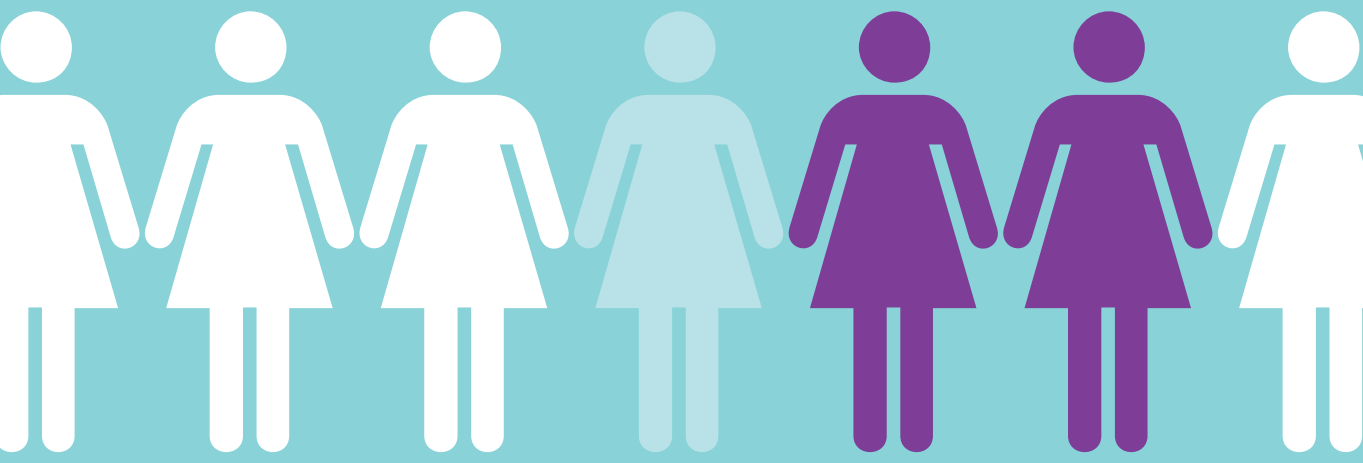
Royal College of Nursing

Women's Health Pocket Guide



The RCN Women's Health Forum

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Female Anatomy and Physiology

The female reproductive anatomy consists of:
The **uterus** is a pear shaped organ, like an inverted triangle with variable dimensions. It has three layers:

- peritoneum – the outer serous layer
- myometrium – the middle muscular layer
- endometrium – the inner mucus layer.

The **vulva** or external genitalia consists of:

- mons pubis
- labia majora
- labia minora
- vestibule – between the labia minora into which the urethra, Bartholins ducts and vagina open into. This goes from the fourchette to the Clitoris.
- the perineum.

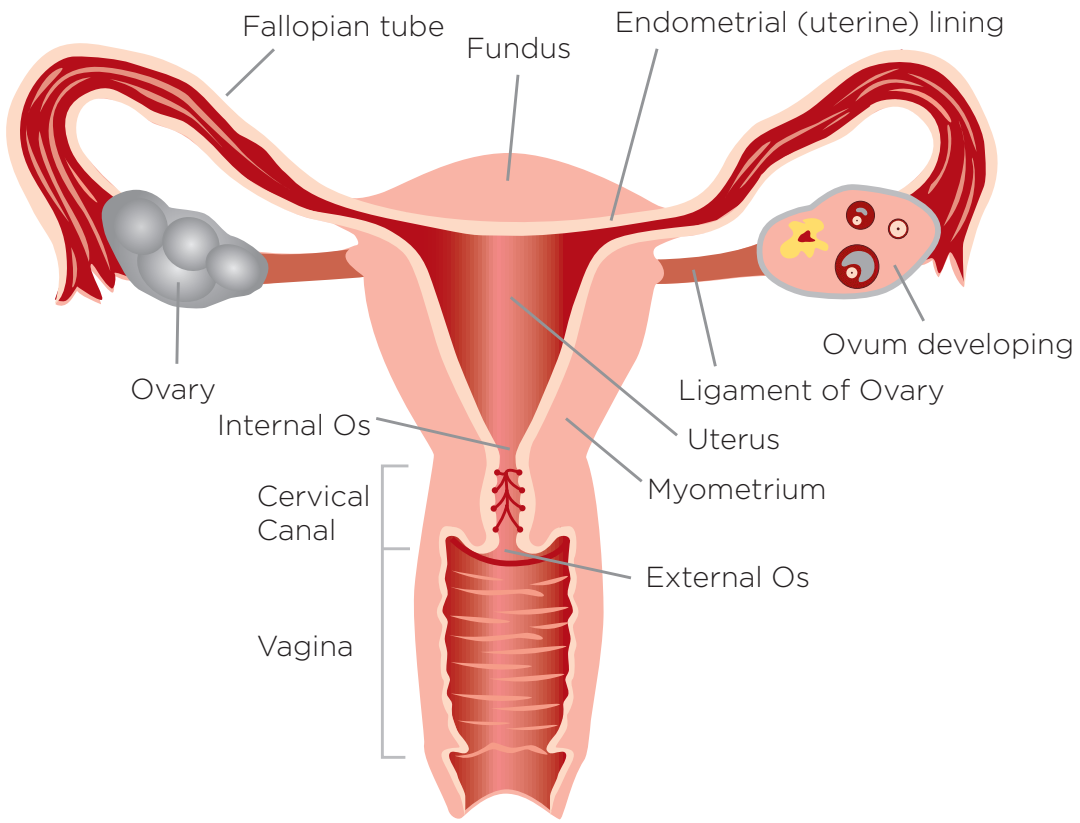
The **vagina** which is a fibromuscular distensible 8-10cm long tube passing upwards and backwards from the introitus at the vulva. It is attached to the cervix.

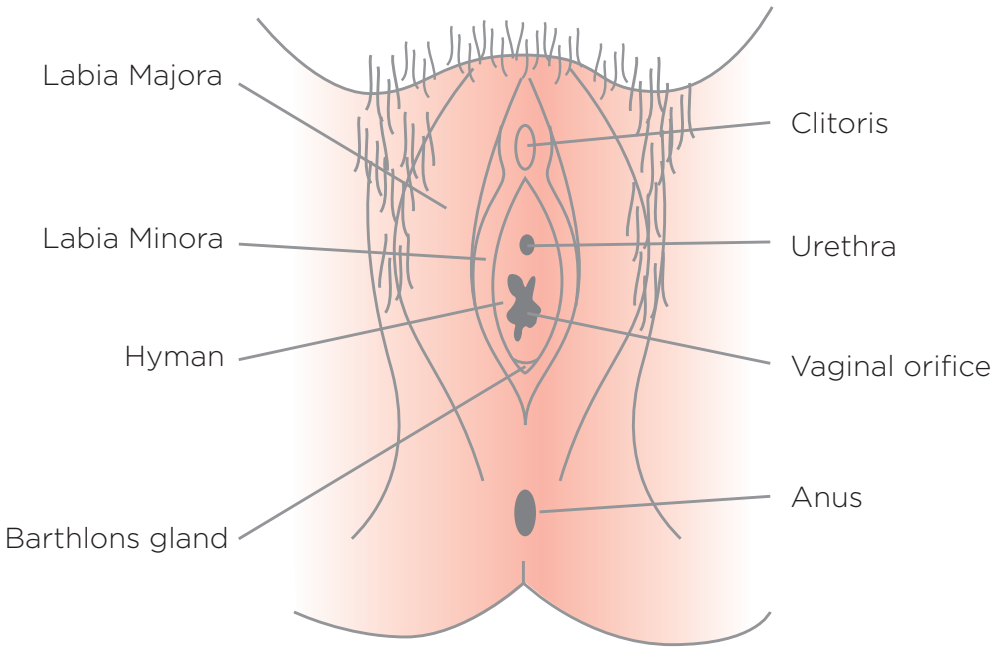
The **cervix** is cylindrical in shape and 2.5cm long.

The **ovary**, attached by the ovarian ligament and contains follicles, is covered by germinal epitherlium. There is a central vascular medulla and an outer cortex.

The **pelvic floor** consists of muscles which support the organs in the lower pelvic region.

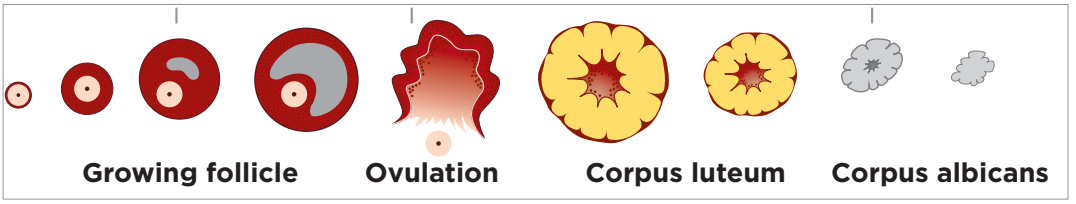
Female Anatomy and Physiology



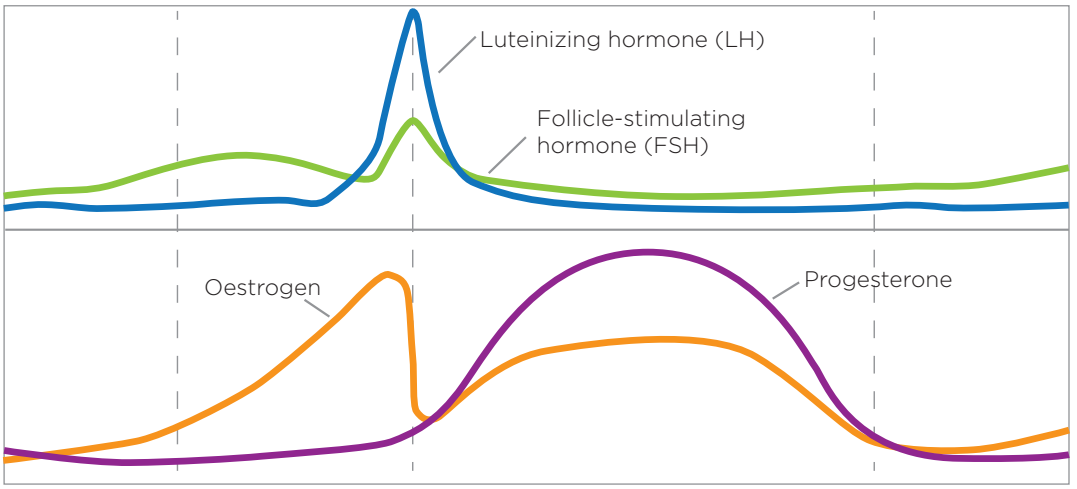


Menstrual Cycle

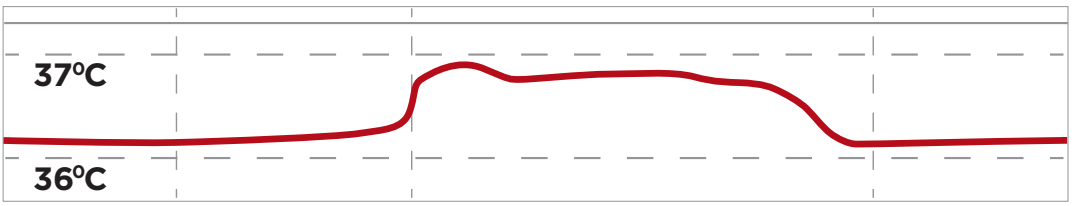
Ovarian cycle



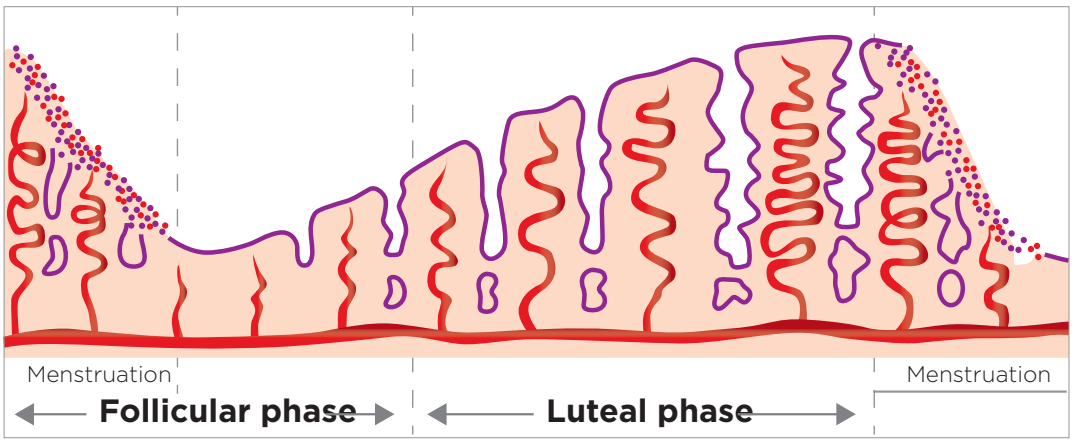
Hormonal activity during the Menstural Cycle



Average Body Temperature during Menstrual Cycle



Uterine Cycle



The menstrual cycle:

The proliferative/follicular phase

Under the control of follicle stimulating hormone (FSH) an ovum develops. When this happens oestrogen levels rise and block FSH. The endometrial glands grow and new blood vessels form in a healthy endometrium, under the influence of oestrogen.

Secretory/luteal phase

The luteinising hormone (LH) surge from the anterior pituitary leads to final maturation of the dominant follicle and rupturing of the graafian follicle and is preceded by a rise in progesterone and ovulation about 38 hours after the initiation of the LH surge.

The empty follicle fills with blood and the theca and granulosa cells of the follicle luteinise with formation of corpus luteum. Progesterone is synthesised by the corpus luteum. This phase lasts for 14 days. The endometrium develops into secretory endometrium, ready for implantation. The fall in oestrogen and progestogen then results in menses.

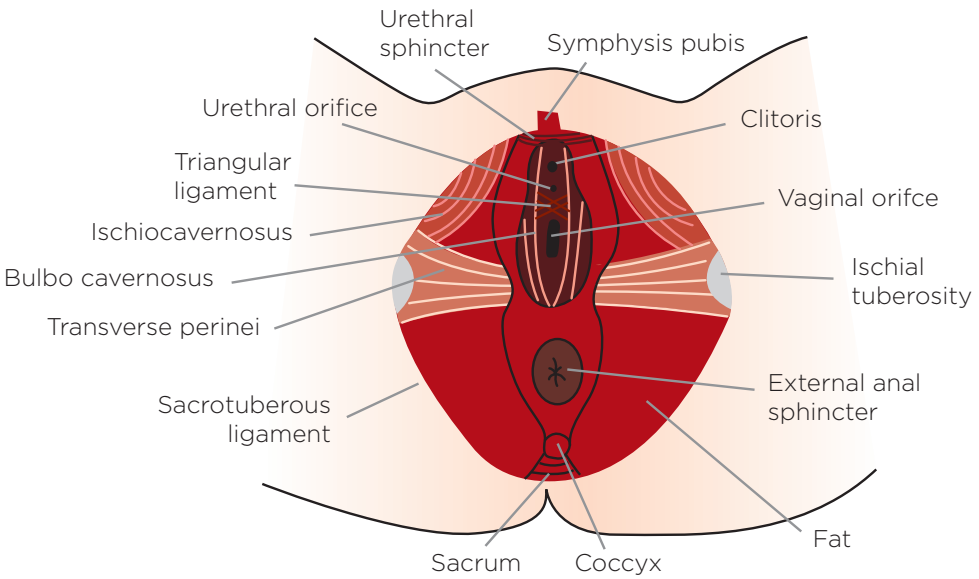
Menstruation is the shedding of superficial layers of the endometrium and is initiated by a fall in circulating concentrations of progesterone. A normal cycle loss is up to 80mls.

