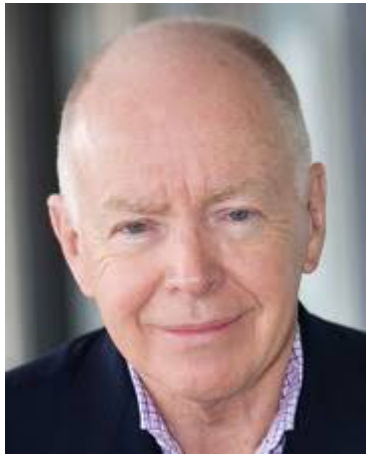
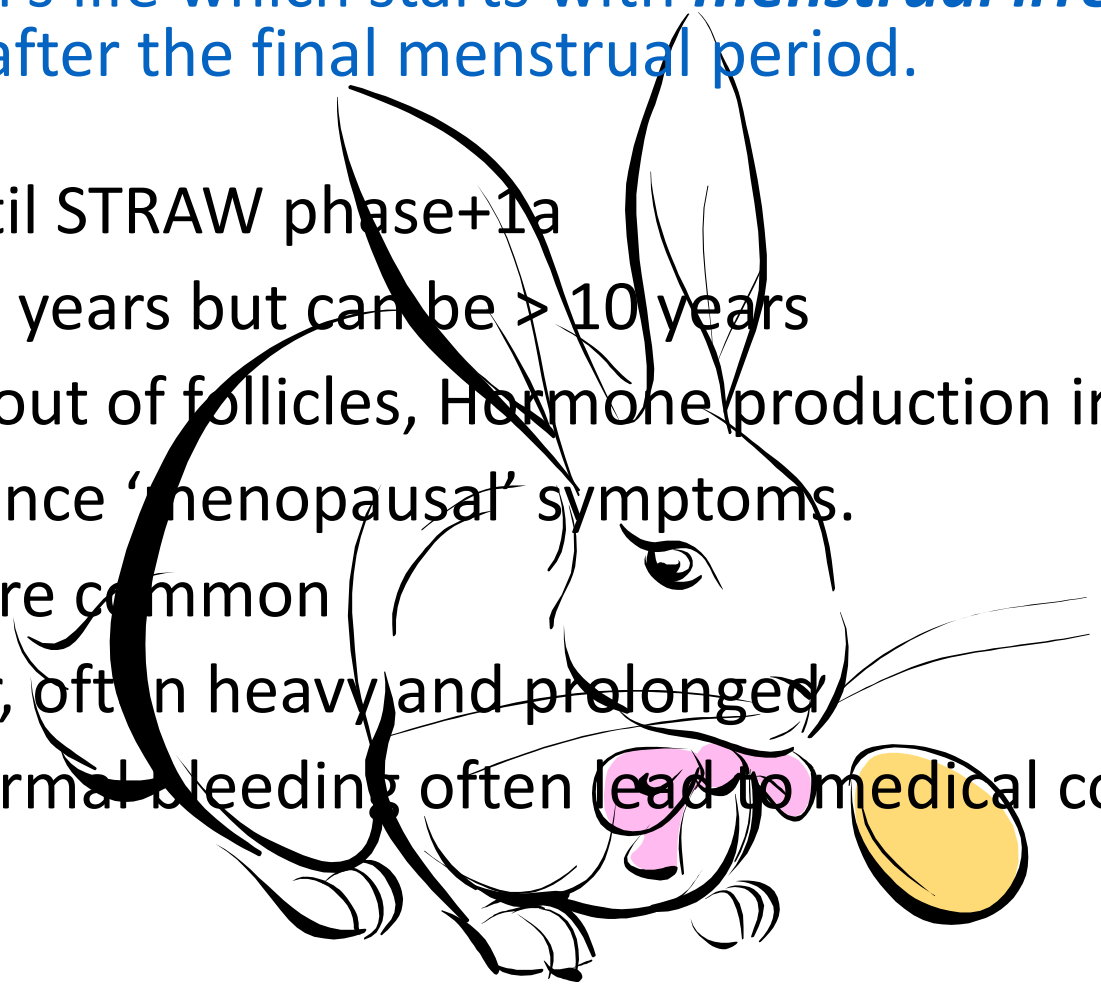
Risk Assessment and Screening in the Perimenopause

Rod Baber



Perimenopause

The phase of a woman's life which starts with ***menstrual irregularities*** and which concludes one year after the final menstrual period.



