Endometrial cancer

Dr Mark McGowan

O&G ST6, KMH

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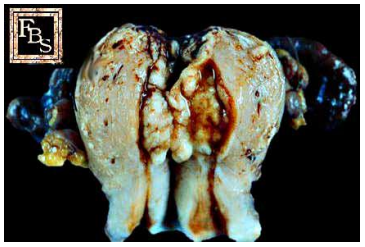


Objectives

- Incidence
- Endometrial cancer- issues
  - Clinical presentation
  - Diagnosis
  - Cancer statistics: Incidence, Survivorshi
  - COVID surge data
  - Investigations including radiology
  - Pathology
  - Staging
  - Natural history
  - Management within MDT
  - Prognosis
  - Follow-up
- Summary

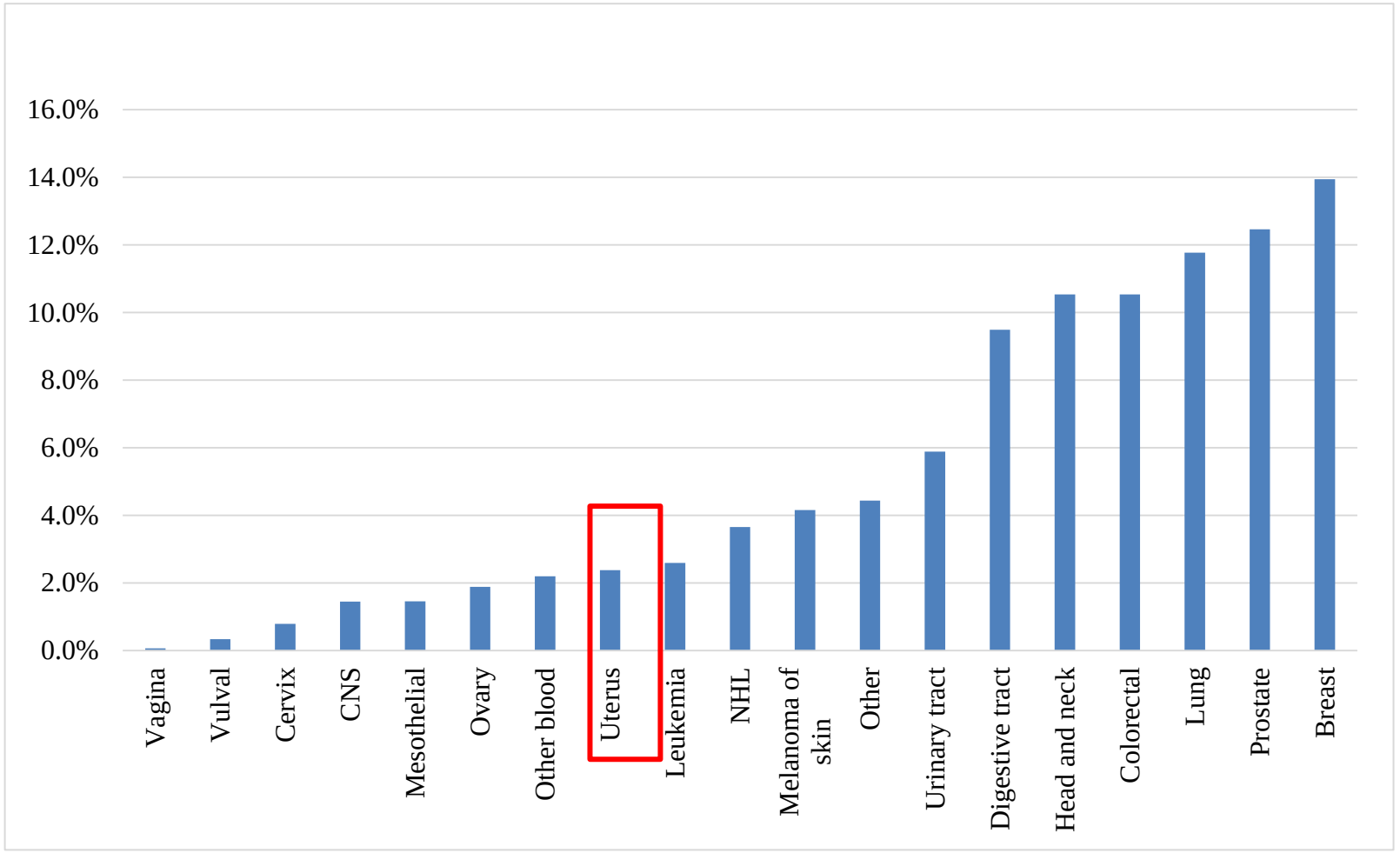
Clinical Presentation

- Abnormal vaginal bleeding/discharge
- PMB
- Postmenopausal discharge
- Pelvic pain