Along with these changes, the cervical mucus becomes thinner at the time of ovulation to facilitate the penetration of the cervix by the sperm. It then becomes less and thicker under the influence of progestogen. Breasts increase in size and tenderness in the week pre-menstruation.

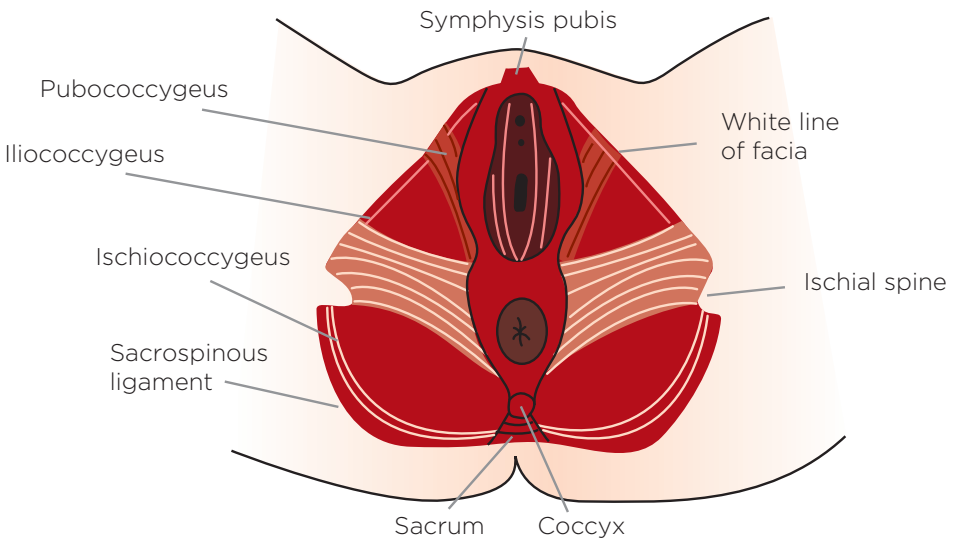
The Pelvic Floor

The bony pelvis is filled with soft tissues (muscles and ligaments) which support the abdominal and pelvic organs.

1) Superficial muscles of the pelvic floor



2) Deep muscles of the pelvic floor



The Pelvic Floor

A complex layer of muscles which support the organs in the pelvis.

Pelvic floor muscle is important in providing support for pelvic organs, for example, the bladder, uterus and bowel.

Purpose and function

- It helps to maintain continence. Relaxation of the pelvic floor, along with the sphincters, allows urine and faeces to pass out of the body. When the pelvic floor is weaker, women may have less control of their bladder and bowel.
- The pelvic floor also provides support for the baby during pregnancy and assists in the birthing process.
- It helps to maintain sexual function. In women, voluntary contractions of the pelvic floor contribute to sexual sensation and arousal.
- The muscles of the pelvic floor work with the abdominal and back muscles to stabilise and support the spine.

Common causes of a weakened pelvic floor include childbirth, obesity, straining associated with constipation, high impact exercise, age and heavy lifting.

Common Gynaecological Surgical Interventions

Procedure	Details	Explanation
Hysteroscopy	Diagnostic Endometrial ablation TCRE (Trans cervical resection of the endometrium) TCRF (Trans cervical resection of fibroid) Endometrial polypectomy Hysterscopic division of adhesions Removal of septum	Operations via the vagina with a hysteroscope to look at and treat any abnormities within the uterus. These are more commonly being undertaken in outpatient/ambulatory settings.
Laparoscopy	Diagnostic Ablation and excision of endometriosis Tube removal (salpingectomy) and tube opening – (salpingostomy) Laparoscopic adhesiolysis A laparoscopy and dye test Cystectomy – ovarian	To investigate pain/abnormal scans and treat pathology within the abdomen/ uterus and adenexa. Undertaken under general anaesthetic via small incisions under umbilicus and lower on the abdomen. Complex operations can be carried out this way, hysterectomy and myomectomy.
Procedures on the Vulva	Marsupialisation of Bartholins cyst Vulvectomy Deinfibrulation (Female Genital Mutilation)	
Procedures for Fibroids	Myomectomy Laproscopic myomectomy TCRF (Trans cervical resection of fibroid)	Surgical removal of fibroids.
Hysterectomy	Sub total hysterectomy (cervix left in situ) TAH (total abdominal hysterectomy) – uterus removed Radical hysterectomy Vaginal hysterectomy Laparoscopic assisted hysterectomy Laparoscopic hysterectomy	Removal of the womb.

Common Gynaecological Surgical Interventions

Procedure	Name	Explanation
Bladder operations	Anterior colporrhaphy Posterior colporrhaphy Sling procedures Colposuspension Sacrospinus fixation Vaginal hysterectomy (if prolapse present)	Repair of the front and back wall of the vagina. Some procedures use slings under the bladder neck to provide support.
Procedures on Ovaries	Bilateral salpingo – oophorectomy Oophorectomy	Removal of ovaries and or fallopian tubes. For cancer, cysts, preventative for Breast Cancer Gene (BRCA) patients.
Pregnancy related	Surgical management of miscarriage Surgical abortion via vacuum aspiration (manual or electric) or dilation and evacuation (D&E) Salpingectomy Salpingotomy (Ectopic Pregnancy)	
Cervical procedures	Knife cone Large loop excision of transformation zone LLETZ (large loop excision of the transformation zone) Radical trachelectomy (removal of cervix – cancer operation to preserve fertility)	Removal of areas of the cervix found to be abnormal at colposcopy.
Laparotomy	Omentectomy Lymphadenectomy	Removal of the omentum and lymph nodes in cancer operations in conjunction with hysterectomy.

Heavy Menstrual Bleeding (HMB)

HMB is a common debilitating problem affecting 1 in 3 women at some stage in their life, particularly over the age of 35. It can have a major impact on a woman's quality of life.

Causes

1. Dysfunctional uterine bleeding (60%) – often no known cause.
2. Pelvic pathology (35%) – includes fibroids, endometriosis, adenomyosis, polycystic ovarian disease, endometrial hyperplasia, malignancy, infection and trauma.
3. Systemic disorders (5%) – includes coagulation disorders.

Assessment

1. A comprehensive history – menstrual (frequency, duration, volume, flooding/accidents/sanitary changes), contraception, sexual, cervical screening, obstetric, medical, social.
2. Examination – general (signs/symptoms anaemia), pelvic (speculum/bimanual).

Diagnosis

1. Tests – full blood count (to exclude anaemia).
2. Transvaginal ultrasound scan (to assess endometrium and identify other pathology, such as fibroids).
3. Hysteroscopy (to assess uterine cavity).
4. Endometrial biopsy (to exclude hyperplasia/malignancy).
5. Other tests to consider if clinically indicated – thyroid function, endocrine and coagulation screening, sexually transmitted infection screening, pregnancy test.

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Heavy Menstrual Bleeding (HMB)

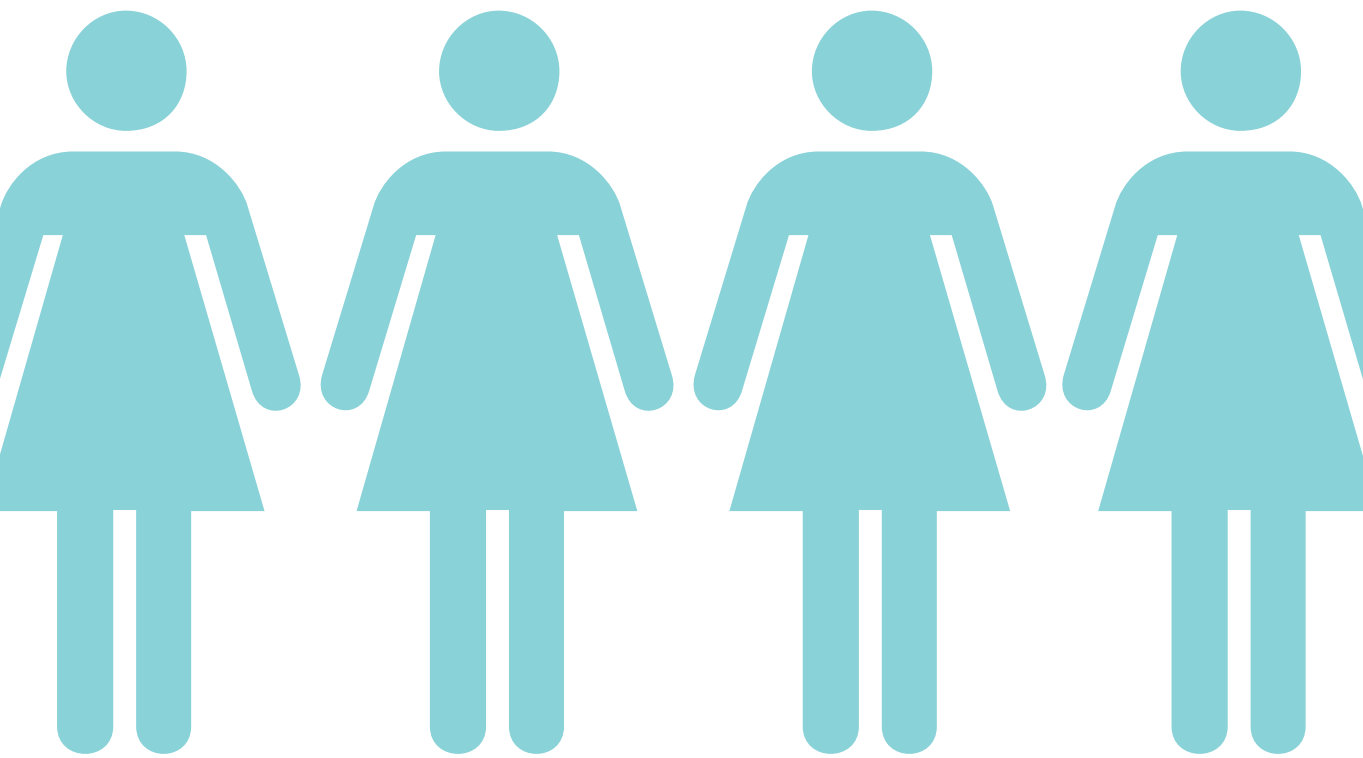
Treatments

1. Medical
   Hormonal – levonorgestrel intra-uterine system, (LNG-IUS), combined hormonal contraception, progesterone-only methods
   Non-hormonal – tranexamic-acid, mefenamic-acid.
2. Surgical – endometrial ablation, hysterectomy, myomectomy.
3. Non-surgical – uterine artery embolization (UAE).

References

NICE (2020) Heavy menstrual bleeding: assessment and management. www.nice.org.uk/guidance/ng88

RCN (2019) Promoting Menstrual Wellbeing www.rcn.org.uk/professional-development/publications/pub-007856



Endometriosis

Endometriosis is defined as the presence of endometrial-like tissue outside the uterus, which induces a chronic, inflammatory reaction.

Approximately 1 in 10 women of reproductive age suffer from endometriosis (estimates range from 2 to 10% of the general female population, but up to 50% in infertile women).

It takes an average of 7.5 years from the onset of symptoms for women to get a diagnosis. MRI and Ultrasound can be used to assess the pelvis for deep infiltrating endometriosis.

Cause is uncertain but may include:

- genetics/family history
- retrograde menstruation
- immune dysfunction.

Signs and symptoms:

- dysmenorrhea (painful periods)
- heavy periods
  dyspareunia (deep pain during sex)
- chronic pelvic pain (periodic or constant)
- pain during bowel movements
- painful urination and/or blood in urine
- cyclical or premenstrual symptoms with or without abnormal bleeding and pain
- chronic fatigue
- depression
- family history of endometriosis
- infertility
- painful caesarean section scar or cyclical lump in the scar
- pain in back, legs and/or chest.

Treatments: (there is no definite cure)
Endometriosis is a benign condition and only requires treatment when symptoms require management.

Endometriosis

Medical management

a) Non-hormonal:

- non-steroidal anti-inflammatories; +/- paracetamol or codeine-based analgesics
- pain modifiers
- lifestyle interventions such as diet and exercise
- complimentary therapies such as acupuncture.

b) Hormonal:

- combined hormonal contraception
- levonorgestrel intrauterine system
- progesterone only methods
- gonadotropin-releasing hormone analogues.

Surgical management

- laparoscopic ablation/excision of endometriosis lesions.
- radical surgery: total abdominal hysterectomy/bilateral salpingo-oopherectomy.
- bladder/bowel involvement – requires British Society Gynaecological Endoscopy specialist centre involvement.

Support/advice

- Endometriosis UK: www.endometriosis-uk.org
- RCN (2018) Endometriosis factsheet www.rcn.org.uk/clinical-topics/womens-health/endometriosis

Useful resources

- RCN (2018) Clinical nurse specialist in endometriosis www.rcn.org.uk
- The British Society for Gynaecological Endoscopy www.bsge.org.uk
- Royal College of Obstetricians and Gynaecologists www.rcog.org.uk
- European Society of Human Reproduction and Embryology www.eshre.eu
- The World Endometriosis Society www.endometriosis.ca
- NICE 2017 Endometriosis: diagnosis and management (NG73) www.nice.org.uk

Uterine Fibroids

Fibroids

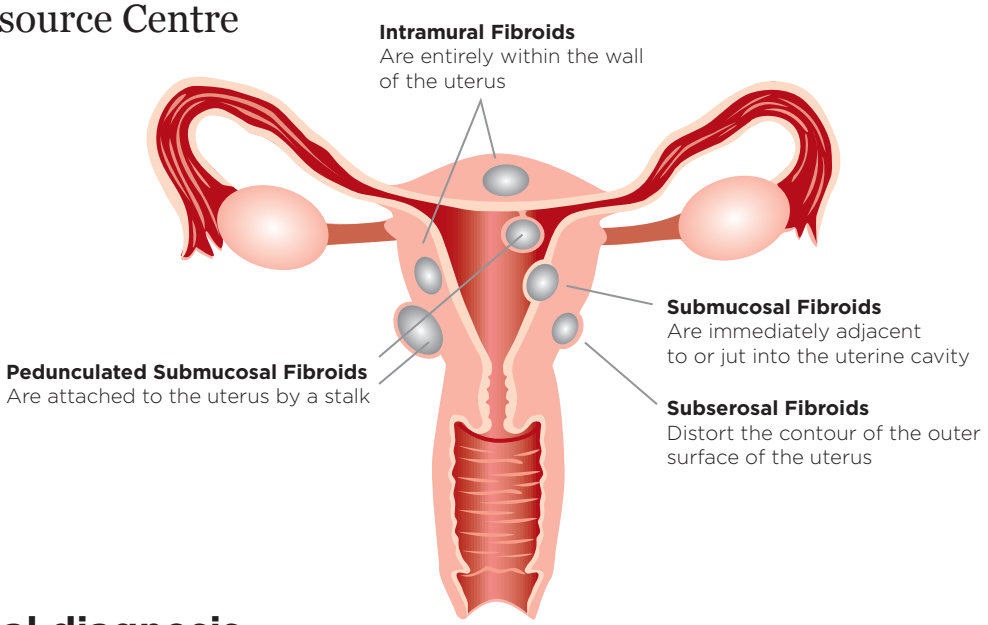
- Benign tumours of myometrium with a clinically relevant prevalence in 30% of women of reproductive age.
- Single or multiple and vary in size.
- Their growth is influenced by oestrogen and progesterone.
- They can enlarge during pregnancy and they shrink post-menopausally.