- STRAW phase -2 until STRAW phase+1a
- Median duration 4-6 years but can be > 10 years
- Ovaries are running out of follicles, Hormone production irregular.
- Women may experience 'menopausal' symptoms.
- Anovulatory cycles are common
- Menses are irregular, often heavy and prolonged
- Symptoms and abnormal bleeding often lead to medical consultation.

The midlife health check

Don't

- Check FSH, LH, E2, T or P in a woman at the normal age of menopause
- Blood test results will not influence management decisions

Do

- Take a good history; consider a menopause symptom score card
- Consider other causes for symptoms
- Take a menstrual history
- Record personal and family history of relevant medical conditions.
- Discuss general health and contraception
- This an excellent opportunity to reinforce key preventative health messages

What do you need to know?

Medical History

Relevant Gynecological facts

- LMP and bleeding pattern
- Hysterectomy /oophorectomy
- Current use of Hormone therapy
- Contraceptive needs

Major Medical illnesses

- VTE / PE
- Breast / endometrial cancer
- Thyroid disease
- Cardiovascular disease
- Osteoporosis
- Diabetes
- Depression
- Liver or Renal disease
- Smoking / alcohol use
- Medication

Significant Family History

- Cardiovascular
- Osteoporosis / fracture
- Cancer
- Dementia

Social history

Examination

- Height
- Weight
- Blood Pressure
- Cardiovascular
- Respiratory
- Pelvic examination
- Cervical smear
- Breast check
- Thyroid assessment

Investigations

- FSH, LH – ***rarely needed and useless in women on hormonal contraception***
- Progest. / AMH – *no value*

Mid Life Assessment

- Cervical Screening
- Mammogram
- Lipids
- Fasting BSL
- TSH
- FBC / ferritin
- Renal function
- Liver function
- Fecal occult blood test
- Vitamin D
- Bone density

A Practitioner's tool kit. Jane F M and Davis S R Clim,acteric 2014;17:1-16

Perimenopause – key issues:

- **Diagnosis**:

- based on history, bleeding pattern, exclusion of other diseases

Management Goals:

- **Perimenopause Symptom management**:

- 20% will have severe symptoms

- **Contraception**: 1-2 years depending on age at LMP.

- **Screening for diseases of ageing**

- **Advice on healthy lifestyle issues**

- **Management of abnormal bleeding**

Screening for Cervical Cancer

- **Cancer of Cervix is > 10x higher incidence in the developing world.**
- Has she ever had a smear? If so when?
- Has she ever had an atypical smear
- Has she received HPV Vaccination
- **See and Treat** – First line treatment in many high burden settings
- Visual Inspection with Acetic Acid (VIA) / Lugols Iodine (VILI)
- **Pap Smear**
- **Cervical Screening test** (High Risk HPV DNA serotyping / Cytology)
- ***GOAL***: Cheap global vaccination programmes

Screening for Colorectal Cancer

- CRC is the third most common cancer in western countries
- Incidence rises in midlife
- **History will give clues about risk**: Sedentary life style, smoking, alcohol consumption, low fibre diets, high levels of red and processed meats
- Change in bowel habit
- PR Bleeding
- **Family History:** If positive these women require closer monitoring.
- **Prophylaxis:** *Life style modification*, low dose aspirin, alter microbiome
- **Screening**: immunochemical fecal occult blood testing (2 years) sigmoidoscopy, colonoscopy, CT tests, fecal DNA testing…

