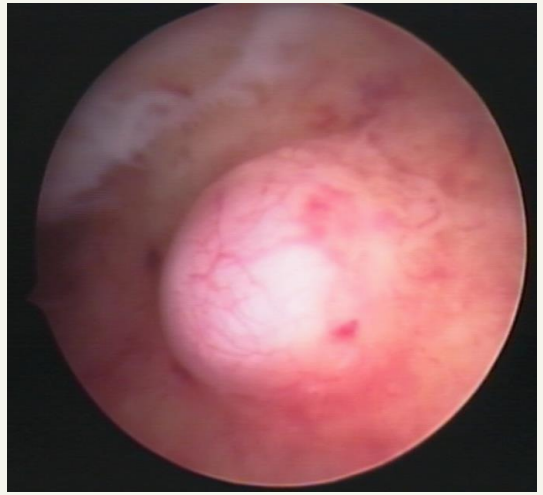




Fibroids / Leiomyoma

- Benign tumours growing from myometrium
- Submucosal, myometrial or subseroral
- Grow at moderate rate, dependent on Oestrogen and Progesterone
- Can cause heavy irregular, prolonged bleeding, iron deficient anaemia, pelvic pressure and pain, obstructive symptoms, fertility problems, or no symptoms
- Treatment: Expectant mx, medical management (zoladex), uterine artery embolization, hysterectomy, myomectomy, endometrial ablation





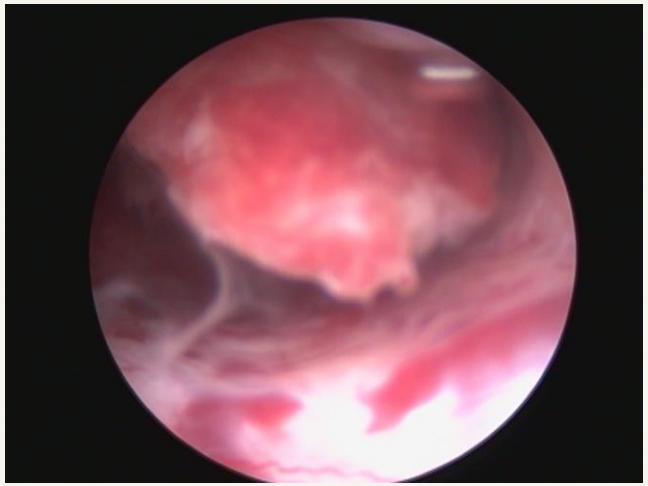
Case Study

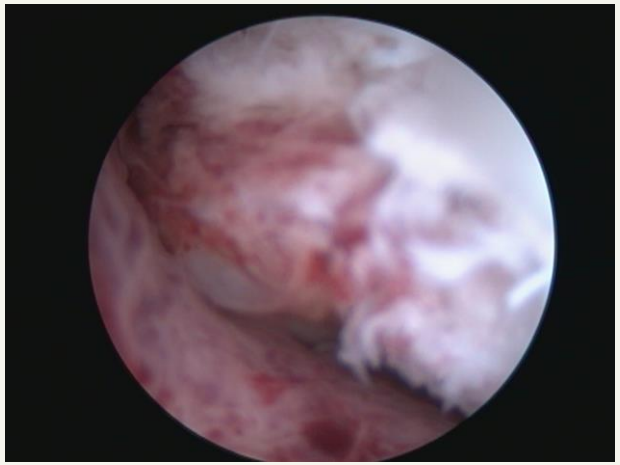
- 59 year old with PMB for 4 weeks referred to gynaecology clinic
- Currently on tamoxifen for adjunctive therapy for breast cancer ER PR positive
- Pelvic USS: ET 15mm, ?small polyp
- Para 2, BMI 24, nil other medical conditions
- Pipelle: Disordered proliferation

Attended OPH Clinic

Analgesia: Lignocaine gel,
Method: Vaginoscopy, hydrodilation
Scope type: 6mm omnisure scope with external sheathi, 30 degree
Findings: Thickened globally throughout cavity, decidulising polyp
Sample: Myosure-lite, resection of thickened tissue
Diagnosis: Disordered proliferative endometrium, endometrial polyp

