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Postmenopausal Bleeding

Definition

- Postmenopausal bleeding (PMB) refers to genital bleeding that occurs after at least 1 year of cessation of menstruation
- Most common causes of PMB are benign in origin

Causes of PMB

Atrophic endometritis and vaginitis	60- 80 %
Exogenous estrogens	15 – 25 %
Endometrial carcinoma	10 % (1% if younger than 50 years)
Endometrial hyperplasia	5 – 15 %
Endometrial polyps	12 % (vs. 6% in premenopausal women, 45% in women taking Tamoxifen)
Cervical polyps	13 %

Endometrial polyps

Epidemiology	<ul style="list-style-type: none"> • 25% of PMB cases are associated with endometrial and cervical polyps
Risk factors	<ul style="list-style-type: none"> • Elevated oestrone e.g. obesity (polyps have greater oestrogen receptors) • Genetic causes (associated with chromosome 6 and 12 anomalies) • Treatment with Tamoxifen (30-60% of patients) • Hypertension
Malignant potential	<ul style="list-style-type: none"> • Most polyps are benign • Incidence of precancerous and cancerous pathology is increased in symptomatic patients: <ul style="list-style-type: none"> ▪ In asymptomatic polyps: <ul style="list-style-type: none"> □ Risk of atypical hyperplasia is 1.2% □ Risk of endometrial cancer is 0.3% ▪ In symptomatic polyps: <ul style="list-style-type: none"> □ Risk of atypical hyperplasia is 2.2% □ Risk of endometrial cancer is 2.3% (10 times greater than asymptomatic polyps) • Other than symptoms, polyp size is the only predictor of an abnormal histology, if polyp size is greater than 18 mm, the risk is 7 times higher
Diagnosis	<ul style="list-style-type: none"> • <i>Transvaginal ultrasound:</i> <ul style="list-style-type: none"> ▪ It has 97% sensitivity and 74% specificity ▪ Presence of a single feeding vessel has a specificity 95% for diagnosis • <i>Saline infusion sonography:</i> <ul style="list-style-type: none"> ▪ Incidence of procedure failure is higher in postmenopausal women (14%) than premenopausal women (5%) ▪ Experience in performing the procedure may reduce failure by 10% • <i>Hysteroscopy:</i> <ul style="list-style-type: none"> ▪ It is the gold standard test. ▪ Sensitivity of hysteroscopy is 100% and specificity is 97%
Management	<ul style="list-style-type: none"> • Symptomatic polyps should be removed • Asymptomatic polyps smaller than 18 mm are unlikely malignant, and risk of perforation from hysteroscopy in postmenopausal women is high

Endometrial hyperplasia

Epidemiology	<ul style="list-style-type: none"> • In the 50s, incidence of simple hyperplasia is 140:100,000 and complex hyperplasia 213:100,000. • In the 60s, incidence of atypical hyperplasia is 56:100,000 • Age-adjusted incidence decreases over time, especially for atypical hyperplasia
Malignant potential	<p>The risk of progression to carcinoma:</p> <ul style="list-style-type: none"> • Hyperplasia without atypia is 2%. • Hyperplasia with atypia is 23%. • Complex hyperplasia with atypia is 29%.
Diagnosis	<ul style="list-style-type: none"> • <i>Ultrasonography:</i> Endometrial thickness is used to assess women with PMB. However, it should not be used as a screening test in asymptomatic women. • <i>Pipelle biopsy:</i> <ul style="list-style-type: none"> ▪ It has a 99% sensitivity in diagnosing endometrial cancer. However, it is less sensitive for hyperplasia ▪ It is associated with slightly increased rate of insufficient biopsy • <i>Hysteroscopy:</i> <ul style="list-style-type: none"> ▪ Routine screening is not indicated in women with Tamoxifen who are asymptomatic ▪ Symptomatic women on Tamoxifen should be assessed by hysteroscopy and biopsy, rather than pipelle biopsy because Tamoxifen may cause subepithelial stromal hypertrophy
Management	<ul style="list-style-type: none"> • Definitive treatment: is hysterectomy • Conservative management: treatment with progestins or GnRH and follow-up biopsy after 3 months. Hyperplasia will persist or progress in only 25% of cases <p>Risk of cancer is reduced by 3-5 folds in women with complex or atypical hyperplasia who receive progestins</p>

Endometrial carcinoma

- 90% of women with endometrial carcinoma present with PMB
- In women with PMB, risk of endometrial carcinoma is 10%. Risk is higher if associated with other risk factors:
 - Age: risk is 25% in women older than 80
 - Obesity: cancer risk is 18%
 - Diabetes mellitus: risk is 21%
 - Obesity and diabetes: risk is 29%
- Doppler has a sensitivity of 80% and specificity of 100% for endometrial cancer.