Diagnosis

- Women presenting with PMB require a full history, abdominal and pelvic examination with a speculum.
- 5-10% risk of endometrial cancer in women presenting with PMB (increases with age and risk factors).
- Endometrial biopsy required in women > 45 year old with HMB or following failure of medical treatment (7 - NICE guideline).
- Endometrial cancer diagnosis based on endometrial biopsy histology.

Cancer registration statistics 2017 (1)

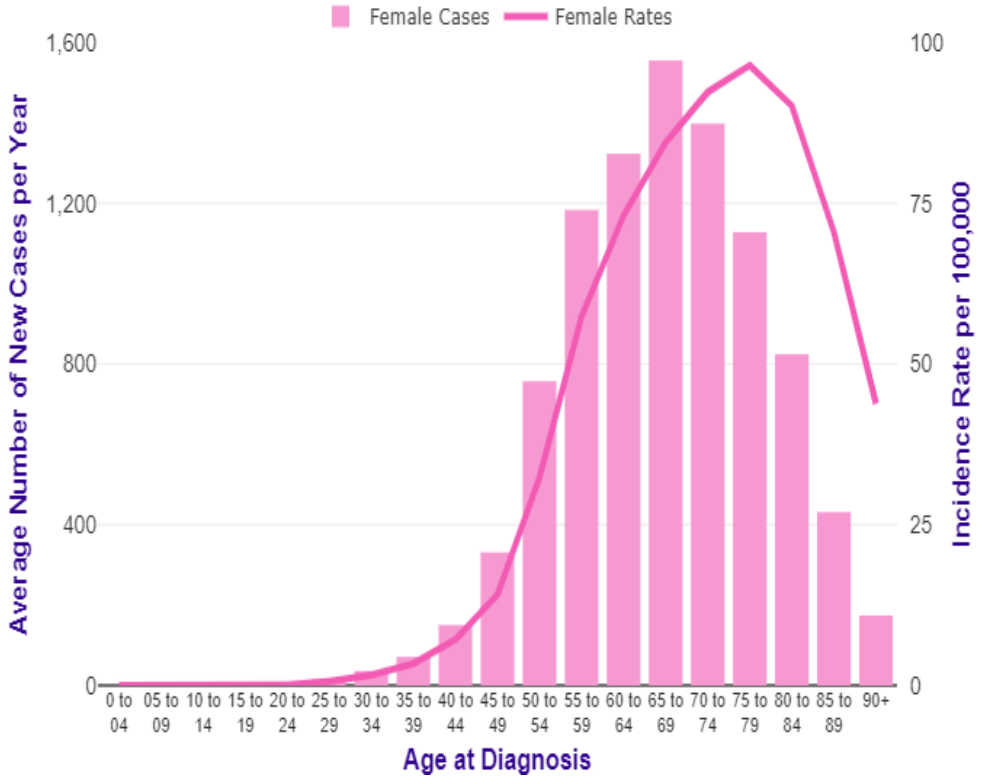


Incidence

Type of cancer	Cases in 2017	1yr survival rate (2017)	5 yr survival rate (2017)	Incidence/100, 000
Uterine	9377	90%	75%	29.1
Ovarian	5676	70%	45%	22.2
Cervical	2591	80%	60%	9.4
Vulval	1107	85%	65%	4.0

National Cancer Registrations UK 2017 (2)