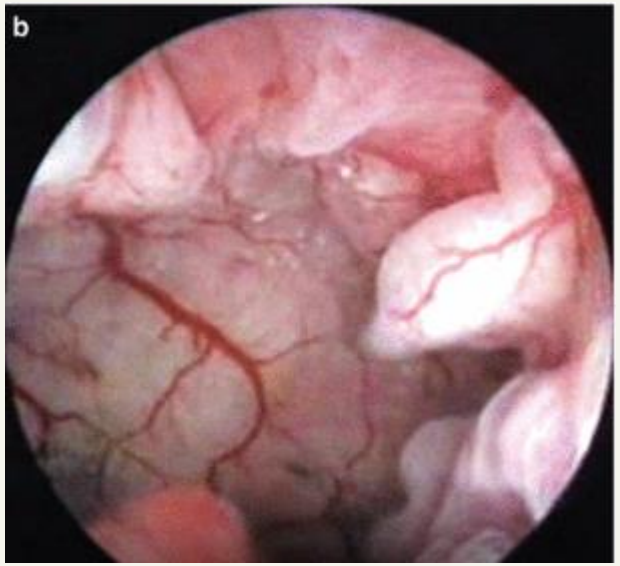
Management: Scheduled for TLH, BSO risk reducing surgery





Tamoxifen changes

- Adjunctive therapy for breast cancer
- Binds to oestrogen receptors in breast causing cancer cells to die,
- Only partial agonist behaviour on oestrogenic tissues on endometrium can cause proliferation
- Post menopausal risk of endometrial proliferation, hyperplasia, endometrial cancer, uterine sarcoma
- Tx: Breast team review ?change medication, Conservative management, Hysterectomy

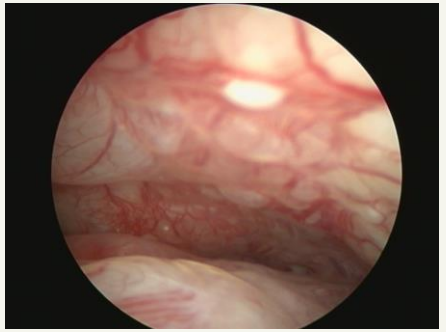


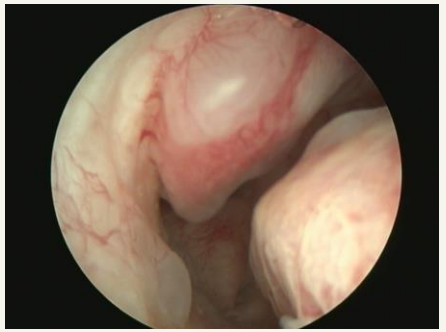
Case Study

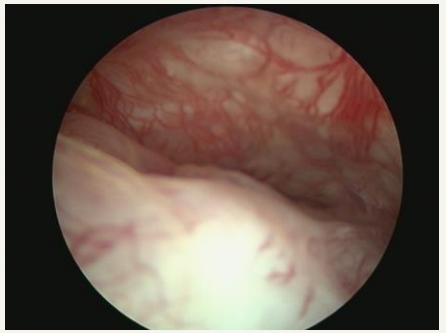
- 56 year old, PMB for 6 weeks, heavy with flooding and clots
- USS: ET 8mm, cystic appearance, intermural fibroid
- Hx: Previous breast cancer ER & PR positive, Tamoxifen completes 2 years ago
- Pipelle: Disordered proliferative endometrium