Hormonal replacement

- 15% of patients taking unopposed estrogen may develop endometrial hyperplasia
- Continuous combined therapy is associated with less than 1% risk of endometrial hyperplasia

Selective estrogen receptor modulators

Tamoxifen	Raloxifene
<ul style="list-style-type: none"> • it increases endometrial thickness by 0.75 mm/year (12 mm in 5 years). After 1 year of treatment, 80% of women will have endometrial thickness > 5 mm • It decreases by 1.3 mm/year after discontinuation • Incidence of atypical hyperplasia with Tamoxifen is 15% 	<ul style="list-style-type: none"> • It is used for prevention of osteoporosis in postmenopausal women • Although its use is associated with greater risk of endometrial thickness > 5 mm, there is no increased risk of endometrial hyperplasia or carcinoma

Atrophic endometritis

Aetiology	<ul style="list-style-type: none"> • Chronic endometritis of low resistant endometrium • Chemotherapy • Radiotherapy • Tuberculosis
Symptoms	<ul style="list-style-type: none"> • Asymptomatic • PMB • Vaginal itching and discharge <p>It may be complicated by pyometra</p>
Investigations	<ul style="list-style-type: none"> • <i>Transvaginal ultrasound:</i> Endometrium appears thin and normal. In advanced stage, endometrium may be thickened and heterogenous with intracavitary fluid ± gas • <i>Endometrial biopsy:</i> In conjunction with genital swabs, it is diagnostic • <i>Hysteroscopy and biopsy:</i> It may be necessary to rule out underlying endometrial cancer
Management	<ul style="list-style-type: none"> • Local oestrogen can be used in symptomatic women with genital atrophy • Antibiotics may be used if an infectious cause is detected

Assessment

- All women with PMB should be thoroughly assessed
- If endometrial thickness is less than 4 mm with transvaginal sonography, endometrial carcinoma is unlikely, and no further assessment is usually required
- If endometrial thickness is 4 mm or more, office endometrial biopsy is warranted. If biopsy is inconclusive, diagnostic hysteroscopy is indicated

- Women with hormonal replacement therapy have a thicker endometrium. In these patients, hysteroscopy and biopsy is indicated in symptomatic patients with endometrial thickness is > 8 mm

Hormone Replacement Therapy

Benefits

- **Vasomotor symptoms:**
 - Vasomotor symptoms are present in 70% of women after menopause and are severe in 20% of cases
 - Although median duration is 5 years, 10% women experience these symptoms for longer duration
- **Cardiovascular benefits:**

Oestrogen provide the following benefits which overall reduces risk of cardiovascular disease and cardiovascular-related mortality:

 - Lowers risk of atherosclerosis
 - Reduces LDL-cholesterol level and lipoprotein-A
 - Inhibits LDL-cholesterol oxidation
 - Raises HDL-cholesterol level
 - Causes coronary artery vasodilation
 - Prevents platelet aggregation
- **Other benefits of hormone replacement therapy (HRT):**
 - Improves mood
 - Protects against bone loss/osteoporosis including vertebrae and hips
 - Protects against connective tissue loss
 - Reduces risk of colorectal cancer,
 - May be protective of cognitive function including dementia and parkinsonism particularly if given early
- **Topical oestrogen:**

It is superior to systemic oestrogen in improving vaginal symptoms (e.g. vaginal dryness), and reducing incidence of recurrent urinary tract infection and urgency, with limited side effects