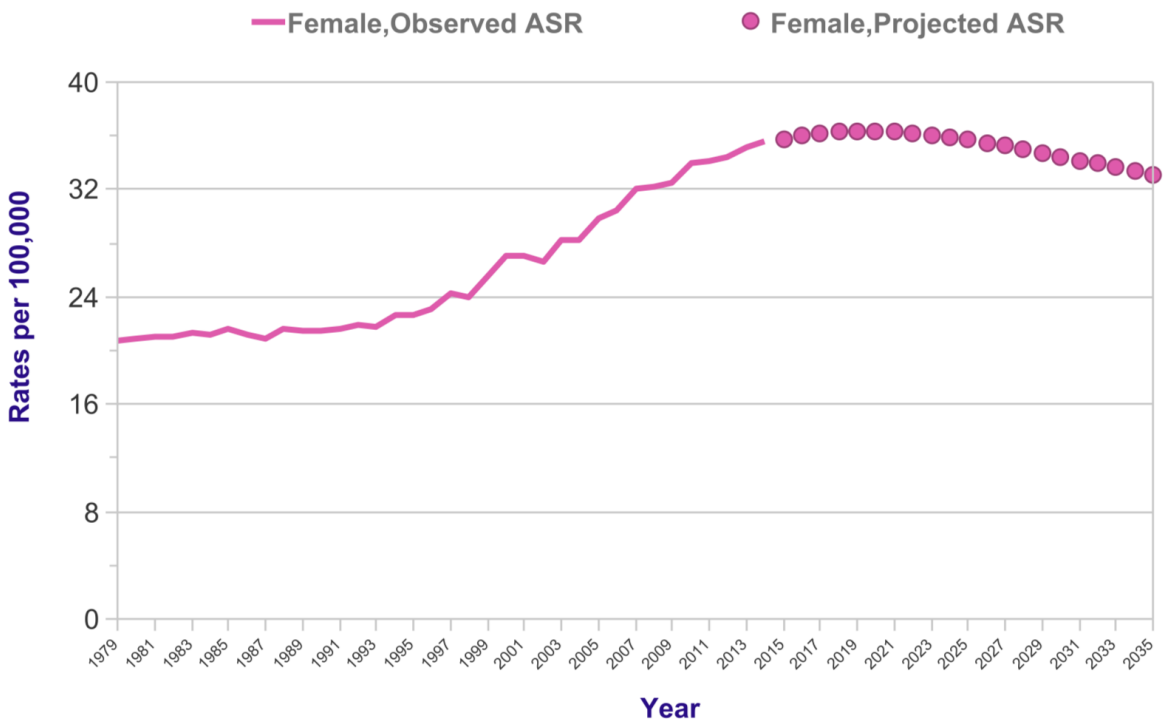
Incidence by age



- Account for 3% female malignancies UK
- 9377 cases in 2017.
- Incidence : age related
- Steep rise age 45-49 year old
- Peak onset 75-79 years old

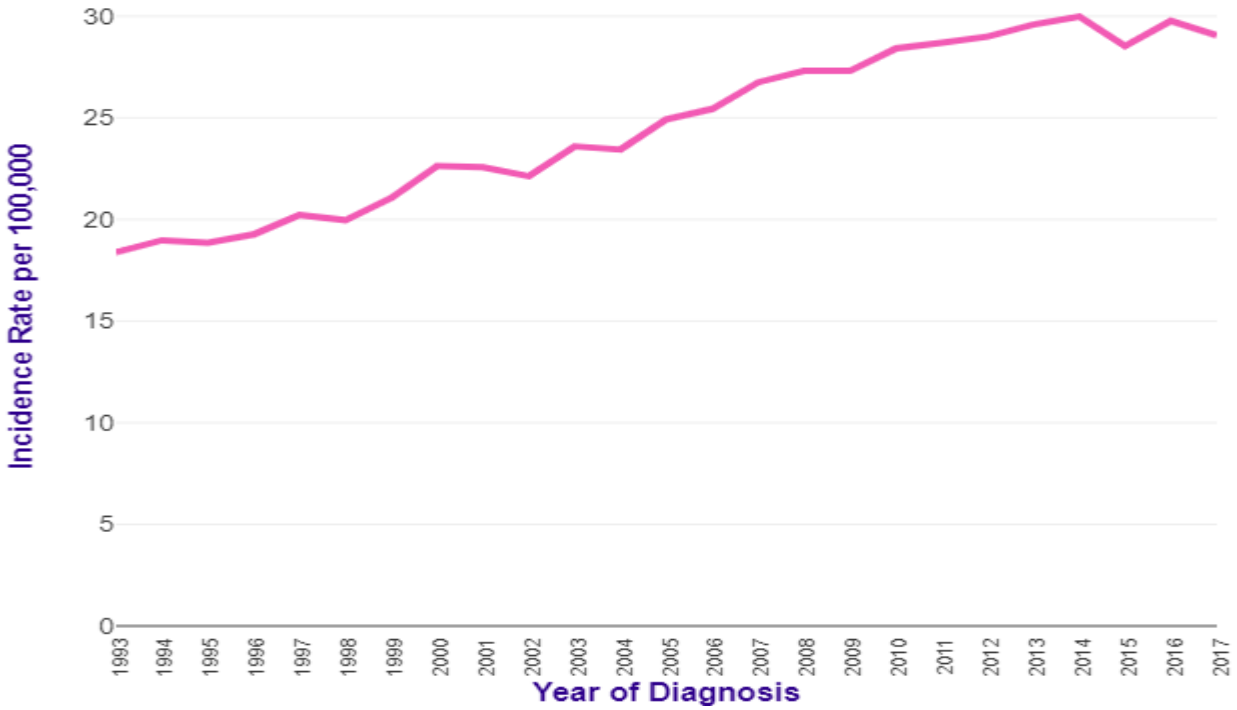
National Cancer Registrations UK 2017 (3)