Screening for Breast Cancer

- Breast Cancer incidence rises in perimenopausal years
- Mortality has substantially reduced in the past 20 years but whether due to screening or better treatments remains unclear.
- **History:** Has she had a mammogram or breast ultrasound? When?
- Has she detected breast lumps
- Has she had breast biopsies
- Is there a family history
- **Discuss:** Breast Self examination, Clinical Breast examination, Mammogram – particularly if you are going to initiate hormone Rx
- Screening programmes if available

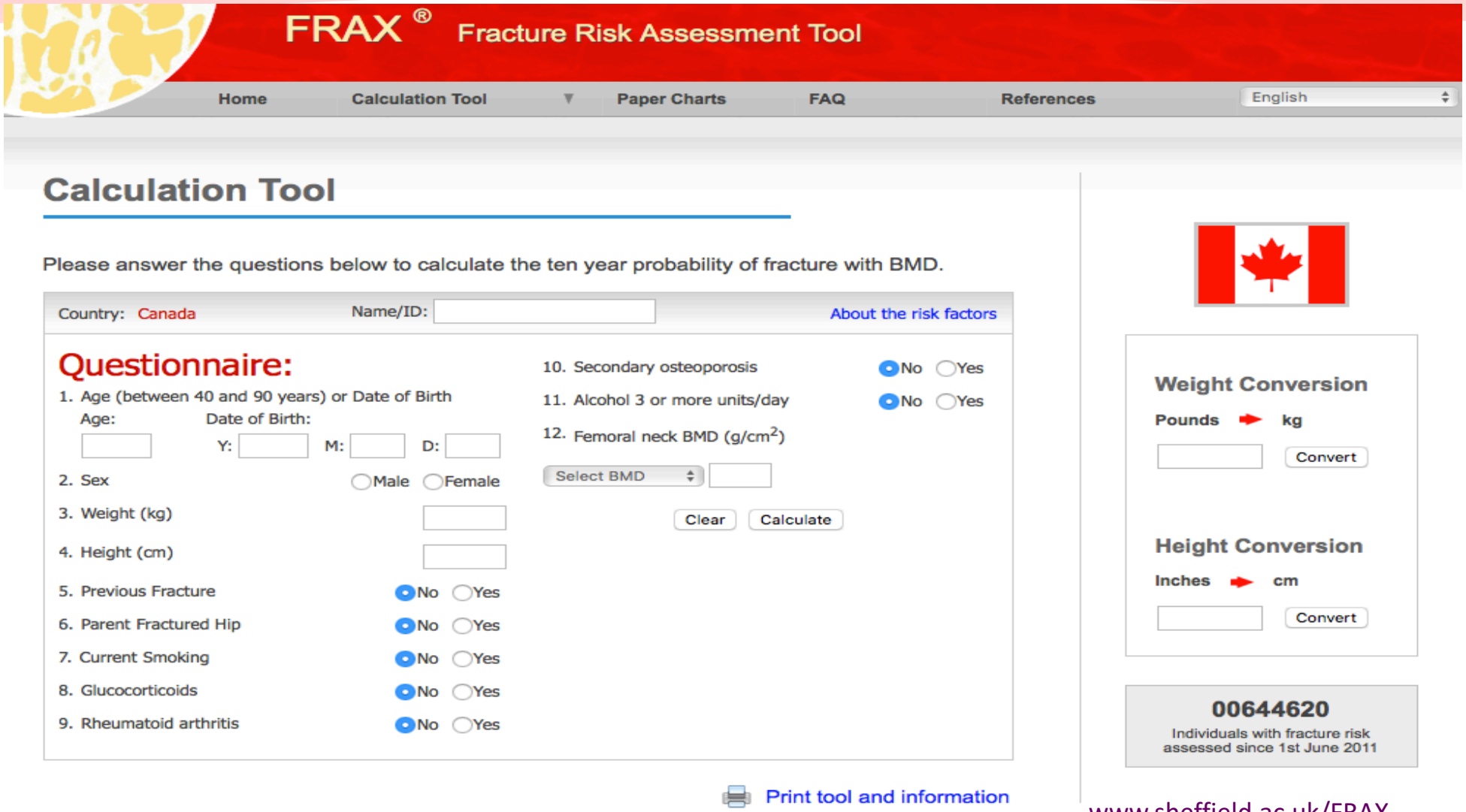
Screening for Osteoporosis

- **Osteoporosis** and related fractures are common in women after midlife.
- **Fractures** have significant morbidity, mortality, cost and reduce QOL.
- **Fracture risk** can be reduced by identifying and treating risk factors