Risks

- **Breast cancer:**
 - HRT causes slight increase in the risk of breast cancer. It does not increase cancer-related mortality
 - With HRT, 6 additional cases in every 1000 women after 5 years of use
 - The risk returns to baseline 5 years after discontinuation
- **Venous thromboembolism (VTE):**
 - Compared to baseline risk (5:1000), oestrogen alone slightly increases the risk to 7:1000, while oestrogen and progestins increase the risk to 12:1000
 - Maximum risk is present at initiation of HRT and then starts to decline after 12 months
 - Transdermal associated with lowest risk
- **Common side effects:**
 - Headache, breast tenderness, bloating, and cramps
 - HRT is not associated with weight gain
 - Symptoms commonly resolve within 3 months of initiation
 - Any unscheduled bleeding should be investigated
 - HRT does not increase blood pressure. Therefore, blood pressure follow-up is indicated

If side effects develop specifically during progestin administration, progestin type may be changed or levonorgestrel releasing intrauterine system may be considered

Contraindications

The following conditions are relative contraindications to HRT:

- Cardiac disease
- Systemic lupus erythematosus
- Active liver disease
- History of breast cancer, ovarian or endometrial cancer
- Undiagnosed vaginal bleeding
- Personal or family history of VTE (consider referral to a specialist)

Family history of breast cancer is not a contraindication to HRT. Carriers of BRCA mutations can safely receive HRT after risk-reducing surgery. Risk of breast cancer does not increase specially if oestrogen only preparation is given

Initiation of HRT

- **Pre-treatment assessment:**
 - Medical history, family history of cardiovascular disease and cancer should be discussed
 - Current symptoms including breast and abdominal symptoms should be reviewed
 - Blood pressure and body mass index should be checked. No examination or screening are indicated
 - Women should be counselled on benefits and risks of HRT. Perimenopausal women should be counselled that HRT not a contraception

- **Administration:**

Perimenopausal women	Postmenopausal women
<ul style="list-style-type: none"> ▪ Cyclic regimen should be considered ▪ HRT starts with the next cycle if menstrual cycles are frequent. It may start any time if cycles are more than 3 months apart ▪ Women should switch to continuous combined regimen if treatment continues for more than 5 years to reduce risk of hyperplasia. Changing to combined continuous regimen should be done after a withdrawal bleed ▪ Switching to continuous combined regimen should start after menopause. Age 54 may be used as a landmark since 80% will be menopausal by then 	<ul style="list-style-type: none"> ▪ Combined continuous regimen should be considered (or tibolone) after menopause ▪ HRT is given initially at a low dose. Dose is increased after 3 months if indicated ▪ Breakthrough bleeding is common safter initiation of HRT and it resolves shortly after. However, persistent bleeding beyond 6 months requires assessment with transvaginal ultrasound ± endometrial biopsy ▪ Similarly, bleeding episode after a period of absence of bleeding should be investigated even if there is an apparent cause e.g. non-compliance

- **Follow-up:**
Women should be assessed 3 months after initiation of HRT to determine effect of treatment on symptoms' improvement and quality of life. Women can decide by then whether she is interested in continuing treatment

Indications of transdermal HRT

- Migraine headache
- Diabetes
- Controlled hypertension
- Existing gall bladder disease
- Hyperlipidaemia
- Obesity
- Smoking
- Personal history of VTE

If women are treated with HRT, aromatase inhibitors are not effective, and they should switch to tamoxifen

Alternatives to HRT

In women who do not want to use hormonal treatment or in the presence of a contraindication to HRT, other alternatives could be:

- **General measures:**
 - Avoiding sudden temperature changes, hot drinks, and spicy food
 - Reducing caffeine and alcohol intake, avoid spicy food
 - Exercise
 - Relaxation techniques
 - Cooling devices
- **Medications:**
 - Clonidine
 - Selective serotonin reuptake inhibitors (SSRI) if women are not on tamoxifen
 - Serotonin and norepinephrine reuptake inhibitors (SNRIs) (unlicensed indication)
 - Gabapentin

Unscheduled bleeding with HRT

- **Prevalence:**

- With combined HRT, up to 80% of women will experience unscheduled bleeding or spotting in the first 6 months of treatment
- Continuous combined regimens usually lead to amenorrhoea and should not cause cyclical or breakthrough bleeding

Combined continuous regimen	Sequential regimen
Irregular bleeding is expected in 0–77% in the first few months. After 9 months, only 3–10% of women will still experience it.	Irregular bleeding is experienced by 8–40% of users