Risk factors

- Early menarche.
- Nulliparity.
- Increasing age (30-40s).
- Obesity.
- Race (more common in women of Afro-Caribbean origin).
- Steroid hormone concentrations.
- Angiogenic growth factor abnormalities.

Types (see figure 1)

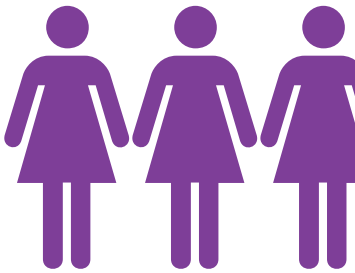
Richter Resource Centre



Differential diagnosis

- Malignancy (e.g. ovarian cancer, endometrial cancer, leiomyosarcoma).
- Other benign causes (e.g. ovarian cyst, adenomyosis).
- Other causes (e.g. pregnancy).

Uterine Fibroids



Symptoms

50% will be asymptomatic.

- Heavy menstrual bleeding (HMB); possible intermenstrual/postcoital bleeding.
- Anaemia (due to HMB).
- Dysmenorrhoea associated with heavy bleeding.
- Pressure symptoms (bowel, bladder, dyspareunia).
- Pelvic pain and swelling (large uterus).
- Reproductive dysfunction (subfertility, pregnancy loss).

Diagnosis and investigations

- Bimanual and speculum before any investigations (including insertion of intrauterine contraception).
- Full blood count for heavy menstrual bleeding (HMB).
- Offer outpatient hysteroscopy for HMB if their history suggests endometrial pathology including polyps or submucosal fibroids.
- Offer Pelvic Ultrasound for women with possibly larger fibroids and examination suggests an enlarged uterus.
- Magnetic resonance imaging (MRI) or Saline infusion Sonography is not a first line diagnostic tool for heavy menstrual bleeding, laparoscopy excludes pelvic pathology.

Treatments

Treatment will be based on a number of factors including age, reproductive plans, severity of symptoms, size and location of fibroids and preferences.

Pharmacological

Hormonal	Non-hormonal
• Levonorgestrel-releasing intrauterine system* • could use after hysteroscopy to assess effectiveness • oral progesterone or injectable progesterone**	• Tranexamic acid** • non-steroidal anti-inflammatory preparations**

Non-pharmacological

Surgery	Radiological
• endometrial ablation**. • myomectomy. • hysterectomy.	• Uterine artery embolisation.

** Contraindicated for fibroids distorting uterine cavity*
*** Contraindicated for fibroids >3cm diameter*

Further information

Fibroid Network: www.fibroid.network

British Fibroid Trust: www.britishfibroidtrust.org.uk/support_grp_mtg.php

Fibroid Treatment NHS Choices: www.nhs.uk/Conditions/Fibroids/Pages/Treatment.aspx

NICE clinical knowledge summary for uterine fibroids, updated December 2018 https://cks.nice.org.uk/fibroids

NICE clinical guideline. *Heavy menstrual bleeding: assessment and management* www.nice.org.uk/guidance/cg44

NICE clinical guideline NG88. *Heavy menstrual bleeding: assessment and management* updated Nov 2018 www.nice.org.uk/guidance/ng88

Cervical polyps

Cervical polyps are generally benign overgrowths of tissue at the external os or just inside the internal cervical canal.

They are common and the exact cause is unknown.

Symptoms may include:

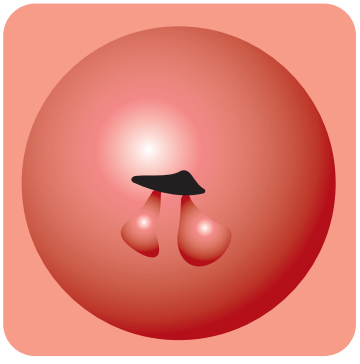
- none, as it may only be found on examinations and at cervical screening
- intermenstrual bleeding (IMB)
- post coital bleeding (PCB)
- vaginal discharge
- post-menopausal bleeding (PMB).

Cervical polyps should be removed (and sent for histology) by:

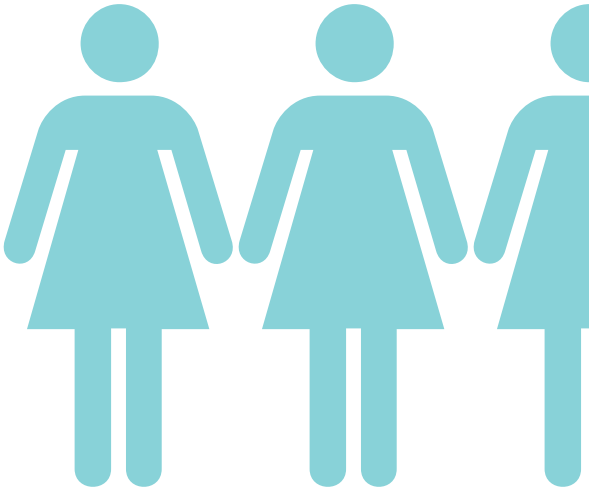
- avulsion (twisting the polyp) and it will then come away with its base if it is cervical
- diathermy.

Women with polyps in the post-menopause are more likely to have a concurrent endometrial polyp so should have ultrasound performed.

Cervical polyps



As viewed through a speculum



Endometrial polyps

Endometrial polyps are dense, fibrous tissue, with blood vessels and glands lined with endometrial epithelium and can reoccur after removal. They are a common finding on ultrasound, and will regress if small. They:

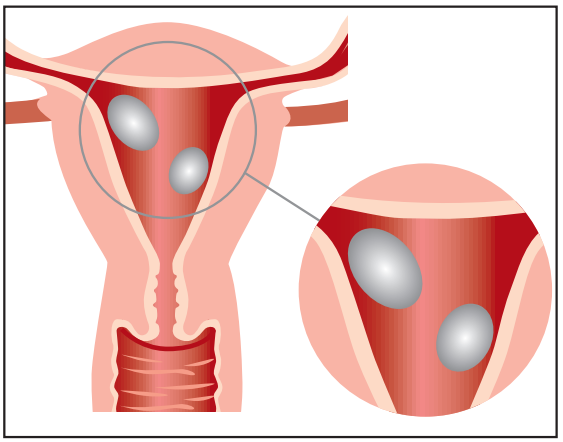
- can be single or multiple.
- range from a few millimeters to 5-6cm.

Risk factors

- Age.
- Hypertension.
- Obesity.
- Tamoxifen.
- High oestrogen.

Treatment

- Hysteroscopic assessment if seen on ultrasound.
- None – smaller ones may regress (20%).
- Hysteroscopic resection.
- Not blind curettage which can miss the polyp and lead to a higher chance of regrowth – histological abnormalities are normally within the base of the polyp.



Endometrial polyps

Symptoms

- Intermenstrual bleeding (IMB).
- Post Coital bleeding (PCB).
- Heavy periods (HMB).
- None, seen on scan.
- Linked with fertility issues and miscarriage.
- Post-menopausal bleeding (PMB) (estimated that there is an 8% malignancy rate).

Amenorrhoea

Types of amenorrhoea

Primary amenorrhoea (0.3%) failure to establish menstruation

- by 16 years of age with normal secondary sexual characteristics.
- Pathological causes: genito-urinary malformation or androgen insensitivity syndrome (AIS).
- by 14 years with no secondary sexual characteristics.
- Pathological causes: Turner's syndrome or hypothalamic-pituitary dysfunction.
- Other causes: pregnancy or constitutional growth delay (Body Mass Index (BMI) below 19).

Secondary amenorrhoea (3%) absence of menstruation for six months or more after previously normal regular periods.

Causes

- polycystic ovarian syndrome (28%).
- premature ovarian insufficiency (12%).
- hypothalamic amenorrhoea (34%).
- hyperprolactinaemia (14%).
- pregnancy.
- anatomical factors (7%).

Investigations

- clinical history.
- imaging.
- follicle stimulating hormone and luteinising hormone levels.
- oestradiol levels.
- physical examination.
- thyroid function tests.
- prolactin levels.
- androgen concentration.

Treatments

- Most girls with primary amenorrhoea will be referred to secondary care.
- For secondary amenorrhoea treat as per diagnosis and refer as required.
- Refer if the woman is concerned about fertility.

Resources

NICE Amenorrhoea https://cks.nice.org.uk/amenorrhoea (updated 2019)

Polycystic Ovarian Syndrome (PCOS)

Endocrine condition with gynaecological and metabolic elements (affects ovaries, uterus, liver and adrenals) with multiple presentations affecting up to 10% of women of reproductive age.

- Harder to diagnose in young girls who have just started periods.
- Unknown causes, possible genetic link, fetal exposure to androgens.
- Multiple small follicles with persistently high Luteinising Hormone (LH), which inhibits ovulation, leading to high androgens.

Differential diagnosis

- Thyroid dysfunction.
- Pituitary tumours.
- Premature ovarian insufficiency.
- Hypogonadotropic hypogonadism – in women with anorexia/excessive exercise.
- Drug use.
- Rare endocrine e.g. adrenal hyperplasia.

Signs and symptoms

- None.
- Irregular/no periods (70%).
- Infertility.
- Increase in hair - hirsutism (70%).
- Male pattern baldness (5-10%).
- Acne (15-25%).
- Weight gain and obesity (45%).

Diagnosis - 2 of the following

- Menstrual disturbance - infrequent or no periods.
- Androgen symptoms.
- PCO seen on scan.

Supported by verity
sharing the truth about PCOS

Polycystic Ovarian Syndrome (PCOS)

Diagnosis	Results
FSH/LH	Normal FSH, raised LH ratio >2:1
Oestrogen	High
Prolactin	Normal or slightly raised
TSH	If no periods
17-hydroxyprogesterone	If no periods (adrenal hyperplasia)
Testosterone	High
Glucose /GGT/ lipids	Check diabetes and risk factors
Pelvic scan	- Multiple small follicles on the ovaries, larger ovarian volume - Endometrial thickness - Polycystic ovaries can be seen on those who do not have PCOS

Treatments (Depends on the presenting symptoms)

Lifestyle advice: weight management (ovulation after 5-6% weight loss) and benefit on CVD (cardiovascular disease) and long term health.

1. Possible fertility referral for ovulation support.
2. Hair/skin may need an endocrine/dermatologist referral.
3. Endometrial protection and periods - IUS or cyclical progestogens to ensure 3-4 withdrawal bleeds per year to prevent hyperplasia.
4. Weight loss.
5. Combined hormonal contraception pills - androgen side effect and endometrial protection.
6. Metformin alone – not recommended - limited evidence (NICE).

Increased risk of:

- poor self esteem
- depression
- CVD/ metabolic syndrome
- fertility issues
- sleep apnoea
- poor reproductive outcomes
- Type 2 diabetes
- non-alcoholic fatty liver
- endometrial cancer.

Resources

ESHRE (2018) (PCOS) www.eshre.eu/Guidelines-and-Legal/Guidelines/Polycystic-Ovary-Syndrome.aspx

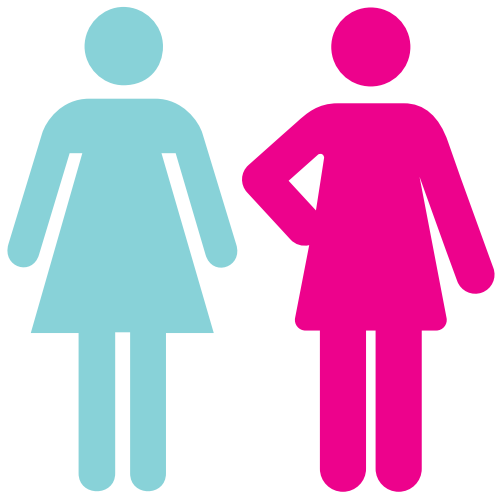
Verity, a charity for women www.verity-pcos.org.uk

Pre-menstrual Syndrome (PMS)

A chronic cyclical condition, with multiple symptoms that occurs in the luteal phase (second half) of the menstrual cycle. 40% of women experience PMS symptoms and of these 5-8% will suffer severe PMS.

Symptoms may be psychological and physical

- Depression and anxiety.
- Loss of confidence.
- Mood swings.
- Food cravings.
- Irritability.
- Mastalgia.
- Bloating.
- Change in sleep pattern.



Cause

Causes of PMS is not known but some women have progesterone sensitivity, this may be due to a reduction in the neurotransmitters serotonin and gamma-aminobutyric acid.

Diagnosis and management

A PMS diagnosis is dependent on the timing of symptoms rather than the character of the symptoms. The degree of impact on the woman's daily life must be considered and the symptoms should cause significant impairment during the luteal phase of the menstrual cycle (before a period) to establish a diagnosis. Symptoms should resolve within a few days of menstruation commencing. A symptom diary should be used prospectively for at least two cycles.

Pre-menstrual Syndrome (PMS)

Treatments

Lifestyle changes - exercise and reducing caffeine, alcohol, salt, sugar and simple carbohydrates.

1st line treatments include:

- combined hormonal contraception (CHC)
- Vitamin B6 or low dose selective serotonin reuptake inhibitor (SSRIs)
- antidepressants and cognitive behavioural therapy.
- drospirenone-containing contraceptive pill should be considered as a first line pharmacological intervention and should be used continuously rather than cyclically.

2nd line treatments include:

- estradiol patches with micronized progesterone
- levonorgestrel intrauterine system, or higher dose SSRIs and could use after hysteroscopy to assess effectiveness.

3rd line treatments include:

- gonadotropin-releasing hormone analogues with add-back hormone replacement therapy (HRT) (continuous combined).

4th line treatment includes:

- includesurgical treatment +/-HRT.

Resources

National Association for Pre-menstrual syndrome www.pms.org.uk

RCOG (2016) Green top guideline No 48 Management of Pre-menstrual syndrome www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg48

Promoting Menstrual Wellbeing (RCN 2019) www.rcn.org.uk/professional-development/publications/pub-007856

Premenstrual Dysphoric Disorder (PMDD)

PMDD is a hormone-based severe mood disorder occurring in the luteal phase of the menstrual cycle. Affects an estimated 1 in 20 of women of reproductive age. Disabling symptoms of poor mental health and physical pain every cycle. It can have a devastating impact on relationships and daily life. Often under-recognised and underdiagnosed. 30% of those with PMDD have attempted suicide.

Symptoms

- Feelings of sadness and despair.
- Anxiety and panic attacks.
- Suicidal thoughts.
- Anger.
- Insomnia.
- Headaches, joint pain, bloating, menstrual cramps.

Management

Should be tailored to the individual and aimed at symptom control and maintaining function.

- Talking therapies.
- Selective serotonin uptake inhibitors (SSRI's) antidepressants.
- Ovarian suppression with combined hormonal contraception or Gonadotrophin Releasing hormone.
- Intrauterine system (IUS) to prevent cyclical bleeding.
- Hysterectomy and bilateral salpingo-oophorectomy to permanently stop menstrual cycle.