- Low BMI, smoking, glucocorticoid use, Cushings, Rh Arthritis, malnutrition malabsorption, sedentary life style, diabetes, HyperPTH, Low Vit D, HIV

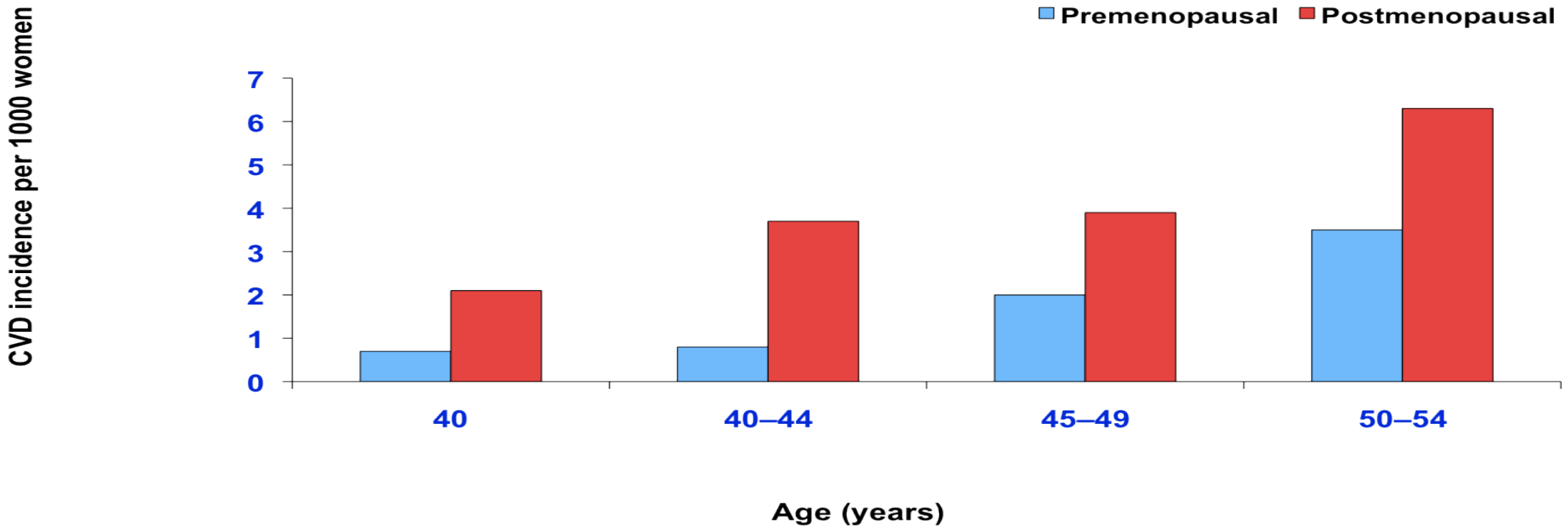
- **Family History** is important
- On line fracture risk calculators eg FRAX can help predict risk
- **Radiological Investigations**
- Conventional X Ray, DEXA, QCT ..