Uterine Cancer (C54-C55): 1979-2035
Observed and Projected Age-standardised Incidence Rates, Females, UK

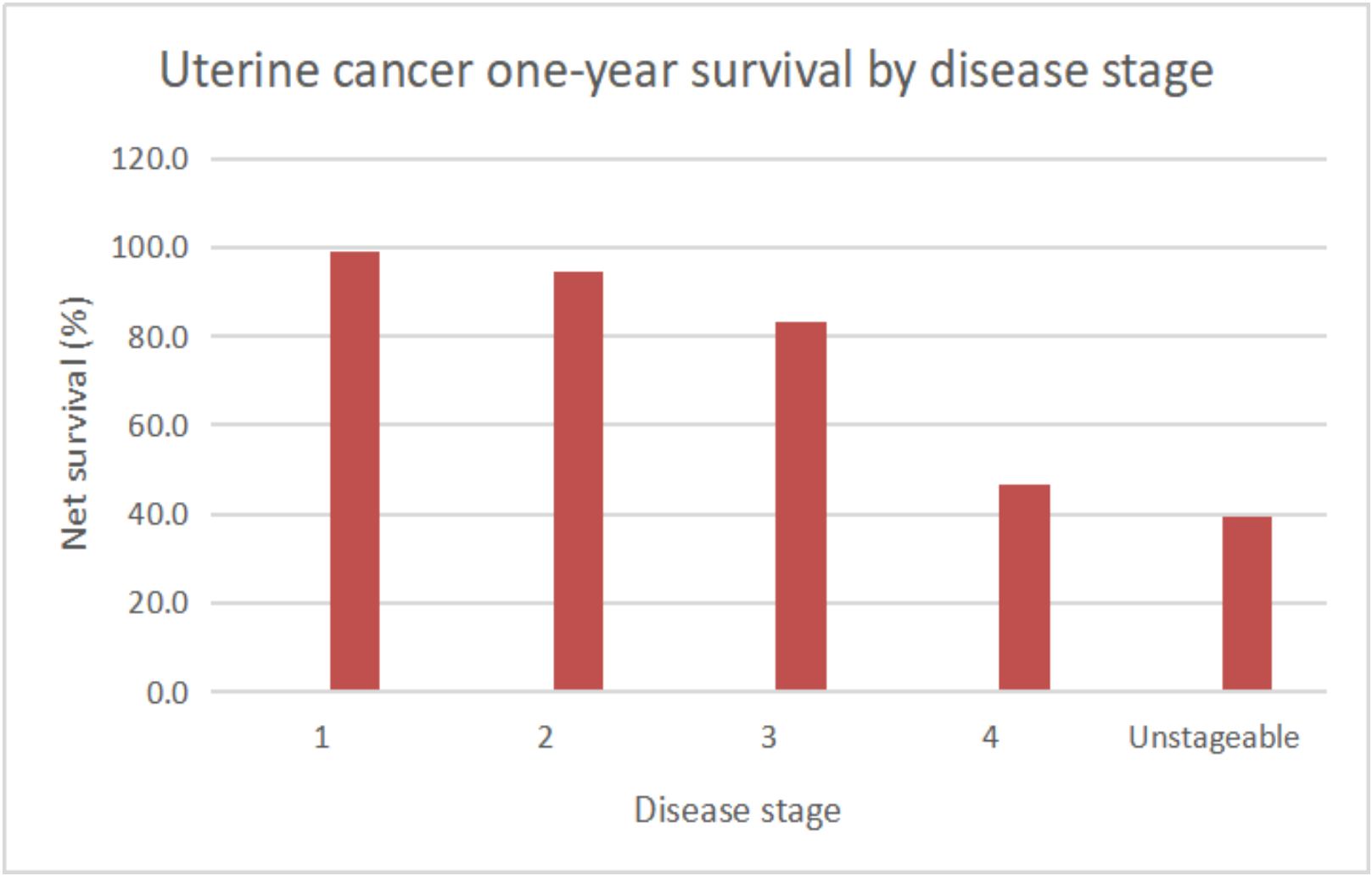


Trends in incidence

- 55% increase when comparing 1993-1995 to 2015-2017.



http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/uterine-cancer/incidence#heading-Two (4)


Uterine cancer one-year survival by disease stage
120.0
100.0
80.0
60.0
40.0
20.0
0.0
Net survival (%)
1
2
3
4
Unstageable
Disease stage

COVID surge data (2)

- Study from May 2020 suggests during 12 week surge 328, 505 gynaecological cancer operations cancelled globally (39.3%).

- Backlog of gynaecological cancer operations will require a careful government strategy.

Aetiological factors

Increased risk

- Unopposed oestrogen
- Nulliparity
- PCOS
- Diabetes
- Obesity
- Functional ovarian tumuors
- Family history of breast/colon/endometrial cancer
- Tamoxifen

Decreased risk

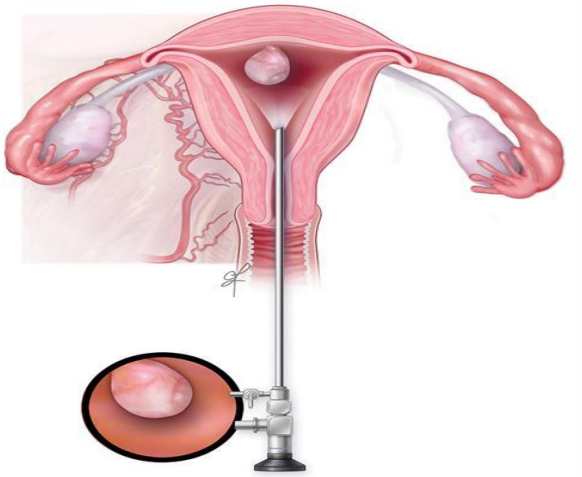
- COCP
- Prosteogens

Investigations - PMB