References

Mind (2020) Premenstrual dysphoric disorder (PMDD) www.mind.org.uk/information-support/types-of-mental-health-problems/premenstrual-dysphoric-disorder-pmdd/pmdd-treatments

The National Association for Premenstrual Syndrome (2020) Guidelines on Premenstrual Syndrome www.pms.org.uk/assets/files/guidelinesfinal60210.pdf

Vicious cycle PMDD support group www.viciouscyclepmdd.com a PMDD awareness map

Pelvic Inflammatory Disease (PID)

PID is inflammation of the reproductive organs.

- Usually caused by a bacterial infection.
- Caused by sexually transmitted infection in ¼ of women. Most commonly chlamydia, gonorrhoea, or mycoplasma genitalium.
- Left untreated, can lead to pelvic scarring, pelvic abscess and infertility.

Symptoms

- Lower abdominal pain.
- Deep pain during sex (dyspareunia).
- +/- Abnormal vaginal bleeding.
- Abnormal vaginal discharge.
- Fever or feeling unwell.
- May be asymptomatic.

Diagnosis

- Sexual health history.
- Full sexual health screen including tests for mycoplasma genitalium and blood borne viruses.
- Bimanual examination.
- Urine test to exclude pregnancy and urinary tract infection.

Management

- 2 weeks antibiotics, analgesics and rest.
- Abstain from any sexual contact for 2 weeks.
- Partner notification & treatment.
- Patient information, support, encourage safer sex.
- Follow up in 2-4 weeks.
- Admission for intravenous antibiotics if pregnant, severe symptoms or complications.
- Pelvic scanning and specialist treatment required if acutely unwell or non-responding to treatment.

Resources

BASHH (2019) *UK National Guideline for the Management of Pelvic Inflammatory Disease* www.bashh.org/guidelines

Mycoplasma genitalium (BASHH 2020) www.bashhguidelines.org/current-guidelines/urethritis-and-cervicitis/mycoplasma-genitalium-2018

Benign Vulval Disorders

The vulva is the external female sex organs and includes the urethral opening and anus. There are a wide range of conditions that can cause symptoms, but the common ones are listed below.

Symptoms

- Itching – most common presenting symptom.
- Pain – including soreness, discomfort and dyspareunia.
- Discharge.
- Change in appearance – including colour change or loss of anatomy.
- Presence of a lump/lesion.

Conditions	
Lichen sclerosus (LS) is an inflammatory dermatosis of unknown cause.	Symptoms include itching, irritation and white patches on the vulva.
Lichen planus (LP) is an inflammatory disorder with manifestations on the skin, genital and oral mucous membranes.	Symptoms include soreness, itching and dyspareunia.
Vulval dermatitis (also known as eczema) refers to itchy inflamed skin usually due to irritants on the skin e.g. urine, scented wipes.	Symptoms include soreness and itching. On examination the skin may be inflamed, swollen, weepy and excoriated.
Vulvodynia is a disorder of chronic vulval pain (neuropathic) in the absence of any obvious skin condition or infection.	Pain frequently felt at the introitus when touched during sexual intercourse or on insertion of tampons. Sometimes pain may be spontaneous. The vulva looks normal.

Diagnosis and management

The majority of benign vulval disorders can be diagnosed with a detailed history and full examination of the vulva. A biopsy may be taken if a lesion is present. Women should be given a diagnosis, information about their condition and basic skin care (e.g. avoidance of irritants).

Incidence

Currently the incidence of many vulval disorders in the UK is unknown but LS is estimated to affect up to 3% of adult females.

Treatments

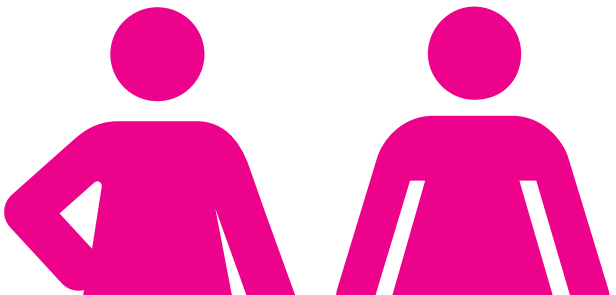
Topical treatments include topical steroids, antiseptics, antibacterials and antifungals. For symptomatic patients, emollients (to keep skin hydrated and to act as a barrier) and good skincare (avoiding wet wipes, talcum powder, urine) will benefit many.

For LS and dermatitis effective treatment is with the regular, appropriate application of strong steriod ointments (to suppress skin inflammation such as clobetasol propionate). Steroid thinning is uncommon.

Vulvodynia patients may need a holistic approach. Cognitive behavioural therapy, psychosexual counselling, perineal massage, pelvic floor muscle physiotherapy, topical lidocaine and oral neuromodulators such as amitriptyline or pregabalin may help.

Resources

Vulval Pain Society www.vulvalpainsociety.org
British Society for the Study of Vulval Disease www.bssvd.org
Association for Lichen Sclerosus and Vulval Health www.lichensclerosus.org



Ovarian Cysts

Cysts are seen on ultrasound and vary in size, they can be fluid filled (simple) or be solid and contain solid material, blood or have compartments (complex).

Types

Functional

- Corpus luteal: 2-3 cm fluid filled sac. An egg is released at ovulation forming a corpus luteum.
- Functional ovarian cysts: follicle doesn't rupture to release the egg. They are usually large, asymptomatic and resolve without treatment.

Non Functional

- Haemorrhagic cysts - bleeding within the follicular cyst. A rescan in 3 months should ensure it's resolved.
- An endometrioma - 'chocolate cysts' filled with old blood. They cause significant pain and don't resolve without treatment (see *endometriosis*).
- Benign germ cell tumours 'dermoid' cysts - contain hair, bone and fat and as they develop in size they are associated with a risk of torsion. Usually occur in young women with a 2-3% risk of malignancy.

Signs and symptoms

- Symptomatic or asymptomatic.
- Unilateral or bilateral dull, sharp, constant or intermittent pain.
- Sudden severe sharp pain if rupturing.
- Severe pain along with vomiting if torsion.

Ovarian Cysts

Investigations

- Vaginal and bimanual examination.
- A transvaginal ultrasound scan.
- Consider a pregnancy test.
- CA 125 (blood test – tumour marker) in postmenopausal women or if malignancy suspected.

Treatment

Premenopausal women:

- <5cm – treatment is not needed
- 5 – 7 cm – ultrasound follow up
- a simple cyst of 7cm – further imaging, MRI +/- surgery.

Postmenopausal women:

- rescan in 4-6 months if <5cm
- surgery recommended for ovarian cysts >5cm.

Resources

RCOG (2016) The management of ovarian cysts in postmenopausal women. Green top guideline 34 www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg34

RCOG (2012) Patient information leaflet - Ovarian cysts before the menopause www.rcog.org.uk/en/patients/patient-leaflets/ovarian-cysts-before-the-menopause

Pelvic Organ Prolapse

- Affects 50% of parous women.
- Risk of prolapse doubles with each completed decade of life.

Type - main types
Cystocele – anterior wall
Rectocele – posterior wall
Uterine – womb
Vault prolapse – post hysterectomy
Enterocele – small bowel
Urethrocele

Symptoms
Dragging sensation
Difficulty emptying bowels and bladder
Sitting on an egg type feeling
Backache
Feeling something come down or out of the vagina

The RCOG Patient information leaflet has useful diagrams (RCOG, 2018).

Risk factors

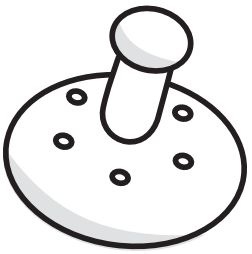
- Chronic constipation – straining.
- Chronic cough.
- Childbirth and pregnancy.
- Family history – increased risk if mother/aunt had a prolapse.
- Hysterectomy – vault prolapse, cystocele, rectocele.
- High impact exercise – trampolining, running.

Treatments

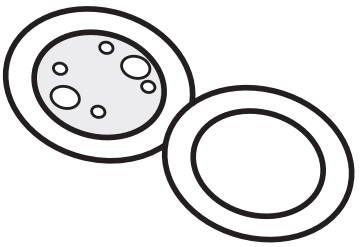
- Pelvic floor exercises – don't cure prolapse, strengthen the muscle to help relieve symptoms.
- Pessary – different types. Use whilst waiting for surgery, whilst family not complete, if surgery not suitable.
- Surgery – hysterectomy, anterior/posterior repair, sacrospinous fixation, 30% recurrence rate following surgery.

Pessaries

Many different types for different prolapses. Ring and gelhorn most commonly used.



Gelhorn



Ring

Changing the pessaries

- 4-6 monthly.
- Can notice increased vaginal discharge.
- Observe vaginal tissue quality with speculum.
- If bleeding or ulceration – leave pessary out and treat with topical vaginal oestrogens, replace pessary after one month.
- If tissues atrophic consider low dose topical vaginal oestrogen such as vagifem, twice weekly.
- If any post-menopausal bleeding – refer to 2 week wait service for ultrasound scan to check endometrial thickness.
- Self-management – option for dexterous women, remove, wash and replace as needed.
- May not always find correct size at first fitting.

Resources

NICE Urinary incontinence and pelvic organ prolapse in Women NG123 (April 2019)

RCOG (2018) Menopause and women's health in later life www.rcog.org.uk/en/patients/menopause

RCOG (2018) Patient information leaflets www.rcog.org.uk/en/patients/menopause/pelvic-organ-prolapse

Pelvic Floor Exercises (PFE)

Stronger pelvic floor muscles help to reduce symptoms of stress incontinence and an overactive bladder.

Pelvic floor exercises strengthen the muscles around the bladder, vagina, and anus.

It is essential that women know which muscles to contract - vaginal examination assessing squeeze.

Regularity is key - ideally needs to be three times a day. Maintenance - once daily.

Using a Valsalva manoeuvre (push down) will make pelvic floor weaker.

How to do the exercises

- PFE can be done lying, sitting or standing. Lying is easiest, standing most difficult.
- Squeeze the muscle as if trying to stop the flow of urine and as if trying to stop passing wind.
- Squeeze up, NOT push down.
- Fast contractions – aim for 10 repetitions.
- Slow contractions – aim for 10 repetitions, holding for 10 seconds – do less if this feels too much.
- Relax muscle fully in between contractions, do not use the stomach muscle.
- To check – woman can put finger in vagina to feel a squeeze, or finger on perineum to feel a lift.
- Any push down is not advised.
- Do not encourage women to stop the flow of urine, this can create issues with voiding and possible reflux, and is now considered outdated.

Pelvic Floor Exercises (PFE)

Devices
Many different types for different prolapses. Ring and gelhorn most commonly used.

- Electrical stimulation machines. For those with little or no contraction.
- Intra vaginal supports (more popular since suspension of mesh procedures) – ring with knob, diveen, uresta, contiform, incostress.
- Squeezy app from app store – will provide reminder to do the exercises regularly.
- Elvie personal trainer – biofeedback device – available on NHS.

Referral to
Women's health physiotherapist or urogynaecology Clinical Nurse Special for assessment if not sure technique is correct.

Resources

NICE 2015 *Urinary incontinence in women: management Clinical guideline* [CG171] www.nice.org.uk/guidance/cg171

Tommys (2018) *Pelvic floor exercises* www.tommys.org/pregnancy-information/im-pregnant/exercise-pregnancy/pelvic-floor-exercises

NHS Choices (2018) *What are pelvic floor exercises?* www.nhs.uk/common-health-questions/womens-health/what-are-pelvic-floor-exercises

Assessment and Management of Incontinence

Type	Definition	Cause	Symptoms	Treatments
Stress incontinence	Leakage of urine on coughing, sneezing, laughing – anything that might cause a rise in intra-abdominal pressure	Childbirth, menopause, chronic cough, constipation and straining, high impact sports	Leakage with cough, sneeze, run, jump, exercise, raise in intra-abdominal pressure	Supervised pelvic floor exercises (pfe) for 3 months, vaginal cones, squeezy app, electrical stimulation for very weak pelvic floor muscles, constipation management, correct toilet position
Overactive bladder (OAB)	Urgency, with or without urge incontinence, usually with frequency and nocturia	Not known. May be worse around period, in cold weather or when patient stressed	Urgency, frequency, nocturia, urge incontinence	Pelvic floor exercises, bladder retraining, fluid advice – caffeine reduction, weight loss, exclude Urinary Tract Infection (UTI), vaginal oestrogens, antimuscarinics, weight loss
Mixed incontinence	When symptoms of both stress incontinence and overactive bladder are present	As above	Both symptoms above	Treat most bothersome problem first – see above

Assessment and Management of Incontinence

Type	Definition	Cause	Symptoms	Treatments
Functional incontinence	A person is usually aware of the need to urinate, but physical or mental reasons prevent them reaching a bathroom	Old age, dementia, Parkinson's, stroke, obesity, clothes, immobility	Feel urge to go to the toilet but unable to make it due to functional reasons	Occupational therapy referral for continence aids, commode, handrail, stick and frame. Treat cause of immobility. Velcro instead of buttons and zips or elasticated underwear/ trousers. Timed and prompted voiding
Voiding difficulties	Inability to empty bladder fully/properly	UTIs, constipation, fibroid uterus, pregnancy, atonic bladder, cystocele, uterine prolapse, procidentia, abdominal tumour, previous episodes of retention	Feeling of incomplete voiding, UTIs, raised post void residuals, frequency, retention	UTI management, check post void residual, double voiding, treat constipation, teach intermittent self-catheterisation

Assessment questions

Presenting symptoms: main symptoms/duration? Most bothersome problem?

Parity: how many children, delivery mode (caesarean, forceps, ventouse, slow/ long second stage), any tears, episiotomy or problems with perineum?

Previous gynaecology, urogynaecology, bladder or abdominal surgery.

Current medications? Which affect their continence status?

Effects on quality of life (family, sex, work, socialising).

Bowel habit: frequency, constipation, Irritable bowel syndrome (IBS), diarrhoea, laxative use, do they vaginally digitate?

Oral intake: type, volume, when they drink it (bladder diary).

Tests

Urinalysis – to check for infection.

Vaginal examination – check skin integrity, pelvic floor strength, any prolapses or stress incontinence.

Post void residual.

Bladder diary – to see what they are drinking and passing and when.

Treatments

Pelvic floor exercises

2-3 sessions daily of both fast and slow twitch exercises. The 'knack' – squeeze pelvic floor prior to any raise in intra-abdominal pressure, cough, laugh, sneeze – regularity is the key.

Bladder retraining

Try to train bladder back into good habits, hold on when feel urge to go, squeeze pelvic floor when experiencing urgency, increase times between voids, drop 'just in case' trips to toilet, distraction techniques, cognitive behavioural therapy.

Treatments cont.

Fluid advice
1.5-2 litres of fluid a day, reduce caffeine (tea, coffee, hot chocolate, green tea) avoid fizzy drinks and citrus drinks.

Constipation advice
Correct toilet position, good oral intake, don't put off urge, gastrocolic reflex, diet (flaxseeds, prunes etc), laxatives if needed.

UTI Prevention
Correct hygiene, good oral intake (1.5-2 litres), double voiding, cranberry capsules, d-mannose.

Medications

Antimuscarinics: to reduce urgency, frequency and urge incontinence. Non-specific so affect receptors throughout the body. Common side effects are constipation and dry mouth.