- Due to unscheduled bleeding on HRT, 25–50% of women discontinue HRT

- **Assessment:**

- **Indications:**

- ① If there is breakthrough bleeding on continuous combined HRT regimens that:
 - Occurs after 6 months of therapy or
 - Occurs after amenorrhoea has been established
- ② If there is heavy, prolonged or breakthrough bleeding on sequential HRT regimen for more than 2 cycles

- **Evaluation process:**

- A full detailed history including a drug history and a clinical examination.
- Menstrual diaries should be used to assess bleeding episodes and pattern.
- Pregnancy and sexually transmitted infections should be excluded, and compliance with medication should be checked.

- **Hysteroscopy:**

- Hysteroscopy with endometrial sampling remains the gold standard for uterine cavity evaluation in the UK.
- Criteria for hysteroscopy:
 - ① Multiple bleeding episodes
 - ② Focal lesions on transvaginal ultrasound

- ③ Endometrial thickness (ET) >5 mm on continuous combined HRT and ET >7 mm on sequential combined HRT
- ④ Incomplete visualisation of endometrial echo or fragmentation of endometrial echo on ultrasound scan
- ⑤ High-risk group with risk factors for endometrial disease or cancer (e.g., raised BMI, familial cancer syndromes)
- Disadvantages:
 - ① Invasive, expensive and can lead to postoperative morbidity such as infection or pain.
 - ② Intraoperative complications as uterine perforation with injury to abdominopelvic structures.
 - ③ May facilitate spreading of malignant cells into the peritoneal cavity

② Transvaginal ultrasound:

- It is an initial tool in the investigation and evaluation of women with postmenopausal bleeding and not on HRT is safe and cost effective.
- Among women with postmenopausal bleeding, a thin endometrium (<5 mm) reasonably excludes endometrial pathology.
- Referral criteria for ultrasound to check endometrial thickness:
 - ① Any bleeding after 6 months of continuous combined HRT even in low-risk women
 - ② Bleeding after amenorrhoea has been established
 - ③ Any bleeding in the first 6 months if any significant risk factors present

③ Pipelle endometrial sampling:

- Pipelle sampling is useful where resources and access to TVS or hysteroscopy is limited. However, its use alone in detecting or ruling out endometrial cancer and other pathologies is debatable.
- Moreover, endometrial biopsy can miss up to 20% of focal lesions like endometrial polyps.

④ Further imaging:

CT or MRI may be needed in the event of the presence of adnexal pathologies or a suspected primary malignancy elsewhere.

- **Management:**

- **General rules:**

- Appropriate counselling at the outset
- On continuous combined HRT, bleeding in the first 6 months is usually acceptable if no other risk factors, but it needs investigating if any risk factors or bleeding after amenorrhoea has been established
- Sequential HRT is the preferred option in perimenopausal women
- If on sequential combined HRT, ideally check ET using transvaginal ultrasound within a week of the last progestogen pill
- Expert opinion in refractory cases

- **Treatment for unscheduled bleeding on HRT**

Sequential HRT	<ul style="list-style-type: none"> ▪ Prolonged or heavy withdrawal bleed: increase dose/change type of progestogen or reduce estrogen ▪ Bleeding occurs early in progestogen phase: increase the dose/change type of progestogen ▪ Spotting before withdrawal period: increase estrogen dose ▪ Irregular bleeding: change regimen or increase progestogen dose ▪ Painful bleeding: change type of progestogen
Continuous combined HRT	<ul style="list-style-type: none"> ▪ Lower estrogen dose preparations preferable ▪ Increase the dose or change the type of progestogen ▪ Convert to sequential HRT and have a regular bleed if other options fail
Other options	<ul style="list-style-type: none"> ▪ Stop HRT by gradually phasing it out may be appropriate once vasomotor symptoms cease ▪ Switch to non-oral HRT ▪ Significant urogenital symptoms: vaginal estrogen preparations ▪ Offer Mirena (for those who continue to continue their estrogen only preparations) ▪ Offer surgery (endometrial ablation, resection, or hysterectomy) in refractory cases