- Most referred via the 2WW pathway (53%).
- TV US scan the most widely used investigation for PMB.
- Endometrial thickness ≤ 4mm has a risk of endometrial cancer of < 1% (7).
- Abnormal endometrial thickness on US scan requires an endometrial biopsy.
- High risk woman such as those on Tamoxifen should be investigated with TV US scan, hysteroscopy and endometrial biopsy.

Investigations - hysteroscopy

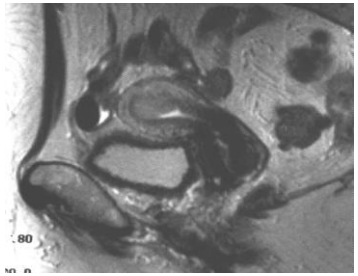
- Hysteroscopy required for any abnormality detected at US scan (e.g. endometrial polyp) and any high risk women.
- Where possible this should be as an outpatient procedure.
- UK units developing outpatient hysteroscopy treatment pathways.

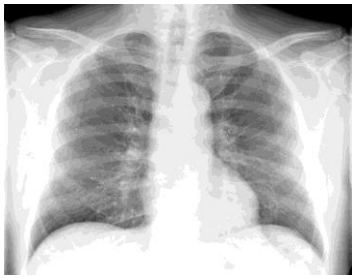


TruClear or Myosure

Investigations - endometrial cancer confirmed on biopsy

- Bloods - FBC, U&Es, LFTs
- CT chest/CXR – all endometrial cancers
- MRI pelvis/CT scan – high risk histology including grade 3 endometrioid, uterine serous, clear cell cancer.