Topical vaginal oestrogens: to reduce urine infections and improve over active bladder (OAB) symptoms (for example urgency, nocturia, frequency and diffcult to control) symptoms. Use caution when previous breast cancer. Every night for two weeks and then twice-weekly. Continuous prescription.

Weight loss
10kg weight loss can reduce incontinence episodes by half.

Further information

NICE *Urinary incontinence and pelvic organ prolapse in Women* NG123 April 2019

NICE *Urinary Incontinence in Women: Management Clinical Guidance* (CG171) www.nice.org.uk/guidance/cg171 (NICE 2015)

The Bladder and Bowel Community www.bladderandbowel.org

Miscarriage

The spontaneous loss of a pregnancy before 24 weeks gestation with associated emotional distress.

1st Trimester Miscarriage (up to 12+6 weeks)

Incidence: Approximately 1 in 4 pregnancies.

Classification

- Complete miscarriage – all pregnancy tissue has spontaneously miscarried & the bleeding has stopped.
- Incomplete miscarriage – some pregnancy tissue is remaining in the uterus.
- Missed miscarriage – the baby has died but remains in the uterus

Treatment options Clear information = informed choice.

	Natural	Medical	Surgical under LA	Surgical under GA
Definition	Miscarriage happens naturally	Medication is used to induce the miscarriage, usually misoprostol	A catheter is inserted into the uterus after local anaesthesia and analgesia has been given, gentle suction is used to remove the pregnancy	A catheter is inserted into the uterus after general anaesthesia, gentle suction is used to remove the pregnancy
Advantages	- Natural process - No medication - No hospital admission - Could happen at home and with partner/other supporter	- No anaesthetic - No hospital admission if under 10 weeks gestation - Usually at home so partner/other supporter could be present	- Timing predictable - Staff support during procedure - No anaesthetic - Partner/family member can usually be present	- Timing predictable - Asleep and unaware during procedure
Disadvantages	- Timescale to miscarrying unpredictable and could happen anywhere - Pain/bleeding at home may cause anxiety - Possible acute hospital admission - May fail and require medical/ surgical treatment	- Pain/bleeding at home can cause anxiety - Possible acute hospital admission - Success of treatment 85-90% - May fail and require surgical treatment	- May be painful/ distressing during procedure - Potential complication of surgery (e.g. perforation, cervical trauma) - 5% risk of failure that may require repeat procedure	- Hospital day admission - Partner/family member not present - Potential complication of surgery (e.g. perforation, cervical trauma) - 5% risk of failure that may require repeat procedure

2nd Trimester Miscarriage (13 to 23+6 weeks)

Incidence: approximately 1 in 100 pregnancies.

It is important to discuss whether the couple wish to see the baby and/ or hold their baby, create memories like hand and foot prints, locks of hair, clothes if they wish the baby to be dressed, post-mortem, funeral/cremation arrangements.

The risks of bleeding, infection and retained tissue are much higher with second trimester miscarriage, so outpatient management is not usually recommended.

Treatment options Clear information = informed choice, natural choice is an option is some cases if the miscarriage is in progress.

	Medical	Surgical under GA
Definition	- Medication is used to induce the miscarriage, usually with - Mifepristone 48 hours prior to admission for misoprostol	- Up to 15 weeks a catheter is inserted into the uterus after general anaesthesia, gentle suction is used to remove the pregnancy. - Above 15 weeks different instruments are used and the procedure is more difficult, so primary surgery is not available in all hospitals.
Advantages	- No anaesthetic - Analgesia - Staff support - Be with partner/other supporter	- Timing predictable - Asleep during procedure
Disadvantages	- May require repeated doses of medication - May require surgical treatment in the event of heavy bleeding or to remove the placenta - Success of treatment 85-90%	- Hospital day admission - Partner/family member not present - Potential complications of surgery

Further reading

NICE (2019) *Ectopic pregnancy and miscarriage: diagnosis and initial management*
www.nice.org.uk/guidance/ng126
Association of Early Pregnancy Units (AEPU)
www.aepu.org.uk
Miscarriage Association www.miscarriageassociation.org.uk

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Ectopic Pregnancy

An ectopic pregnancy is one that develops outside of the uterus, commonly in a Fallopian tube.

Incidence – 1 in 80 pregnancies and is a leading cause of death in early pregnancy.

Risk factors

- Previous ectopic pregnancy – 10% chance of subsequent ectopic.
- Fertility treatment.
- Pelvic inflammatory disease or chlamydia.
- Abdominal or tubal surgery.
- Endometriosis.
- Smoking.
- Increased risk following contraceptive failure with progestogen-only pills and intrauterine contraception.
- A third have no known risk factors.

Symptoms

- May occur from 4-12 weeks' gestation or later.
- Vary and can resemble other conditions, e.g. gastrointestinal conditions, miscarriage, UTI.

Key symptoms

- Missed/late period.
- Abdominal/pelvic pain.
- Bladder/bowel problems.
- Shock or collapse.
- Vaginal bleeding.
- Shoulder tip pain.
- Usually a positive pregnancy test.

Diagnosis

- Clinical assessment.
- Trans-vaginal ultrasound scan.
- Serum human chorionic gonadotropin (hCG) levels.

Treatment is dependent on clinical presentation and hCG level:

- Surgical management
- Medical management with Methotrexate
- Expectant management (active monitoring).

Anti-D prophylaxis for rhesus negative women who have a surgical procedure.

Future considerations

- Avoid conception for two menstrual cycles after treatment.
- Women treated with Methotrexate should wait until hCG level <5mIU/mL, then take folic acid for 12 weeks before trying to conceive.
- Women to be scanned at six weeks' gestation in future pregnancies.
- Consider the need for emotional support.
- Signpost women to the Ectopic Pregnancy Trust for information and support.

Resources

Ectopic Pregnancy Trust www.ectopic.org.uk
Association of Early Pregnancy Units www.aepu.org.uk
NICE (2019) *Ectopic pregnancy and miscarriage: diagnosis and initial management* www.nice.org.uk/guidance/ng126
RCOG (2016) *Diagnosis and Management of Ectopic Pregnancy* (Green-top Guideline No. 21) www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg21/
RCOG (2016) *Ectopic Pregnancy* www.rcog.org.uk/en/patients/patient-leaflets/ectopic-pregnancy/

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Gestational Trophoblastic Disease (GTD)

GTD (previously called molar pregnancy or hydatidiform mole) is an abnormal development of the trophoblast layer of the placenta (approximately 1 in 600 women). Women diagnosed with GTD need follow-up as there is a risk that the condition progresses to Gestational Trophoblastic Neoplasia (GTN).

Types

- Complete hydatidiform mole - genetically abnormal pregnancy; no fetus develops (1:1000). 15% progress to GTN.
- Partial hydatidiform mole - genetically abnormal pregnancy; abnormal fetus starts to form but unlikely to survive (3:1000). 0.5% progress to GTN.
- Invasive - trophoblastic cells occurs when a molar pregnancy invades into the myometrium.
- Choriocarcinoma malignant disease, 50% occur after a molar pregnancy.
- Placental site trophoblastic tumour malignant disease - very rare; occurs more commonly after non-molar pregnancies.

Risk Factors

- Age - more common in teenage women and women over 45.
- Ethnicity – twice as common in women of Asian origin.
- Previous GTD – 1 in 80 chance of another GTD episode.

Symptoms

- Vaginal bleeding (80%).
- Hyperemesis (10%).
- Uterine enlargement (25%).
- Hypertension (1%).
- No symptoms presenting at the first booking appointment.

Detection

- Overall Detection rate via ultrasound is 44%.
- 90% of complete moles are diagnosed on ultrasound scan compared to 30% of partial moles.
- Histopathology diagnosis required in all cases as other methods are unreliable.

Gestational Trophoblastic Disease (GTD)

Management

Suspected GTD

▼

Surgical management only
(Anti D prophylaxis if Rhesus negative)

▼

Histology

▼

GTD diagnosed

Refer to Regional Trophoblastic Disease Centre (RTDC)

Reproductive Considerations

- Women await RTDC discharge instructions – once clear it is safe to try for another pregnancy.
- Barrier methods of contraception advised until safe to conceive.
- Some women may require RTDC follow-up post any subsequent pregnancies, independent of pregnancy outcome.

Resources

Association of Early Pregnancy Units www.aepu.org.uk

RCOG (2020) patient information on Molar pregnancy and Gestational Trophoblastic Disease. www.rcog.org.uk/en/patients/patient-leaflets/gestational-trophoblastic-disease-gtd/ http://stdc.group.shef.ac.uk

Sheffield Trophoblastic Disease Centre
http://stdc.group.shef.ac.uk

RCOG (2020) Green-top guideline (38) on Management of Gestational Trophoblastic Disease. www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg38/

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Anti-D

Anti-D or anti-D immunoglobulin is administered to women who may be at risk of Rhesus disease.

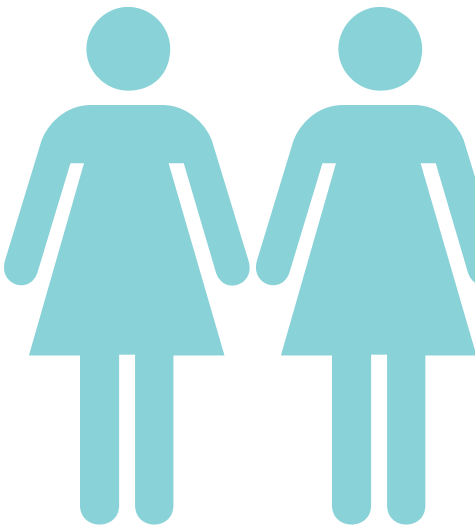
Anti-D can help to avoid a process called sensitisation, which is when a woman with RhD negative blood is exposed to RhD positive blood and may develop an immune response to it.

Current practice is to offer anti-D rhesus prophylaxis at a dose of 250 IU (50 micrograms) to all rhesus negative women who have a surgical procedure to manage an ectopic pregnancy or a miscarriage.

Do not offer anti-D rhesus prophylaxis to women who:

- receive solely medical management for an ectopic pregnancy or miscarriage or
- have a threatened miscarriage or
- have a complete miscarriage or
- have a pregnancy of unknown location.

Do not use a Kleihauer test for quantifying feto-maternal haemorrhage.



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Psychological support following pregnancy loss

All women/couples may react differently after the loss of a pregnancy.

It is important to respond to individual circumstances, cultural norms and emotional responses. It is normal to experience feelings and grief, loss and guilt, combined with the physical experience of pain and bleeding.

Good communication is essential especially undergoing training in breaking bad news in a sensitive way.

Continuity of care and follow up appointments will allow those affected talk through what has happened to them and allow them to seek further support.

Identify those who may be at risk of developing further mental health conditions such as anxiety, depression and post-traumatic stress disorder or withdrawing from family and friends, flashbacks and sleeping disorders.

Useful resources

Miscarriage Association: *Caring for women experiencing pregnancy loss: a new e-learning resource* www.miscarriageassociation.org.uk

National Bereavement Care Pathway. For Pregnancy and Baby Loss. 2018 https://nbcpathway.org.uk

Association of early pregnancy units www.aepu.org.uk

Early Medical Abortion (EMA)

Definition
A combination of drugs used to induce an abortion, up to 10-weeks gestation.

The RCN believes it is important for nursing teams to be reminded of the legislation within which abortion is provided (RCN, 2020).

Drugs used
Mifepristone, given as a tablet orally, blocks the action of progesterone and sensitises the uterus to the misoprostol, a prostaglandin analogue, which is given between 24 to 72 hours later, causing the uterus to contract and expel the pregnancy. (RCOG, 2011) at: www.rcog.org.uk/globalassets/documents/guidelines/abortion-guideline_web_1.pdf

Side effects of drugs: nausea with occasionally vomiting, headache, feverishness/shivering, diarrhoea.

Possible complications:

- retained products of conception (3 in 100): problematic bleeding, cramping pain. May need additional misoprostol or surgical evacuation. If suspicion of infected retained products (bleeding, pain, fever, offensive discharge, feeling unwell), needs urgent surgical evacuation.
- continuing pregnancy (less than 1 in 100). EMA has a small risk of failure. If no or minimal bleeding within 24 hours after misoprostol, medical assessment required. Successful abortion should be checked, by pregnancy test or by ultrasound scan. Surgical abortion is the preferred option in a continuing pregnancy (misoprostol has been shown to have teratogenic effects in early pregnancy).

Early Medical Abortion (EMA)

- haemorrhage (2 in 1000): (soaking two large sanitary pads for two consecutive hours) seek urgent help.
- infection (2 in 1000): endometritis, pelvic inflammatory disease, may require antibiotics.

References

Abortion Act 1967 (as amended 1990) to the Human Fertilisation and Embryology Act, permits abortion under certain circumstances in England, Wales and Scotland.

RCN *Termination of Pregnancy. An RCN Nursing Framework* www.rcn.org.uk/professional-development/publications/rcn-termination-of-pregnancy-pub-009398

NICE (2019) *Abortion care NICE guideline* [NG140] www.nice.org.uk/guidance/ng140

RCN Clinical pages on termination of pregnancy www.rcn.org.uk/clinical-topics/womens-health/termination-of-pregnancy

Surgical Termination of Pregnancy

Surgical termination of pregnancy involves the physical removal of a viable pregnancy from the uterus by:

- aspiration (manual vacuum or electric vacuum) to approximately 14 weeks gestation
- evacuation with surgical instruments (dilatation and evacuation – D&E) with/without vacuum aspiration from approximately 14 weeks gestation.

Options for pain management

Vacuum aspiration: local anaesthetic, conscious sedation or general anaesthetic.

D&E: general anaesthetic or conscious sedation.

Cervical preparation

Involves the preparation of the cervix prior to surgical abortion, in order to make the cervix easier to dilate, to facilitate passage of surgical instruments or suction cannulae.

Cervical preparation can be:

- mechanical, by the insertion of osmotic dilators (small, absorbent rods) into the cervix which gently swell and dilate he cervical opening
- alternatively, or in addition, it can be chemical, with the use of misoprostol or mifepristone to soften the cervix.

Possible complications of surgical abortion

- Retained products of conception (uncommon).
- Infection (rare).
- Unpredictable bleeding after the abortion.
- Pain during procedure.
- Continuing pregnancy (rare for vacuum aspiration; very rare for D&E).

Surgical Termination of Pregnancy

Possible complications of surgical abortion (cont.)

- Psychological problems.
- Haemorrhage (rare for vacuum aspiration; uncommon for D&E).
- Injury to cervix, uterus (including perforation and possibly resulting in hysterectomy), bowel or bladder (rare to very rare).
- Death (very rare).

Follow up after surgical abortion

- Routine follow up not necessary because successful surgical abortion should be confirmed at the time of the procedure by visual means.
- Clear verbal and written information about complications (lasting pain, excessive bleeding, offensive vaginal discharge, abdominal tenderness, fever, generally feeling unwell) and when and how to seek help.
- Access to 24/7 telephone helpline for clinical advice post-treatment.
- Fertility returns as early as 10 days following procedure.
- Appropriate contraception should be offered at the time of the abortion.

Further reading

RCN (2017) *Termination of Pregnancy* *www.rcn.org.uk/professional-development/publications/rcn-termination-of-pregnancy-pub-009398*

NICE (2019) *Abortion care NICE guideline* [NG140] www.nice.org.uk/guidance/ng140

RCN *Clinical pages on termination of pregnancy* www.rcn.org.uk/clinical-topics/womens-health/termination-of-pregnancy

Contraception overview

Contraception is a collective term for methods used to prevent pregnancy and to manage some gynaecological disorders. The following provides an overview of key information.