Vulval Dermatoses and Skin Conditions

Vulval dermatoses

	Vulval lichen sclerosis	Vulval lichen planus	Lichen simplex
Aetiology	Unknown aetiology, likely autoimmune in origin (associated with other autoimmune disorders)	Inflammatory disorder, most likely autoimmune in origin	<ul style="list-style-type: none"> • Underlying dermatoses, i.e. atopic dermatitis • Systemic pruritic conditions i.e. renal failure, Hodgkin's lymphoma • Environmental factors e.g. sweating, rubbing of clothing, local irritants • Psychiatric disorders e.g. anxiety
Symptoms	<ul style="list-style-type: none"> • Asymptomatic (uncommon) • Vulval itching • Soreness • Dyspareunia • Urinary symptoms • Constipation (if there is perianal involvement) 	<ul style="list-style-type: none"> • Asymptomatic • Vulval itching/irritation • Soreness • Dyspareunia • Urinary symptoms • Vaginal discharge 	<ul style="list-style-type: none"> • Vulval itching • Soreness

Signs	<ul style="list-style-type: none"> • Pale atrophic areas affecting the vulva • Purpura (ecchymosis) • Fissuring • Erosions • Hyperkeratosis • Loss of architecture (loss of labia minora, midline fusion, introital stenosis) <p>Changes may be localized, or may take a 'figure of eight' distribution with involvement of the perianal area</p>	<ul style="list-style-type: none"> • Classical type: papules on keratinized anogenital skin, with or without striae or hyperpigmentation • Hypertrophic type: (rare) thick warty plaques, with or without ulcerations or infecting (mimic malignancy) • Erosive type: eroded mucosa, pale epithelium at the edges forming pale network (Wickham striae), friable telangiectasia, patchy erythema, scarring and synaechiae <p>Vulvo-vaginal gingival syndrome is diagnosed if these sites are involved</p>	<ul style="list-style-type: none"> • Lichenification (thickened, scaly, pale skin with accentuated markings) • Erosions and fissuring • Excoriations • Pubic hair is often lost
Complications	<ul style="list-style-type: none"> • Squamous cell carcinoma (< 5%) • Clitoral pseudocyst • Sexual dysfunction • Dysesthesia 	<ul style="list-style-type: none"> • Vulvovaginal scarring and synaechiae • Squamous cell carcinoma (3%) 	Secondary infection
Diagnosis	<p>Diagnosis is made by:</p> <ul style="list-style-type: none"> • Characteristic clinical appearance • Histopathology: epidermal atrophy, hyperkeratosis, sub-epidermal hyalinization of collagen, and lichenoid infiltrate 	<p>Diagnosis is made by:</p> <ul style="list-style-type: none"> • Clinical appearance. • Histopathology: irregular saw-toothed acanthosis, granular and basal cell liquefaction, band-like dermal infiltrate mainly by lymphocytes 	<p>Diagnosis is made by clinical presentation</p> <p>History including mental state assessment is required to identify underlying causes</p> <p>Psoriasis or lichen simplex in other parts of the body should be ruled out</p>

Investigations	<ul style="list-style-type: none"> • Biopsy is used to confirm diagnosis, and rule out premalignant or malignant changes • Assessment of autoimmune diseases if clinically indicated e.g. thyroid dysfunction • Skin swab: to rule out co-existing infection if clinically suspected • Patch testing: may be requested by a dermatologist if allergy is suspected 	<ul style="list-style-type: none"> • Biopsy is used to confirm diagnosis, and rule out premalignant or malignant changes • Assessment of autoimmune disease if clinically indicated • Skin swab: to rule out infection if clinically suspected • Patch testing: if allergy is suspected • Hepatitis C screening is not needed 	<ul style="list-style-type: none"> • Screening for infection (e.g. Staphylococcus aureus, Candida albicans) • Patch testing • Serum ferritin • Biopsy
Treatment	<ul style="list-style-type: none"> • Ultra-potent topical steroids e.g. clobetasol It is given daily for 1 month, on alternate days for 1 month, twice weekly for 1 month and then on demand Ointment form is preferred (less irritant) • Short term clobetasol, neomycin and nystatin are used if secondary infection is suspected • For resistant cases, topical calcineurin, tacrolimus (local irritation), oral retinoid, ultraviolet phototherapy may be used • No role for surgery (except for management of labial fusion if needed) 	<ul style="list-style-type: none"> • Ultra-potent topical steroids e.g. clobetasol (75% of women experience improvement, 50% are symptom-free, and 10% have resolution of signs) • Maintenance treatment with weak steroids or less frequent potent steroids can be considered • Vaginal steroids or suppositories may be used for severe cases • Antibiotics may be added if infection is suspected • Vulvo-vaginal-gingival syndrome is treated with oral cyclosporine, retinoids (for hypertrophic type), oral steroids, basiliximab 	<ul style="list-style-type: none"> • Precipitating factors should be avoided • Use of emollient soap institutes • Topical corticosteroids with or without antifungal and antibiotic. Steroids can be gradually withdrawn after 3-4 months to treat Lichenification • Mildly anxiolytic antihistamine such as hydroxyzine or doxepin may be used at night • Cognitive behavioral therapy may be considered if there are underlying psychiatric disorders