Attended OPH Clinic

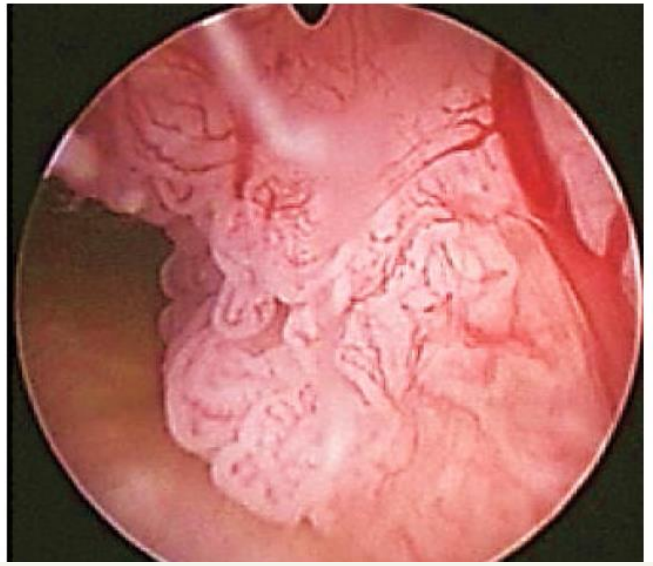
- **Analgesia:** Lignocaine gel, Entonox,
- **Method:** Vaginoscopy, hydrodilation
- **Scope type:** 6mm omnisure scope with external sheath, 30 degree
- **Findings:** Polyps, cystic glandular appearance, thickened tissue globally, vessels
- **Sample:** Myosure-lite, removal of polyps, sampling of background endometrium
- **Diagnosis**: Atypical hyperplasia + polyp







Atypical Hyperplasia



- Pre-malignant condition, precursor to endometrial cancer
- Overgrowth of endometrial cells caused by excess unopposed oestrogen (no added progesterone
- Risk factors: Obesity, ovulatory dysfunction, exogenous sources of oestrogen
- Causes: HMB, IMB, irregular bleeding patterns, unscheduled bleeding on HRT, PMB

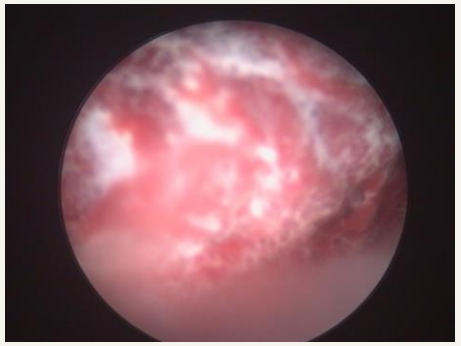
Case Study

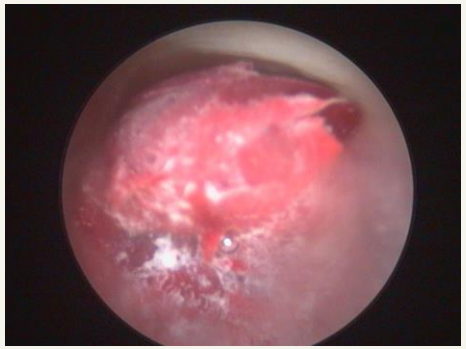
- 82 year old referred with incidental finding of 39mm lobulated mass in endometrial cavity.
- No PMB, abnormal discharge or pain
- Para 6, normal smear Hx, BMI 29
- Hx: lower rectal carcinoma, superficial bladder CA, hypertension, hypothyroidism
- Abdomen soft, bimanual NAD
- Pipelle: Insufficient sample

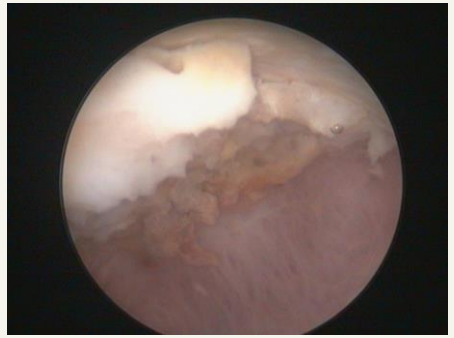
Attended OPH clinic

Analgesia: Lignocaine gel, Entonox
Method: Direct visulisation, four quadrant block, dilation via Hegar's
Scope type: 6mm omnisure scope with external sheath, 30 degree
Findings: Large pedunculated irregular mass, degenerating appearance, background thin atrophic
Sample: Myosure-lite, resection of mass
Diagnosis: Endometrial carcinosarcoma