Combined hormonal contraception

Contains oestrogen and progestogen in different delivery modes • pills. • transdermal patch. • vaginal ring.	
Effectiveness	Around 91-99%
Benefits	• Regular bleeding pattern which may be lighter and less painful. • Reduction in the risk of colorectal, ovarian and endometrial cancer. • May reduce risk of fibroids / ovarian cysts / benign breast disease / endometriosis.
Limitations	• User-dependent methods. • Some hormonal side-effects. • Vomiting or severe diarrhoea affects efficacy of pills. • Drug interactions with liver enzyme-inducers and St John's Wort. • Not suitable for all women – need to refer to the UK Medical Eligibility Criteria (UKMEC) for contraindications.

The chosen contraceptive method should be used in combination with condoms to protect against sexually transmitted infections. Further guidance available at:

- Faculty of Sexual and Reproductive Healthcare: www.fsrh.org/home
- UK Medical Eligibility Criteria (UKMEC): www.fsrh.org/standards-and-guidance/documents/ukmec-2016
- Sexwise: www.sexwise.org.uk
- Contraception Choices www.contraceptionchoices.org/contraceptive-methods

Progestogen-only contraception

Progestogen in different delivery modes

	Pill – daily	Sub-dermal implant – licensed for 3 years	Injection – every 13 weeks
Effectiveness	Around 91-99%	Around 99%	FRSH 94-99% effective and FPA 99%
Benefits	No oestrogen, so suitable for most women		
		Long-acting reversible contraception methods Non-user-dependent	
Effectiveness	Can alter a woman's bleeding pattern Some hormonal side-effects		
	Drug interactions with liver Enzyme-inducers and St John's Wort		Injection cannot be removed once given. Associated with: • up to one years delay in, but no loss of, fertility • weight gain, particularly in women under 18 years of age with a BMI>30 • small loss of bone mineral density, which is usually recovered after discontinuation
	User-dependent method Vomiting or severe diarrhoea affects efficacy	Needs to be fitted by a qualified person	

Intrauterine contraception Uterine fitting by a qualified person – consider pre-insertion screening		
	Intrauterine device (IUD) Plastic and copper device licensed for 5-10 years	Intrauterine system (IUS) Progestogen-releasing plastic device licensed for 3-5 years
Effectiveness	Over 99%	
Benefits	Long-Acting Reversible Contraception methods Can be fitted at the time of surgical abortion	
	• Non-hormonal. • Can be used for emergency contraception.	• Lighter bleeding. • 1st line choice for heavy menstrual bleeding*. • Licensed alternative route for HRT progestogen and treatment for hyperplasia* (Mirena only).
Limitations	Periods may be longer, heavier, or more painful	Irregular bleeding or spotting in the first 6 months
	Risk of: • Expulsion: around 1 in 20 – most common in first year of use, especially first 3 months • Perforation of uterus, bowel, bladder: up to 2 per 1,000 insertions • Pelvic infection – slightly increased risk at insertion, and for the first 20 days afterwards.	

*Mirena for HRT and hyperplasia

Other methods						
	Female condom	Male condom	Diaphragm/ cap	Male sterilisation	Female sterilisation	Natural methods
Effectiveness	Female 95% (FRSH)	Male 98% (FRSH)	92-96% (FRSH and FPA)	Failure rate: approx. 1 in 2,000	Failure rate: approx. 1 in 200	Approx. 76%
Benefits	Protection against sexually transmitted infections		Can insert ahead of intercourse	Non-user-dependent methods		No physical side-effects
Limitations	User dependent methods. Must be used correctly and consistently			Permanent method Contraception needed until sterilisation is effective Risk of post-op complications		Need to avoid sex at fertile time
			Must be left in-situ for a minimum of 6 hours after sex	Small risk of post-op testicle pain	Small risk of ectopic pregnancy if sterilisation fails	

Emergency contraception

Reduces risk of pregnancy following unprotected sexual intercourse (UPSI)
www.fsrh.org/standards-and-guidance/current-clinical-guidance

	Levonorgestrel pill	Ulipristral acetate pill	Emergency IUD
Licensed use after UPSI	72 hours	120 hours	120 hours after UPSI or up to 5 days of expected ovulation

Sexual Health and Sexually Transmitted Infections (STIs)

Sexual health is "a state of physical, mental and social well-being in relation to sexuality. It requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence". It is concerned with sexual wellbeing, infections and disease, as well as contraception.

WHO Defining Sexual Health (2017)
www.who.int/topics/sexual_health/en/

Sexually transmitted infections are infections that can be transferred from one person to another through unprotected vaginal, anal or oral sex, by genital contact and through sharing sex toys.

Diagnosis

- History.
- Examination.
- Genital examination – including vaginal and cervical examination.
- Self-swabs (vaginal, anal and throat).
- Urine sample.
- Bloods (blood borne viruses).

	Signs and symptoms
Bacterial Chlamydia	Most women experience no symptoms. Dysuria, unusual vaginal discharge, lower abdominal pain or tenderness, dyspareunia, bleeding during or after sex or between periods. It can also cause heavy periods. Chlamydia infection may also be in the rectum, throat or eyes.
Gonorrhoea	About 50% women experience no symptoms. Unusual vaginal discharge (thin or watery, yellow or green). Dysuria, lower abdominal pain or tenderness. Rarely, bleeding between periods or heavier periods. Gonorrhoea infection may also be in the rectum, throat or eyes.

Sexual Health and Sexually Transmitted Infections (STIs)

	Signs and symptoms
Bacterial Syphilis	Syphilis in the early stages causes a painless, but highly infectious sore on the genitals or around the mouth. The sore can last up to six weeks before disappearing. Secondary symptoms such as a rash, flu-like illness or patchy hair loss may then develop. These may disappear within a few weeks. The late or tertiary stage of syphilis usually occurs after many years, and can cause serious conditions such as heart problems, paralysis and blindness. The symptoms of syphilis can be difficult to recognise.
Viral Genital herpes	Feeling generally unwell with flu-like symptoms such as fever, tiredness, headache, swollen glands, aches and pains in the lower back and down the legs or in the groin. This will be followed by: Small, fluid-filled blisters anywhere in the genital or anal area, on the buttocks and the tops of the thighs. These burst within a day or two leaving small, red sores which can be very painful.
Genital warts	Flat or smooth small bumps or quite large, pink, cauliflower-like lumps. Genital warts are usually painless but may occasionally itch and cause some inflammation.
Human Immunodeficiency virus (HIV)	Many people who are living with HIV have no obvious signs and symptoms. Recent evidence shows that between 70% to 90% of people who become infected with HIV experience flu-like symptoms within a few weeks after infection. The most common symptoms are a fever, a rash and a severe sore throat all occurring at the same time. These symptoms in an otherwise healthy person may indicate recent HIV infection.
Parasites Trichomoniasis	Unusual vaginal discharge (frothy yellow or watery) that has an unpleasant smell, soreness or itching around the vagina, dysuria.

	Signs and symptoms
Parasites Pubic Lice	Black powdery droppings from the lice in your underwear. Brown eggs on pubic or other body hair. Irritation and inflammation in the affected area, sometimes caused by scratching.
Scabies	An itchy red rash or tiny spots.

Treatments

Treatments vary depending on the STI and history. Please refer to BASHH Guidelines for the latest treatment managements – www.bashh.org/guidelines. Ensure treatment concordance.

Partner notification

Contact tracing of sexual partners is an important part of clinical management. Clinicians diagnosing STIs are responsible for contract tracing so that partners can be treated and tested.

Prevention

- Using a condom every time for vaginal or anal sex.
- Not sharing sex toys.
- Using a condom on a penis when giving males oral sex.
- Using dental dams to cover the female genitals during oral sex or when rubbing female genitals together.

Faculty of Sexual and Reproductive Health www.fsrh.org/home

Further reading

Careers and education www.rcn.org.uk/clinical-topics/public-health/sexual-health/sexual-health-education-and-training

British Association for Sexual Health and HIV (BASHH) www.bashh.org

Search for a sexual health clinic across the UK www.bashh.org/clinics

Sexwise (FPA) www.sexwise.fpa.org.uk/stis/sti-types

Vaginal Discharge

Vaginal discharge is normal and healthy, and changes during the menstrual cycle, thinning at ovulation. Unusual changes need investigation. Full medical, sexual history and examination required (see p.55).

Condition	Symptoms	Treatment - see BASHH Guidelines
Bacterial Vaginosis	• Watery yellow discharge. • Fishy odour. • ^PH.	• Avoid fragranced shower gels/douching. • Oral/intra vaginal antibiotics.
Candida (Thrush)	• Thick white curd-like. discharge • Itchy vulva. • Inflammation.	• Avoid fragranced soaps/gels. • 80% resolve with oral/ topical azoles. • Consider immunosuppression /diabetes.
Cervical Ectropion	• Increased discharge. • +/- spotting.	• Visualise cervix. • Refer to gynaecology if treatment required.
Retained foreign body	• Smelly discharge. • Bleeding. • Discomfort.	• Remove foreign body. • Consider antibiotics.
Sexually Transmitted Infections • Chlamydia. • Gonorrhoea. • Trichomonas. • Pelvic Inflammatory Disease.	• Increased discharge. • +/- frothy discharge. • Clear/yellow/green. • Odour/odourless. • +/-Pain passing urine. • +/- abdominal pain.	• Antibiotics. • Abstain from sex during treatment. • Treat partners. • Follow-up may be required.

Resources

RCN (2020) Genital examination in women www.rcn.org.uk/professional-development/publications

The British Association for Sexual Health and HIV - BASHH Guidelines www.bashh.org/guidelines

Jo's Cervical Cancer Trust (2018) Cervical ectropion (cervical erosion) www.jostrust.org.uk/about-cervical-cancer

Female Genital Mutilation (FGM)

Any procedure that involves partial or total removal of the external female genitalia, or other injury to the external female genitalia for non-medical reasons. There are four types of FGM (see RCN Guidance).

Complications

Short term	Long term
Haemorrhage	Difficulty passing urine
Severe pain; shock	Urinary tract/pelvic infections
Urine Retention	Dysmenorrhoea
Infection	Dyspareunia
Injury to adjacent tissue	Infertility
Limb injury due to restraint	Clitoral neuroma
Death	Problems during childbirth
	Psychological and mental health problems

Safeguarding duties

FGM is child abuse

- Complete safeguarding assessment.
- **Mandatory reporting**
  - Regulated health professionals must report cases of FGM in girls under 18 to the police by calling 101 if they:
    - see physical signs of FGM
    - are informed by the girl that they have had FGM
  - This is a personal duty and subject to sanctions if not complied with.

Female Genital Mutilation (FGM)

Best Practice

- Be sensitive but ask clear questions: “Have you been cut?” Or “do you come from a community that practises FGM?”.
- Diagnose type and/or refer to specialist FGM clinic.
- Document.
- Complete FGM enhanced data template if appropriate.
- Explain UK law and health complications.
- Share information with GP and health visitor/senior nurse if appropriate.

Useful resources

RCN *Female Genital Mutilation: An RCN Resource for Nursing and Midwifery Practice* (2019 fourth edition)

RCN (2020) *FGM and Travel Health*

RCN (2020) *FGM and Sexual Health* - all available from www.rcn.org.uk/publications

DH online Safeguarding support www.gov.uk/government/collections/female-genital-mutilation-fgm-guidance-for-healthcare-staff

RCN Clinical pages on FGM www.rcn.org.uk/clinical-topics/female-genital-mutilation

Female genital mutilation: resource pack www.gov.uk/government/publications/female-genital-mutilation-resource-pack/female-genital-mutilation-resource-pack

NHS England 2019 six scenario-based animations which help explore how and when questions would and would not be asked about FGM in community health care settings, as a girl grows up. www.youtube.com/playlist?list=PL6IQwMACXkj06kcGt64sqh57jRLPcNv1s

Cervical Human Papilloma Virus (HPV)

- There are more than 100 types of HPV, they are a group of viruses that are extremely common.
- HPV can be high risk or low risk. Most infections do not cause symptoms and resolve without causing problems.
- Persistent infection with high risk types of HPV (types 16 and 18) can lead to pre-cancerous cervical lesions.
- If untreated, lesions caused by persistent HPV may progress to cervical cancer, but this development usually takes several years.
- HPV types (16 and 18) cause 70% of cervical cancers and pre-cancerous cervical lesions, there is also evidence linking HPV with cancers of the anus, vulva, vagina and penis.
- In 99% of cases, cervical cancer occurs as a result of a long-term infection with high-risk HPV.
- HPV is transmitted through skin-to-skin contact. Cervical HPV infection is caused by sexually acquired infection with certain types of HPV.
- Once infected with HPV, the virus can remain in your body as an active infection or be dormant and undetectable after your immune system clears the infection. HPV does not go away and may remain present in cervical cells for many years.
- The HPV vaccine is now routinely offered to all young people between the ages of 12 and 13 and to men that have sex with men under the age of 45 who attend sexual health clinics, to prevent HPV-related cancers.

HPV screening

HPV is part of cervical screening.

HPV Primary screening is where cervical screening samples are tested for HPV first.

Cervical Human Papilloma Virus (HPV)

If HPV is not detected, the individual is offered a screening test again in 3-5 years (depending on age).

If HPV is detected, then a cytology test is carried out on the same sample to check for abnormal cell changes. If no changes are detected, the individual will be screened again in 12 months' time. If cell changes are detected, referral is made to colposcopy.

Note: not all areas within the UK currently use HPV screening. Please check your local screening guidelines.

Further information

NHS Choices, HPV vaccine www.nhs.uk/conditions/vaccinations/pages/hpv-human-papillomavirus-vaccine.aspx

WHO 2019 Human papillomavirus (HPV) and cervical cancer fact sheet

Jo's Cervical Cancer Trust: www.jostrust.org.uk www.jostrust.org.uk

Public Health England (2019) HPV Vaccine Update. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/818215/PHE_Vaccine_Update_HPV_special_July_2019.pdf

RCN (2020) Human Papillomavirus (HPV), Cervical Screening and Cervical Cancer: RCN Guidance, available at: www.rcn.org.uk/professional-development/publications/pdf-006903

Cervical screening

Cervical screening (the smear test), is part of the **NHS Cervical Screening Programme** (CSP), screens women aged 25-64 for cervical abnormalities. Early detection allows monitoring and treatment to prevent progression to cervical cancer.

A sample of cells from the cervix is obtained and tested for the presence of HPV, if this is present then screen detection is carried out, looking for abnormal cells. Human Papilloma Virus (HPV) is a normal consequences of sexual intercourse, and 50-79% of women who have sexual intercourse have a lifetime risk of HPV infection.

The CSP pathway, HPV triage and test of cure, is a programme using reflex testing for high-risk HPV (HR-HPV) to manage women with cytology results that show borderline changes or mild dyskaryosis. Cervical abnormalities requiring treatment are present in approximately 15-20% of the women who are HR-HPV positive.

For management of abnormal smear results please refer to NHSCSP www.gov.uk/government/publications/cervical-screening-programme-and-colposcopy-management

	NHS Cervical Screening Programme
Age	**Cervical screening interval**
25 (24 + 6 months)	First invitation to screening
25-49	3-yearly screening
50-64	5-yearly screening
65+	Cease screening unless 1 of the last 3 tests was abnormal

Further information

RCN (2020) Genital Examination in women

www.gov.uk/guidance/cervical-screening-programme-overview

Breast screening

Breast screening is routinely carried out on women aged 50-70 every three years (unless high risk determined).