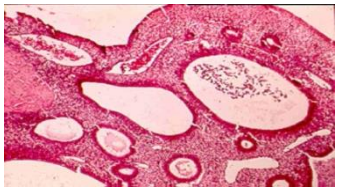




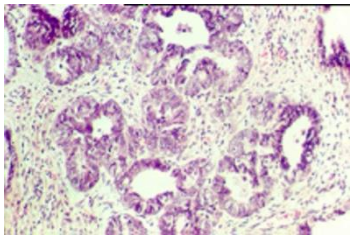
Pathology

Hyperplasia (2014 WHO classification):

1. Without atypia



2. With atypia



- Architecture complexity no longer features in classification i.e. simple and complex.

Pathology

Malignancy from Glands or stroma

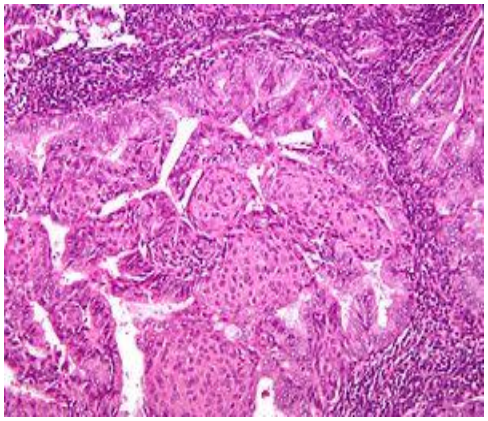
Endometrial Carcinomas : Types

1:Type 1- Endometriod adenocarcinoma (90%)

2: Type 2 Adenosquamous

-Serous (5%)

-Clear cell (1-2%)



Endometrioid endometrial cancer histology

FIGO staging (3)

Carcinoma of the endometrium

IA	Tumour confined to the uterus, < ½ myometrial invasion.
IB	Tumour confined to the uterus, > ½ myometrial invasion.
II	Cervical stromal invasion, but not beyond uterus
IIIA	Tumor invades serosa or adnexa
IIIB	Vaginal and/or parametrial involvement
IIIC1	Pelvic node involvement
IIIC2	Para-aortic involvement
IVA	Tumour invasion bladder and/or bowel mucosa
IVB	Distant metastases including abdominal metastases and/or Inguinal lymph nodes