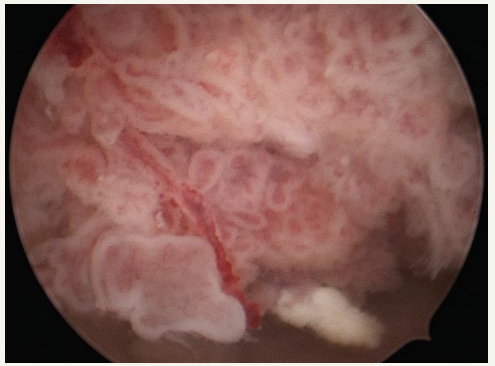
Referred to Auckland Gynae-Oncology MDM, CT chest/abdomen/pelvis, TLH, BSO

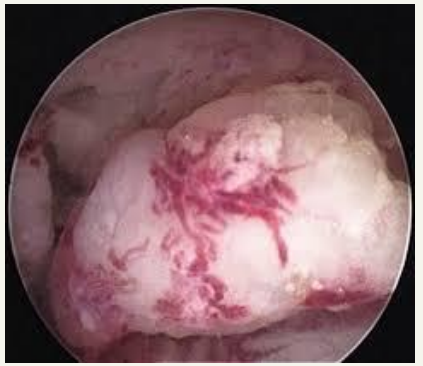




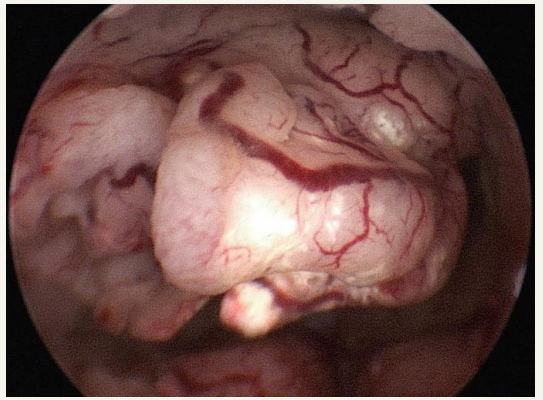


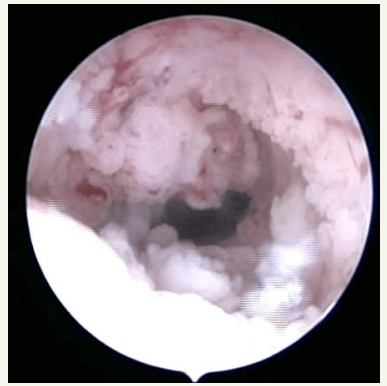
Endometrial cancer





- Most prevalent gynaecology cancer
- Excessive exposure to unopposed oestrogen
- Obesity more significant risk factor
- Abnormal bleeding patterns (PMB, IMB, PCB) abnormal vaginal discharge, pain, urinary and bowel dysfunction
- Adenocarcinoma most common (95%),
- Treatment varies on severity of staging + grading – Hysterectomy – radical hysterectomy +/- radiation, chemotherapy





Complications

- Perforation / false passage – monitor, ultrasound, surgical repair
- Haemorrhage – sutures, packing, TXA, surgery
- Cervical shock – manage per symptoms,
- Bradycardia - atropine
- Hypotensive – IV fluids, positioning
- Severe pain – opioids, admission
- Respiratory depression – analgesics
- Allergic reaction – adrenaline, steroids,

Hysteroscopy training for Nurses

- NZNO WHC training Standards (WHC page on NZNO website)
- Entry criteria:
  - RN with extended practice or Nurse Practitioner
  - Two years concurrent post registration women's health experience
  - PDRP proficient
  - Post-graduate qualification with advanced health assessment
- 18 months – 24 month training
- Te Pukenga Ara – 60 point course
- Two mentors, commitment from employer for a position at end of training
- 110 case completed minimum for logbook (10 observation only)
- Theory component: Case studies, online quizzes, clinical audit,
- 10 Clinical evaluation assessments, OSCE, Final Examination

Thank you