Fracture risk assessment



www.sheffield.ac.uk/FRAX

The risk of heart disease is linked to age at menopause



Adapted from the Framingham Study, DHEW No 74, 1974

Screening for metabolic disease

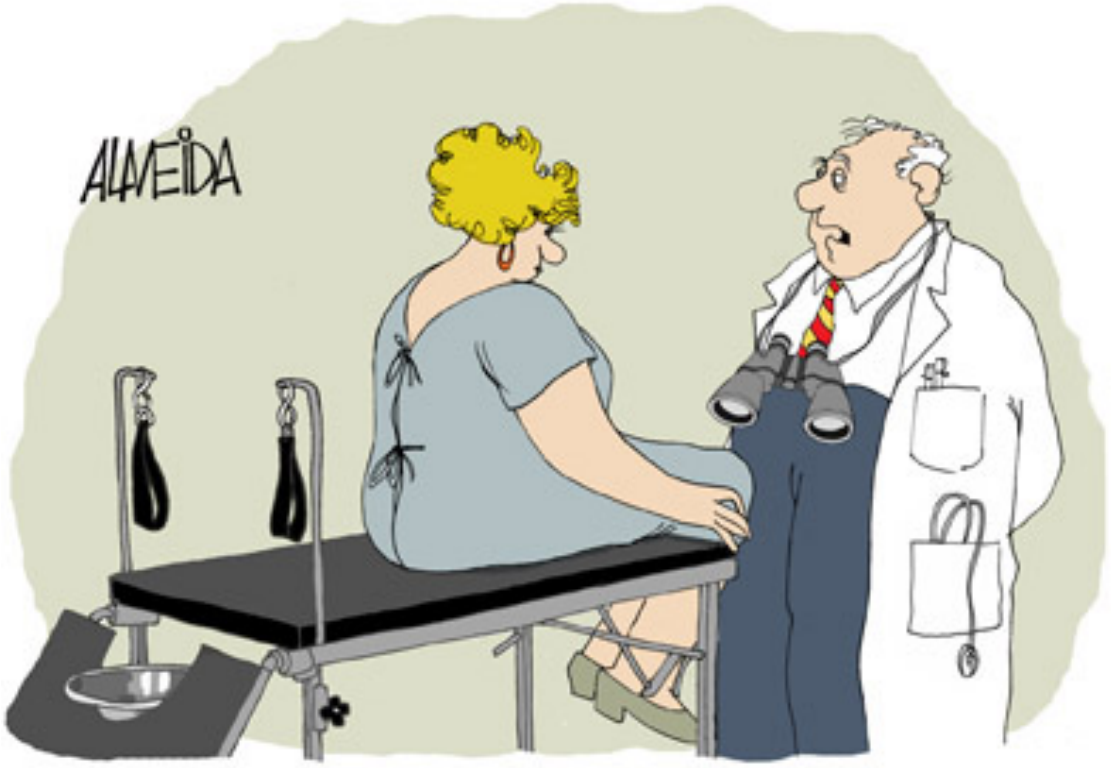
- **History:** Personal and Family
- **Examination:** Full physical, BP, height, weight, BMI, eyes..
- **Blood tests:** Blood Lipids, Sugars, Electrolytes, LFT, FBC, Iron, TSH
- **Urinanalysis**
- **Advice:** Diet and lifestyle measures alone may reduce CHD risk by 10-15%

- Exercise, normalization of BMI, cease smoking, healthy lifestyle

- **Management of hypertension** may reduce CHD risk by 20-25%

Lichtenstein A et al Circulation 2006;114:82-96
Maruthur N et al Circulation 2009;119:2026-31
Ridker P N Eng J Med 2005;352:1293-304
Lobo R et al Climacteric 2014;17:540-556