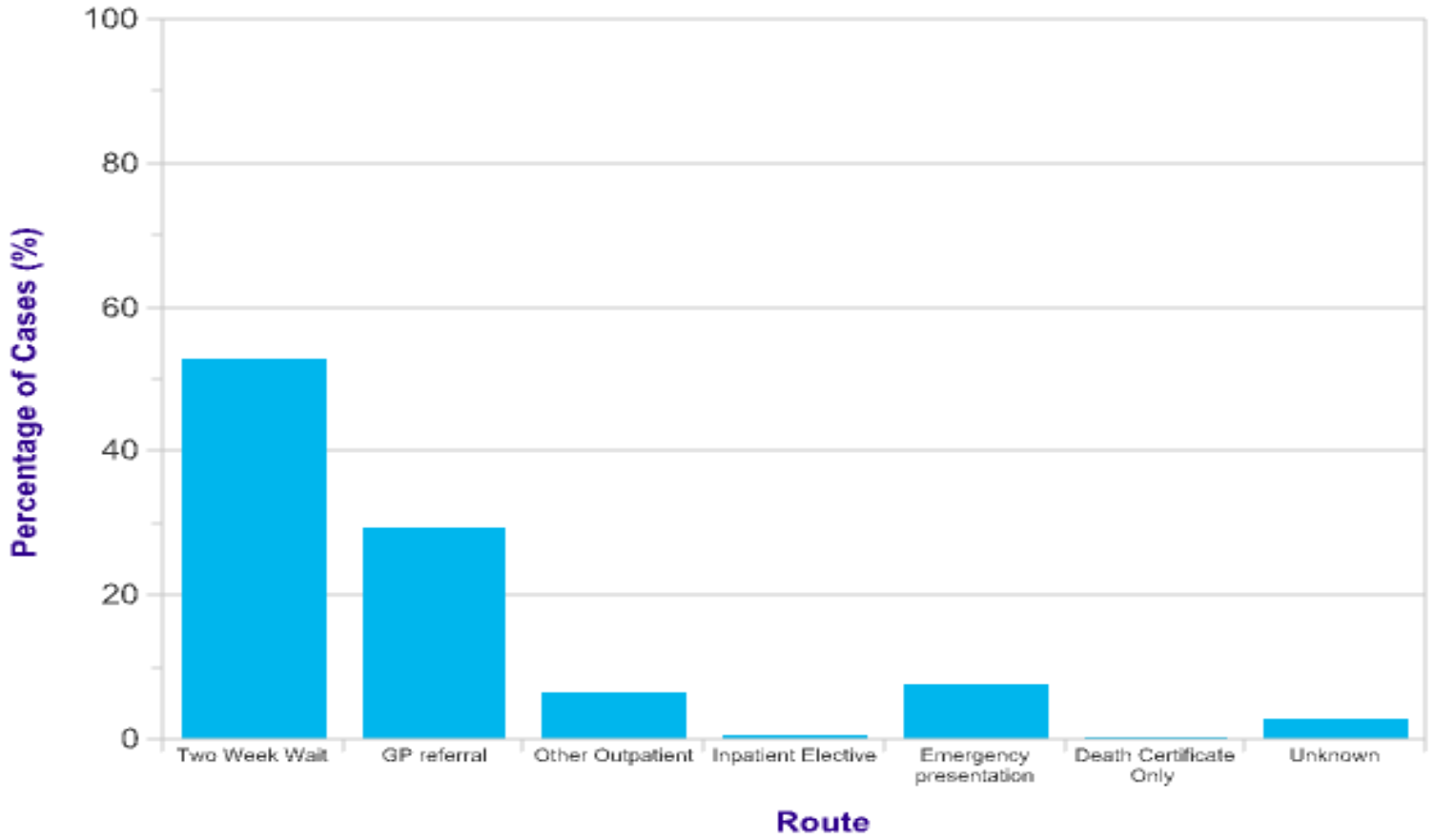
Natural History

- Local Invasion : Myometrium
- Trans-peritoneal spread
- Lymphatic (Pelvic and para-aortic directly)
- Vascular invasion (uncommon)

Referral pathway

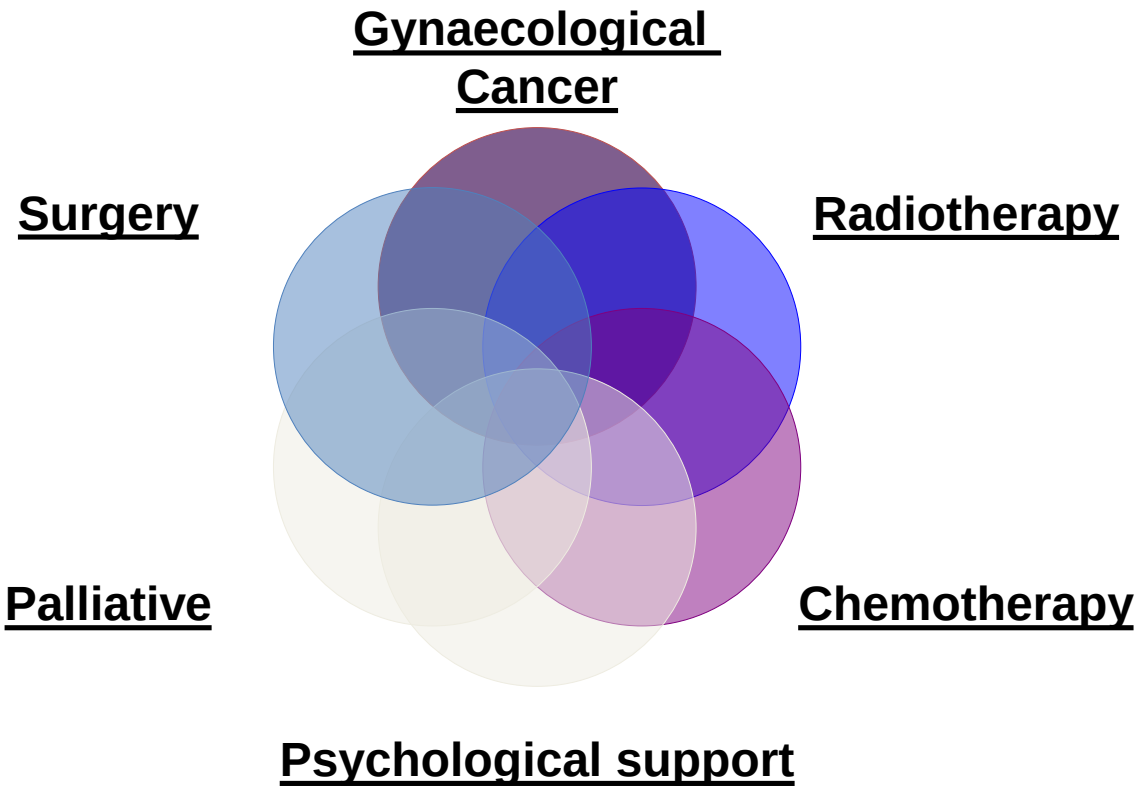
- 2 week wait (53%)
- GP referral
- Other outpatient
- Inpatient elective
- Emergency presentation