Breast screening helps to detect cancer earlier, allowing treatment to commence earlier, which gives a greater chance of successful and less destructive treatment.

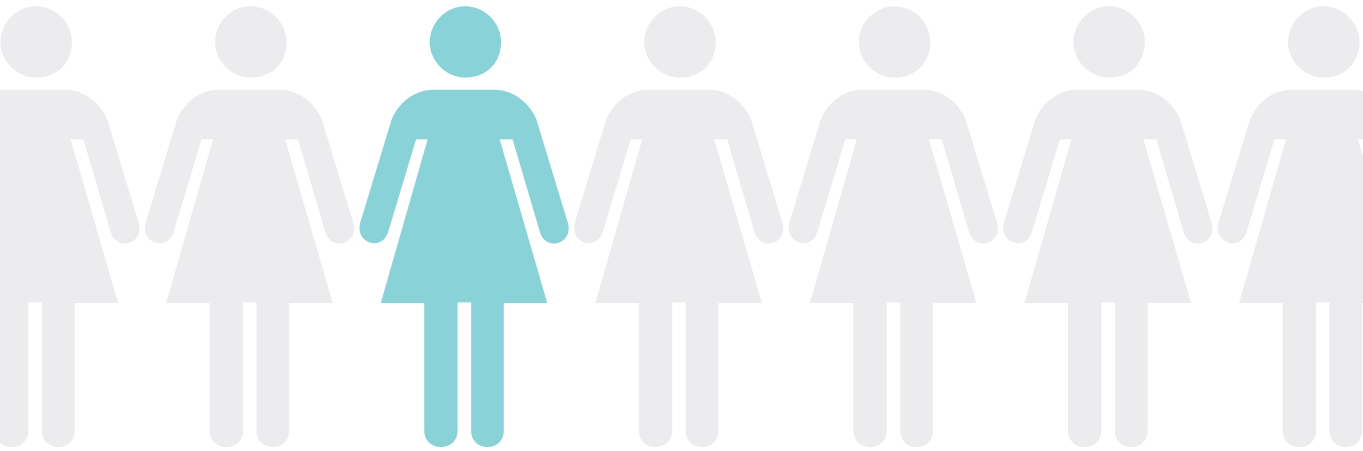
Mammography is the most common screening test. Some women may have MRI (magnetic resonance imaging) if there is an elevated risk of cancer, or the breast tissue is dense.

Further reading

RCN Human Papillomavirus (HPV), *Cervical Screening and Cervical Cancer RCN Guidance* (in press rcn/publications 2020)

Cervical screening programme overview
www.gov.uk/guidance/cervical-screening-programme-overview

Breast screening (2017) Cancer research UK
www.cancerresearchuk.org/about-cancer/breast-cancer/screening/breast-screening



Cervical cancer

Cancer of the cervix is almost 100% preventable with correct implementation and uptake NHS cervical screening programme (NHSCSP). It accounts for 900 deaths/year in the UK, with 1 in 135 women diagnosed.

Cervical cancer survival

The mortality rate has dropped by 72% since the early 1970s, with 63% of women surviving cervical cancer for 10 or more years, with survival rates highest in patients under 40.

Causes/risks	Signs & symptoms
Predominantly lifestyle oriented. • human papillomavirus (HPV) – biggest risk factor present in 100% of cases. • tobacco smoking and human immunodeficiency virus (HIV) type 1, can be linked to HPV infection. • Oestrogen-progestogen contraceptives and in utero exposure to diethylstilbestrol also have strong evidential links to cervical cancer.	1/4 through screening programme. 1/3 routine or urgent GP attendances. 1/5 2-week wait referral route. Signs are: - abnormal vaginal bleeding - post cotial bleeding - vaginal discharge Types: - squamous - adeno carcinoma

Cervical cancer

Diagnosis	Treatment
Colposcopy (a detailed examination of the cervix using an illuminated microscope) as diagnosis, plus biopsies. In small lesions large loop excision of the transformation zone (LLETZ) can be used to remove the area in clinic under local anesthetist. More advanced may have Examination under Anaesthetic to check surrounding organs for signs of invasive disease. Further investigations: Computerised tomography (CT) scan. Magnetic resonance imaging (MRI) scan. Chest X-ray. Positive emission tomography (PET) scan.	Treatment is dependent on the stage of the cancer, and the woman's preferences. Surgery is the most common. Early stage cervical cancer may be radiotherapy, surgery or a combination of both. If the cancer is more advanced, surgery can be paired with chemotherapy and / or radiotherapy. - Cone biopsy/ Large excision - Hysterectomy - Trachelectomy - Internal radiotherapy (brachytherapy) - Radical hysterectomy - External radiotherapy chemotherapy

Resources

Jo's cervical Cancer trust www.jostrust.org.uk

Macmillan's online community community.macmillan.org.uk

Cancer Research UK www.cancerresearchuk.org

Human Papillomavirus (HPV), Cervical Screening and Cervical Cancer RCN Guidance (in press rcn/publications 2020)

Cervical Screening Programme UK Overview (updated 2019) www.gov.uk/guidance/cervical-screening-programme-overview

Cancer of the Vagina

Cancer of the vagina is the abnormal growth of vaginal tissue either locally or spread to neighbouring tissue, cervix or bladder. In the UK approximately 300 women a year are diagnosed.

Causes/Risks
Age (majority over 60)
HPV (human papilloma virus)
VAIN (vaginal intra-epithelial neoplasia) or CIN (cervical intra-epithelial neoplasia) – pre-cancers
History of pelvic radiotherapy (rare)
DES (Diethylstilbestrol) (last given in the 1970s)

Signs & Symptoms
Blood-stained vaginal discharge
Bleeding after the menopause, between periods or after sex
Pain passing urine
Pain in pelvis
Constipation/tenesmus
Lump in vagina

Diagnosis
History taking
Examination
Biopsy
MRI/chest X-ray or CT chest scan and/or PET scan

Types
Squamous cell carcinoma
Adenocarcinoma

Treatment
One of more combinations of treatment:
Chemoradiation
External Beam Radiotherapy (first line)
Surgery (vaginectomy)
Adjuvant radiotherapy (after surgery)
Brachytherapy (inserting radioactive material directly into the affected area)
Chemotherapy (wide spread disease)

Further reading

Macmillan's online community community.macmillan.org.uk
Cancer Research UK www.cancerresearchuk.org

Cancer of the Vulva

This is the abnormal growth of vulval tissue with the capacity to grow locally or spread into neighbouring tissue. Approximately 1000 women are diagnosed in the UK every year.

Causes/risks
Age (80% over 60)
HPV – types 16/18 and 31
VIN (vulval intra-epithelial neoplasia) – pre-cancer
Lichen sclerosus/lichen planus
Smoking

Signs & symptoms
Lump/mole
Ulcer
Itch, burning, soreness
White/dark patches
Thickened area
Bleeding

Diagnosis
History and examination
Biopsy
MRI/chest X-ray or CT chest scan and/or PET scan

Types
Squamous cell carcinoma (90%)

Treatments
Surgery:
Wide local excision
Partial/Radical vulvectomy
+/- Unilateral or bilateral groin node dissection
+/- sentinel node biopsies
Radiotherapy: External beam
Brachytherapy (inserting radioactive material directly into the affected area.)
Chemotherapy used with radiotherapy chemoradiation alone for disease spread

Side-effects of treatment
Lymphoedema
Vaginal fibrosis
Body image/sexual problems

Further reading

Macmillan's online community community.macmillan.org.uk
Cancer Research UK www.cancerresearchuk.org
The Eve Appeal Gynaecological Cancer Research Charity www.eveappeal.org.uk
Gynae C – Support Group www.canceradvice.co.uk/support-groups/gynae-c
Vulval Awareness Campaign Organisation www.vaco.co.uk

Cancer of the Endometrium

Abnormal tissue growth within the endometrium.

5th most common female cancer, with 6,400 new cases annually in the UK.

Causes/Risks	Signs and Symptoms
• Extended exposure to oestrogen (early menarche, late menopause). • Obesity. • Genetic factors such as Lynch syndrome. • Polycystic ovarian syndrome. • Diabetes. • Infertility. • Nulliparity. • Hypertension. • Having unopposed oestrogen and Tamoxifen.	• Postmenopausal bleeding. • Post-coital bleeding. • Intermenstrual bleeding. • Change in menstrual pattern. • Pelvic pain. • Dyspareunia.

Diagnosis	Types
Investigations including: pelvic examination, ultrasound scan, an endometrial biopsy or a hysteroscopy and biopsy	• Endometrioid adenocarcinoma (most common). • Mucinous adenocarcinoma. • Serous adenocarcinoma. • Clear cell adenocarcinoma. • Undifferentiated carcinoma (large/small cell types). • Carcinosarcoma. • Squamous adenocarcinoma. • Mixed carcinoma. • Metastatic carcinoma.

Diagnosis is confirmed following a biopsy result, which will provide the grade of the cancer, a MRI and CT will be organised to ascertain the stage of the disease in order to plan treatment with the multidisciplinary team.

Cancer of the Endometrium

Treatments

Treatment for early stage endometrial cancer involves surgery, laparoscopically or open.

Surgery: Total hysterectomy
+/-bilateral salpingo oophorectomy
+/- bilateral pelvic lymph node dissection
+/- para-aortic lymph node dissection
+/- omentectomy

Women with more advanced disease may be offered further treatment after surgery:

- External beam radiotherapy
- Internal brachytherapy
- Chemotherapy

Women with recurrent and metastatic disease can be treated with hormones or palliative radiotherapy to control their symptoms.

Side effects of treatment

- Lymphoedema.
- Induced menopause.
- Late gastrointestinal effects on bowel +/- bladder.
- Vaginal stenosis.
- Shortened vagina.
- Body image/sexual issues.
- Loss of fertility.
- Peripheral neuropathy.
- Fatigue.

Resources

MacMillian (2017) www.macmillan.org.uk
Cancer Research UK www.cancerresearchuk.org
Eve Appeal https://eveappeal.org.uk
Gynae-C www.canceradvice.co.uk/support-groups/gynae-c

Cancer of the Ovary

One of the most common types of cancer, late diagnosis amongst women.

Causes/Risks	Signs and Symptoms
Age – risk increases after the menopause	Feeling bloated/abdominal distention
Hormonal Factors – early menarche, later menopause and HRT	Persistent pelvic and abdominal pain
Family History and Genetic Mutation – two or more close relatives who have had ovarian cancer or certain other types	Feeling full quickly after eating
Physical Factors – Height, endometriosis and ovarian cysts	Loss of appetite
Lifestyle Factors – smoking, weight and diet	Changes in bowel habits or urinary symptoms Pain during sex Weight loss Fatigue

Diagnosis

Examination, CA125 (blood tumour marker), ultrasound scan, CT, ascitic fluid aspiration, image guided biopsy, surgery.

Treatment plans are made in a multi-disciplinary setting (MDT) depending on the stage/grade/ type.

Types

- Serous (most common).
- Clear cell.
- Teratoma.
- Endometrioid.
- Mucinous.
- Undifferentiated.
- Granulosa Cell Tumour (GCT).

Similar cancers - primary peritoneal and fallopian tube cancer are diagnosed and treated similarly to ovarian cancer.

Treatments

Early stage cancers

Borderline tumours or early stage ovarian cancer can usually be cured with surgery.

Early stage clear cell, high grade serous or stage 1c are usually offered chemotherapy after surgery (adjuvant).

Some women with early stage disease may be offered fertility sparing surgery.

Advanced Ovarian Cancer

Treated with surgery and the chemotherapy can be pre or post-surgery. Chemotherapy may be the main treatment used to palliate and control symptoms.

Surgery usually involves: Total Abdominal Hysterectomy, with Bilateral Salpingo-oophorectomy, and Bilateral Pelvic and para aortic Lymphadenectomy, and Omentectomy, +/- Bowel resection (in some cases).

Resources

RCOG (2016) *Patient Information leaflet on Ovarian cancer* www.rcog.org.uk/en/patients/patient-leaflets/ovarian-cancer

NICE (2011) *Ovarian cancer: recognition and initial management* www.nice.org.uk/Guidance/Cg122

Fertility Preservation

Fertility preservation involves freezing and storing sperm or eggs (gametes), ovarian reproductive material or embryos for use in a person's future fertility treatment.

Techniques for storing gametes and embryos are now well established and progress has also been made with the preservation of ovarian and testicular reproductive material.

Good quality information, informed consent and appropriate counselling are critical before preservation can begin, but it must be managed early.

Legal and regulation issues

Storage and the use of gametes and embryos falls under the regulatory remit of the Human Fertilisation and Embryology Authority (HFEA), which also provides information about HFEA licensed fertility centres across the UK.

The main legislation around fertility preservation is:

- Human Fertilisation and Embryology Act 1990 (amended) (HFE Act)
- Human Tissue Act 2004, use and storage of ovarian and testicular reproductive material.

Reason for preserving fertility

- Medical – life limiting disorders.
- Gender reassignment.
- Social/economic – wishing to delay becoming pregnant.

Resources

RCN (2017) *Fertility Preservation*
www.rcn.org.uk/professional-development/publications/pub-005986

Fertility Care

Infertility is defined by WHO (2018) as the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse.

About 80% of couples will conceive naturally, however 1:7-8 women across the globe will have difficulty and require treatment for infertility. There are also non-medical reasons for choosing fertility care, including same sex individuals/couples or transgender people who seek infertility care, or those who choose to defer their child bearing until a suitable time for them.

Causes

- 1/3 male associated physiology.
- 1/3 female related physiology.
- 1/3 other (e.g. single women/same sex relationships)/ unknown causes.

Options

- Some people will choose not to pursue treatment.
- People who ask for medical advice should have appropriate investigations and referral to a fertility specialist, and if indicated follow a care pathway based on the NICE guideline.
- For some, a technical solution is the option, via reproductive technologies to achieve a pregnancy, this may be in the form of IVF (In vitro fertilisation) or similar techniques.
- This may require the use of donor gametes.
- Fostering or adoption may be an option and information should be provided.
- Surrogacy may be an option in some cases.

Mental Wellbeing and Fertility

Confirming infertility or accessing and using treatment options can be an emotional rollercoaster, requiring the right level of support and counselling at the right time. All health care professionals should be aware of people's emotional as well as clinical needs.

All assisted conception clinics in the UK are legally required to offer their patients information and support counselling and the counsellors are expected to be accredited by the British Infertility Counselling Association or equivalent.