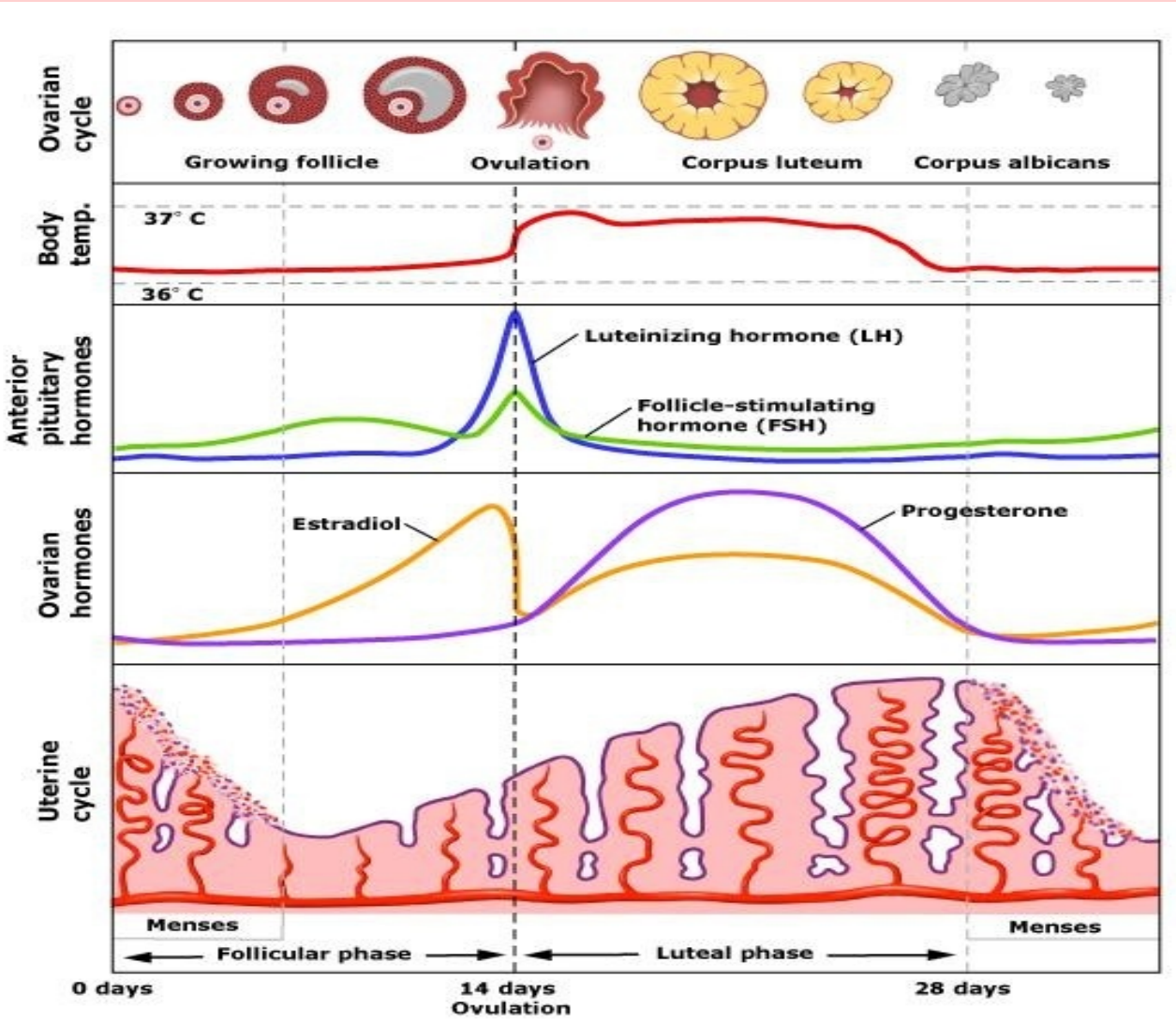
Gynecological matters



"Shall we begin?"

Hormones and menstrual Bleeding

- Estrogen causes endometrial proliferation
- Progesterone induces secretory change in estrogen stimulated endometrium
- Unopposed estrogen (eg with anovulation) causes hyperplasia, atypia complex atypia, cancer



Etiology of abnormal bleeding

- Abnormal menstrual pattern may be attributed to structural and functional causes

FIGO PALM - COEIN Classification

Structural

- **P**olyp
- **A**denomyosis
- **L**eiomyoma
- **M**alignancy and hyperplasia

Functional

- **C**oagulopathy
- **O**vulatiory dysfunction
- **E**ndometrial
- **I**atrogenic
- **N**ot identified

- The etiology of Dysfunctional AUB is presumed to be hormonal imbalance, tends to be diagnosis by exclusion

Munro MG, et al. Int J Gynecol Obstet 2011; 113(1): 3-13