Follow-up	<ul style="list-style-type: none"> • Follow-up should be scheduled after 3 months to assess response to treatment • Women should be followed-up annually thereafter (by their general practitioner) • Women should be referred if there is no response to treatment or if they develop precancerous or cancerous pathology • Topical steroids are safe in pregnancy, breastfeeding • Topical calcineurin inhibitors are contraindicated in pregnancy and breastfeeding • If retinoids are used, pregnancy should be avoided for 2 years 	<ul style="list-style-type: none"> • Follow-up should be scheduled after 3 months then annually (unless she is well controlled and properly counselled) • Erosive lichen is an indication of long-term specialized follow-up 	<ul style="list-style-type: none"> • Mild disease is followed-up as clinically required • Severe disease is followed-up after 1 month and then as required
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Other vulval conditions

	Vulval eczema	Vulval psoriasis	Vulval intraepithelial neoplasia
Symptoms	<ul style="list-style-type: none"> • Vulval itching • Soreness 	<ul style="list-style-type: none"> • Vulval itching • Soreness • Burning sensation 	<ul style="list-style-type: none"> • Asymptomatic (common) • Lumps • Erosions • Burning and itching • Vulval pain

Signs	<ul style="list-style-type: none"> Erythema Lichenification and excoriation Fissuring Pallor or hyperpigmentation 	<ul style="list-style-type: none"> Plaques (well-demarcated and brightly erythematous) with no scaling It frequently affects natal cleft. Other areas may be also involved e.g. scalp 	<ul style="list-style-type: none"> Variable lesions Warty, raised, or eroded lesions White, erythematous, or pigmented lesions Multifocal lesions are common
Complications	Secondary infection	<ul style="list-style-type: none"> Koebner effect (caused by irritation from urine, tight-fitting clothes, or sexual intercourse), which causes worsening of symptoms 	<ul style="list-style-type: none"> Squamous cell carcinoma (9-19%) Recurrence
Diagnosis	<ul style="list-style-type: none"> Clinical signs Patch testing Biopsy is indicated only if there are atypical features 	<ul style="list-style-type: none"> Clinical signs General examination of other signs of psoriasis (skin and nails) Punch biopsy is indicated if diagnosis is doubtful 	<ul style="list-style-type: none"> Biopsy
Treatment	<ul style="list-style-type: none"> Avoid precipitating factors Recommend emollient soap institutes Topical corticosteroids: 1% Hydrocortisone for mild cases, or Betamethasone valerate 0.025% for severe cases Antifungal and/or antibiotics may be added 	<ul style="list-style-type: none"> Avoid irritating factors Recommend emollient soap institutes Topical corticosteroids: weak to moderate steroids intensive Antifungals and/or antibiotic may be added Weak coal-tar preparations may be used Vitamin D analogues such as Talcacitol may be used 	<ul style="list-style-type: none"> Cervical cytology: should be followed-up and kept up to date Refer to colposcopy: to rule out CIN and VIN Local excision: is the standard management (lowest risk of recurrence) Imiquimod cream 5%: limited by side effects, and lack of long-term data (unlicensed indication) Vulvectomy: effective. However, it affects function and cosmesis 5-fluorouracil cream: side effects are common