Resources

Human Fertilisation & Embryology Authority (HFEA)
www.hfea.gov.uk

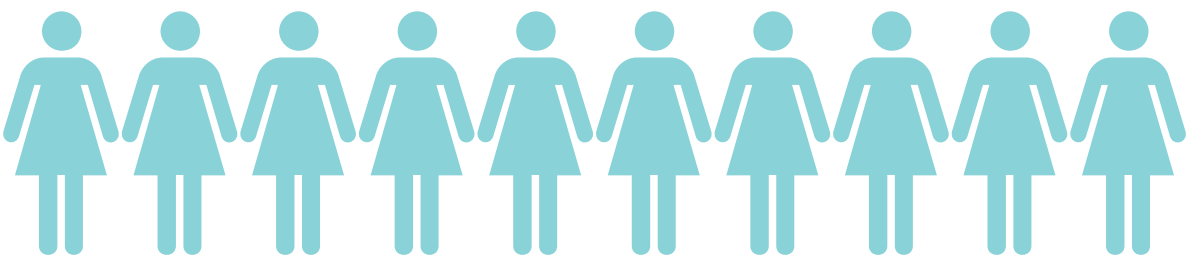
Getting started (2018) HFEA guide to Treatment
www.hfea.gov.uk/about-us/publications

British Infertility Counselling Association (BICA)
www.bica.net

Fertility Network UK
www.fertilitynetworkuk.org

NICE Guideline (2017) Fertility problems: assessment and treatment www.nice.org.uk/guidance/cg156

RCN (2019) Fertility care and emotional wellbeing
www.rcn.org.uk/professional-development/publications/pub-007770



Ovarian Hyperstimulation Syndrome (OHSS)

OHSS is a complication of fertility treatment occurring from excessive response to fertility drugs. Ovaries enlarge, leaking chemicals into the blood stream resulting in fluid retention and increased risk of venous thromboembolism embolism (VTE).

Mild or moderate OHSS occurs in up to 33% of women.

Severe OHSS occurs in 1% carrying a risk of mortality.

Women should be advised of the risks of OHSS prior to starting treatment.

Risk factors

- Under 30.
- History of polycystic ovary syndrome.
- Previous OHSS.
- Pregnancy.

Symptoms

- Abdominal discomfort swelling.
- Nausea and vomiting.
- Extreme thirst.
- Dehydration.

Management

Most symptoms resolve in 7-10 days but may persist into pregnancy. Hospital admission may be required.

- Analgesics and antiemetics.
- Fluid replacement – usually oral.
- Thromboprophylaxis.
- Paracentesis of ascitic fluid if indicated.
- Regular review.

References

www.britishfertilitysociety.org.uk/wp-content/uploads/2015/09/Ovarian-Hyperstimulation-Syndrome-OHSS.pdf

www.rcog.org.uk/globalassets/documents/guidelines/green-top-guidelines/gtg_5_ohss.pdf

www.rcog.org.uk/en/patients/patient-leaflets/ovarian-hyperstimulation-syndrome/

Menopause

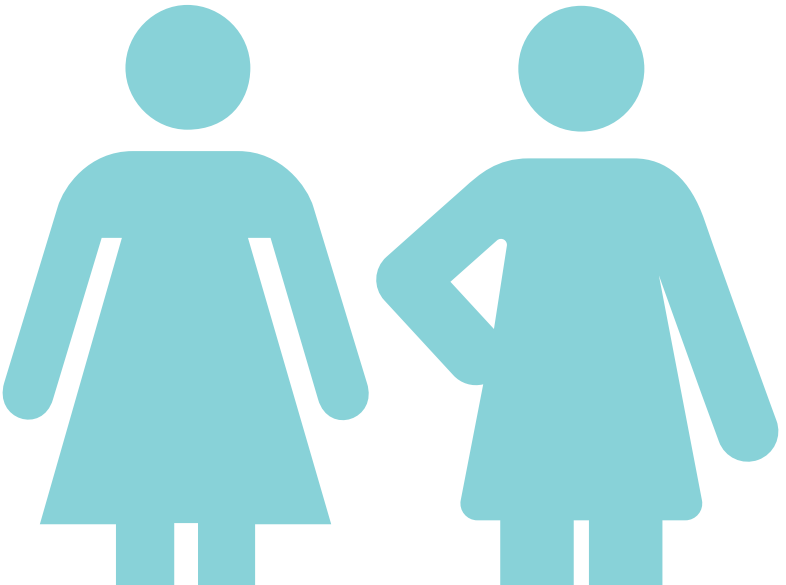
The menopause occurs when menstrual periods become irregular (perimenopause) and then finally stop; when this occurs a women can no longer get pregnant. A women is post-menopausal when she has not had a period for 12 months.

The average age of menopause is 51 in the UK (range 45-57).

Premature ovarian insufficiency (POI) usually occurs in women under 40.

Signs and symptoms

- Irregular periods or absent periods.
- Hot flushes/night sweats.
- Mood changes.
- Vaginal dryness.
- Decreased sex drive.
- Problems sleeping.
- Bladder problems.
- Longer-term problems such as osteoporosis and increase in cardiovascular disease (CVD).



Causes

- A natural event that all women experience.
- Decreased oocytes leads to increase in FSH/LH and decrease in oestrogen (negative feedback system).
- Induced menopause – medication, surgery, chemotherapy, radiotherapy.
- Primary Ovarian Insufficiency (POI) – unknown, genetic, infections, autoimmune.

Keeping healthy at the menopause

Some women experience minimal symptoms and medical intervention is not needed. It is important to optimise health with good diet, weight management and increasing exercise, to help with CVD, bones and minimise symptoms.

Treatments

- Lubricants or moisturisers for vaginal symptoms.
- Diet and lifestyle changes – reduce caffeine, alcohol and stop smoking and keep food diary for flush triggers.
- Herbal remedies.
- Cognitive Behavioural Therapy.
- Hormone replacement therapy (HRT) – available as tablets, patches, gel, intrauterine progestogen, vaginal oestrogen for local treatments. Oestrogen and progesterone if the women has a womb and oestrogen if not.
- Prescribed alternatives such as clonidine, SSRI and gabapentin (off Licence).

Benefits and risks of HRT

- Symptoms management.
- Side effects – breast tenderness, headaches, bleeding, mood changes.
- Slight increased risk of breast cancer, strokes, blood clots (less with transdermal oestrogen) (NICE, NG23, 2019).
- HRT within specialist care only, if previous VTE, hormone dependent cancer, undiagnosed vaginal bleeding, liver disease.

Further information

The British Menopause Society (BMS) https://thebms.org.uk/
Daisy network www.daisynetwork.org.uk

Menopause matters www.menopausematters.co.uk

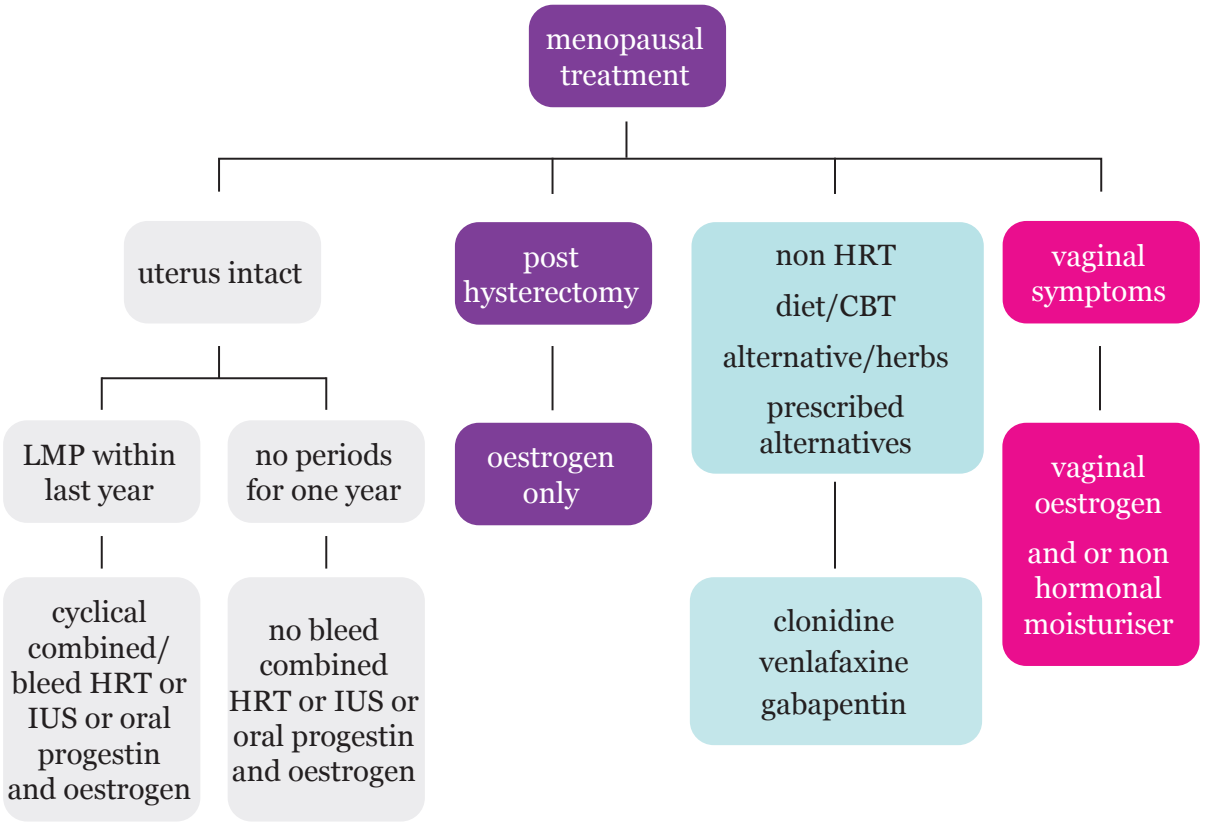
NICE guideline [NG23] November 2019 NICE Menopause: diagnosis and management www.nice.org.uk/guidance/ng232019

RCN (2017) *Menopause RCN guidance for nurses and midwives* www.rcn.org.uk/professional-development/publications/pub-006329 2017

RCN (2019) *Promoting Menstrual Wellbeing* www.rcn.org.uk/professional-development/publications/pub-007856

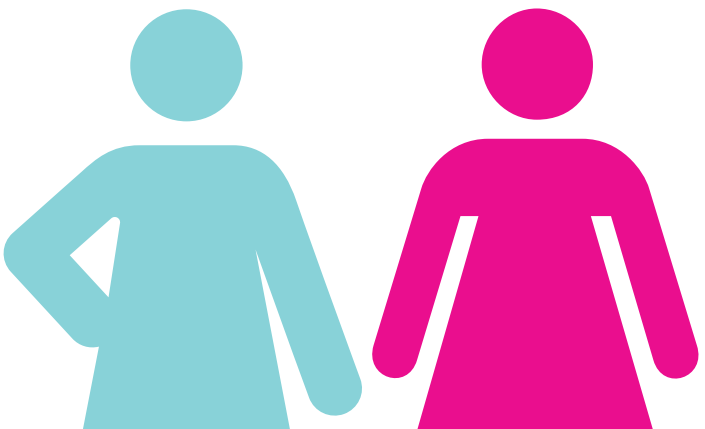
www.rcn.org.uk/professional-development/publications/pub-007813

Treatment of Menopause



NICE 2015

NICE guideline [NG23] November *NICE Menopause: diagnosis and management* www.nice.org.uk/guidance/ng232019



Women and Mental Wellbeing

Women are twice as likely as men to be diagnosed with a mental health problem.

53% of women who have mental ill-health have experienced violence/abuse or post traumatic distress syndrome (affects over 31% of population).

Impacts on mental well-being include:

- feelings, thoughts and actions
- physical health, wellness and experiences
- education and employment
- social/family relationships
- economic and social circumstances
- lifestyle choices
- culture and ethnic background
- gender and sexuality
- use of drugs or alcohol
- past experiences
- any dependents e.g. a child or elderly relative

Types

- Generalised anxiety disorder (GAD), social anxiety, panic disorder, obsessive-compulsive disorder (OCD).
- Severe mental health problems include:
  - depression
  - psychosis and bipolar disorders
  - autistic spectrum disorders
  - personality disorders
  - attention deficit hyperactivity disorder
- Suicide and self-harm.
- Perinatal mental health (PMH) - mental health during pregnancy and the first postnatal year. Characterised by an existing mental health issue or a condition that arises during pregnancy:
  - antenatal depression
  - postpartum:
    - maternity blues, affects 80%
    - postnatal depression, affects 10%
    - puerperal psychosis, rare but severe psychiatric illness.

Women and Mental Wellbeing

As you enquire 'how are you feeling? Consider asking the following supplementary questions:

- Do you take time to look after yourself?
- How are you coping?
- Do you feel low?
- Are you sleeping poorly?
- Are you not eating properly?
- Are you tearful, angry and/or anxious?
- Do you have concerns about your mental health?
- Do you have anyone to talk to about your concerns and what impact is this having?

This should lead to a diagnosis of mental wellbeing as well as physical health.

IDENTIFY > DIAGNOSE > EARLY INTERVENTION > APPROPRIATE CARE > AFTER CARE

Resources

Mental Health Foundation (2017) *Fundamental Facts about mental health 2016* www.mentalhealth.org.uk/publications/fundamental-facts-about-mental-health-2016

Agenda www.weareagenda.org (Women in Mind campaign)

NICE Mental health and wellbeing www.nice.org.uk/guidance/lifestyle-and-wellbeing/mental-health-and-wellbeing

Rethink www.rethink.org

Young Minds www.youngminds.org.uk

Vulnerable Girls and Women Resources

It is worth remembering that anyone can feel vulnerable at any time, and especially when accessing health care, however some women and girls will have defined as vulnerable, and it is important to consider this during every contact made.

Domestic abuse
www.rcn.org.uk/clinical-topics/domestic-violence-and-abuse

www.rcn.org.uk/professional-development/publications/pub-005985

Female genital mutilation
www.rcn.org.uk/clinical-topics/female-genital-mutilation

Female genital mutilation: *An RCN resource for nursing and midwifery practice* (RCN, 2019)
www.rcn.org.uk/professional-development/publications/pub-007833

Modern slavery
www.rcn.org.uk/clinical-topics/modern-slavery

www.rcn.org.uk/professional-development/publications/pub-005984

Forced marriage and honor based violence www.gov.uk/guidance/forced-marriage

SafeLives www.safelives.org.uk

Women's Aid Federation of England
www.womensaid.org.uk

Safer Wales Ltd
www.saferwales.com

Safeguarding in Northern Ireland
www.hscboard.hscni.net/niasp

Adult support and protection - Scotland
www.gov.scot/policies/social-care/adult-support-and-protection

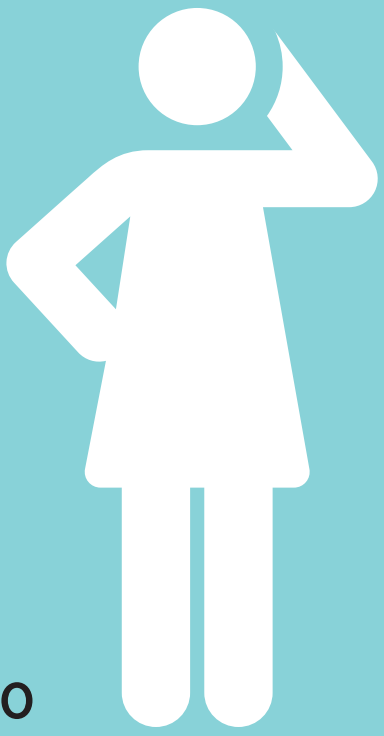
Department of Health
Domestic abuse: *Domestic abuse: a resource for health professionals*
www.gov.uk/government/publications/domestic-abuse-a-resource-for-health-professionals

NHS England Safe guarding policy
www.england.nhs.uk/publication/safeguarding-policy

You are responsible for safeguarding those in your care and you must respond to any safeguarding concerns.
Safeguarding: www.rcn.org.uk/clinical-topics/safeguarding
Have you explored the RCN Women's health clinical pages?
www.rcn.org.uk/clinical-topics/womens-health

Royal College of Nursing

Keep in touch



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