Referral pathway graph



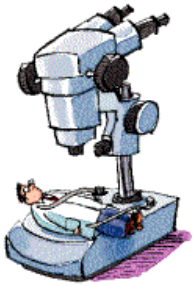
Management

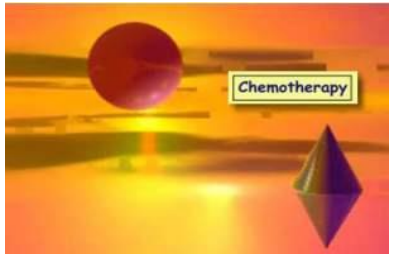
-Determined after discussion in cancer centre MDT.



Multidisciplinary Team

- Consists of:
- Gynaeoncologist
- Oncologist
- Specialist nurse
- Radiologist
- Histopathologist





Management

1:Surgical

2: Medical:

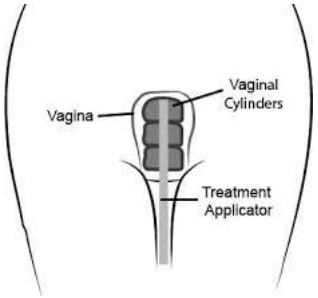
A. Radiotherapy
B. Chemotherapy
C. Hormonal

Surgery (4)

- Procedure:
  - Hysterectomy + BSO
  - Omentectomy
  - Washings
  - Lymph node sampling (cancer centre only)
  - Debulking in advanced disease (cancer centre only)
- Route:
  - Abdominal
  - Laparoscopic
  - Vaginal (if women unfit for standard treatment)

Radiotherapy

Low risk	FIGO grade 1/2, Stage 1a, no LVSI	No adjuvant treatment
Intermediate risk	FIGO grade 2, Stage 1b, no LVSI FIGO grade 3, Stage 1a, no LVSI	Vaginal brachytherapy
High-intermediate risk	FIGO grade 1/2, LVSI unequivocally positive	EBRT vs vaginal brachytherapy in node status unknown
High risk	FIGO grade 3, Stage 1b	EBRT vs vaginal brachytherapy +/- adjuvant chemotherapy



Hormonal treatment

- Can be used in patients unfit for surgery due to co-morbidities e.g. morbid obesity.

- Progestogens
  - Medroxyprogesterone acetate 200-400mg/day
  - Megestrol 160mg/day

- Mirena IUS can be used in endometrial hyperplasia without atypia.

- Recurrent disease

Follow up

- According to MDT recommendations

- Aim:
  -Detect recurrent disease
  -Detect & treat complications from treatment.

How often & For how long?

- Low risk endometrial cancers typically have infrequent visits for 2 years.

- High risk endometrial cancers typically have rigorous follow-up in first two years for up to 5 years.

Summary

- Increasing incidence -obesity epidemic, aging population
- Good prognosis as often presents at early stage
- MDT input essential
- Optimal management to maximize prognosis

Questions??

References

1. Cancer Research UK, https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/uterine-cancer, Accessed February 2021.
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