Follow-up	<ul style="list-style-type: none"> As clinically required <p>Long-term follow-up and psychological support may be indicated</p>	<ul style="list-style-type: none"> Mild disease: as clinically required Severe disease: follow-up is scheduled after 1 month and then as indicated 	<ul style="list-style-type: none"> Close and continuous follow-up is mandatory Imiquimod and 5 fluorouracil cream are not licensed for use in pregnancy
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CIN: cervical intraepithelial neoplasia, VIN: vulval intraepithelial neoplasia

Vulval pain

	Localized provoked vulvodynia	Unprovoked vulvodynia
Aetiology	Multifactorial, usually associated with recurrent candidiasis	Unknown, managed as a part of chronic pain syndrome
Symptoms	Long history of vulval pain at penetration during sexual intercourse	Long standing vulval pain Pain may be associated with other unexplained symptoms including urinary symptoms, irritable bowel syndrome and fibromyalgia
Signs	Focal tenderness is elicited by gentle application of a cotton swab at introitus or around clitoris No signs of inflammation. Normal vestibular erythema may be noticed and should not be mistaken with inflammation	The vulva appears normal
Complications	Sexual dysfunction Psychological morbidity	
diagnosis	Clinical diagnosis made on history and examination	Clinical diagnosis made on history and examination after exclusion of other causes of vulval symptoms
Investigations	Biopsy only if underlying dermatosis is suspected	
Treatment	<ul style="list-style-type: none"> Avoidance of irritating factors Use of emollient soap substitutes Topical local anesthetics (5% lidocaine ointment, 2% lidocaine 	<ul style="list-style-type: none"> Use of emollient soap substitutes Pain modifiers e.g. tricyclic antidepressant (10-100mg of amitriptyline)

	<p>gel). They should be applied 15-20 minutes prior to sex. They should be washed off or condoms should be used to avoid penile numbness</p> <ul style="list-style-type: none"> • Physical therapy: pelvic floor muscle biofeedback • Vaginal transcutaneous electrical nerve stimulation • Vaginal trainers • Cognitive therapy • Psychosocial counselling • Pain modifiers: amitriptyline 10-75 mg may be used • Surgery: modified vestibulectomy may be considered if all other measures fail <p>Surgery is likely effective in women who are responsive to topical lidocaine</p>	<ul style="list-style-type: none"> • If unresponsive: gabapentin, pregabalin may be used • Alternatives: topical local anesthetics • Cognitive behavioral therapy • Acupuncture • Physical therapy
Follow-up	Only when clinically indicated	

General recommendations

- In all women with vulval skin conditions, the following recommendations should be considered:
 - Avoid skin contact with shampoos, soaps, bubble bath. Simple emollients may be used instead
 - Avoid tight-fitting garments and spermicidal lubricated condoms
- Sexually transmitted infection (STI) screening should be considered in all patients with vulvar symptoms. However, Partner tracing is not required unless screening is positive for STI
- Vulvovaginal candidiasis should be excluded if the patient presents with vulval itching
- All patients should be assessed for sexual dysfunction

Menopause

Abstract

Menopause is just a new stage of women life that starts after cessation of menstrual cycle. Transitioning to menopause presents a new experience and women should be aware of the expectations. As gynaecologists, our role is to secure a smooth transition to menopause to all women and to address gynaecologic issues that are associated with this stage of life. In this chapter, we will discuss clinical care of menopausal women and important gynaecologic disorders associated with menopausal transition and after menopause.

Keywords

Postmenopausal bleeding, HRT, vulvar dystrophy, vulvar conditions

Further readings

1. Otify M, Fuller J, Ross J, Shaikh H, Johns J. Endometrial pathology in the postmenopausal woman—an evidence based approach to management. *The Obstetrician & Gynaecologist*. 2015 Jan;17(1):29-38.
2. Bakour SH, Williamson J. Latest evidence on using hormone replacement therapy in the menopause. *The Obstetrician & Gynaecologist*. 2015 Jan 1;17(1):20-8.
3. Edwards SK, Bates CM, Lewis F, Sethi G, Grover D. 2014 UK national guideline on the management of vulval conditions. *International journal of STD & AIDS*. 2015 Aug;26(9):611-24.