Edited by EMMA J CROSBIE and LOUISE C KENNY

21st EDITION

GYNAECOLOGY

by Ten Teachers

Done by

SEXUAL DIFFERENTIATION OF THE FETUS AND DEVELOPMENT OF SEXUAL ORGANS

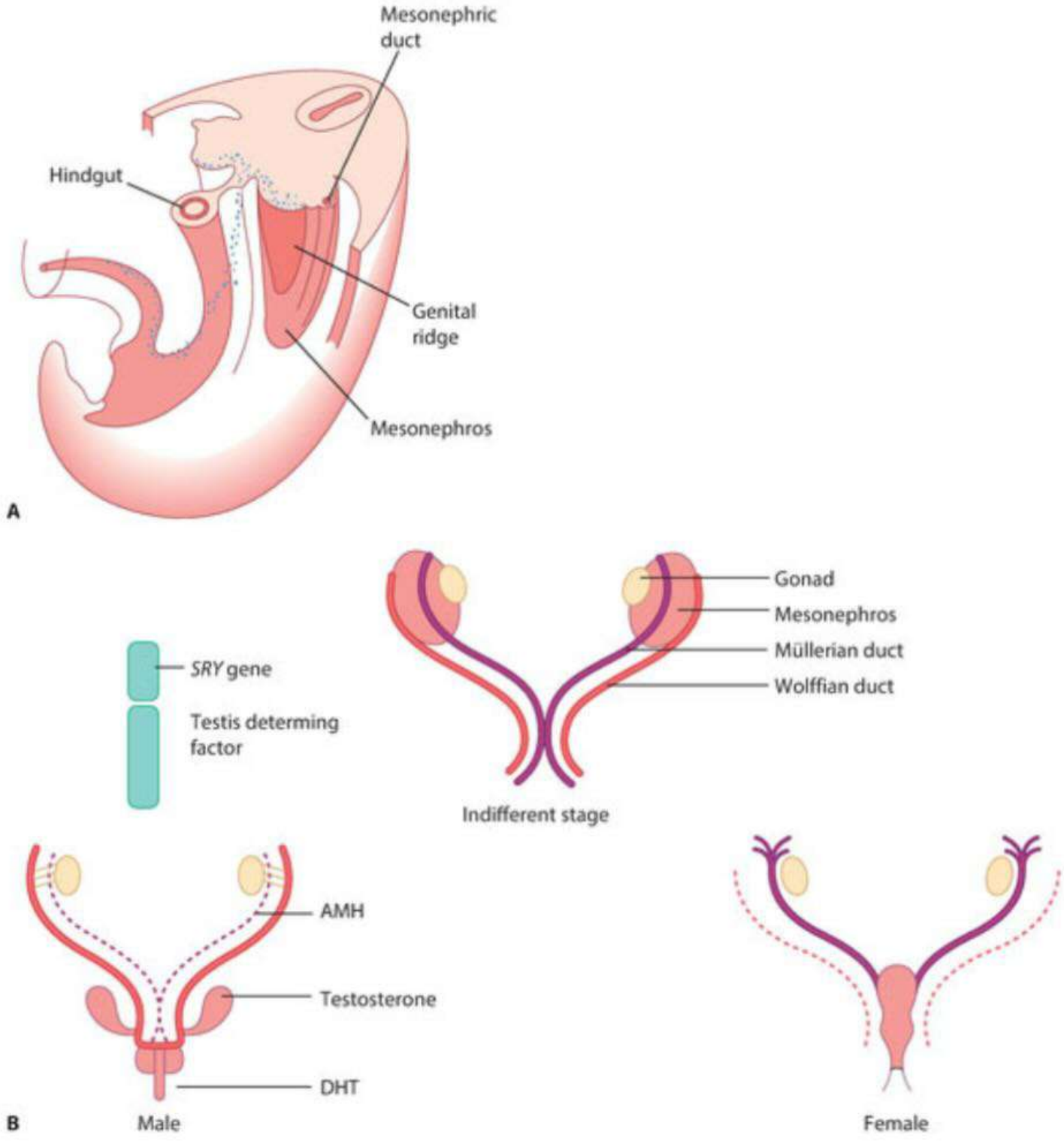


Figure 1.1 (**A**) Cross-section diagram of the posterior abdominal wall showing the genital ridge. (**B**) Diagrammatic representation of the embryological pathways of male and female development. (AMH, anti-Müllerian hormone; DHT, dihydrotestosterone; SRY, sex-determining region of the Y chromosome.)

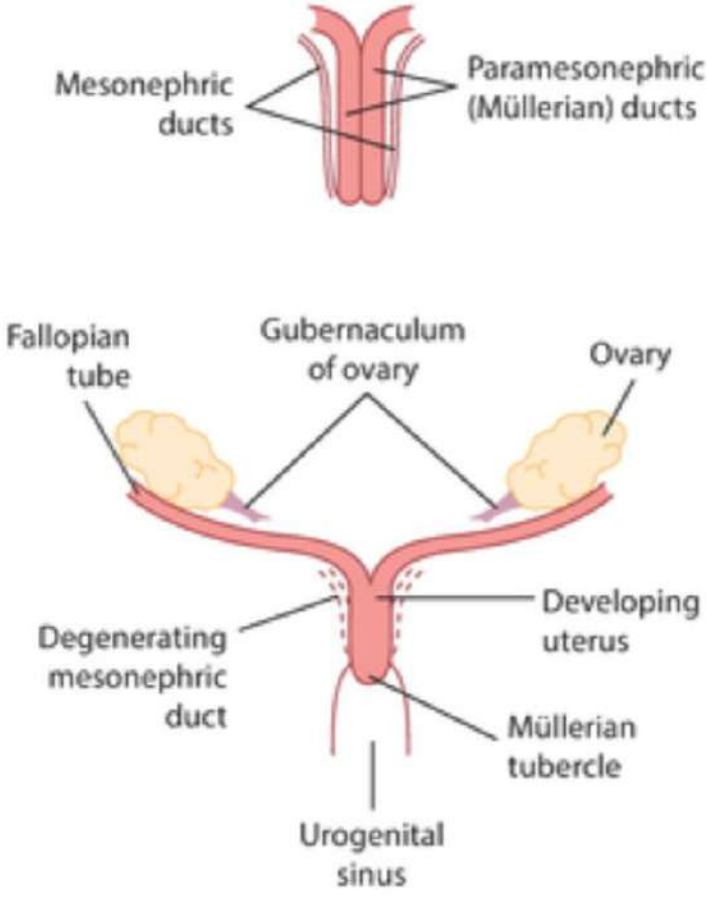


Figure 1.2 Caudal parts of the paramesonephric ducts (top) fuse to form the uterus and fallopian tubes.

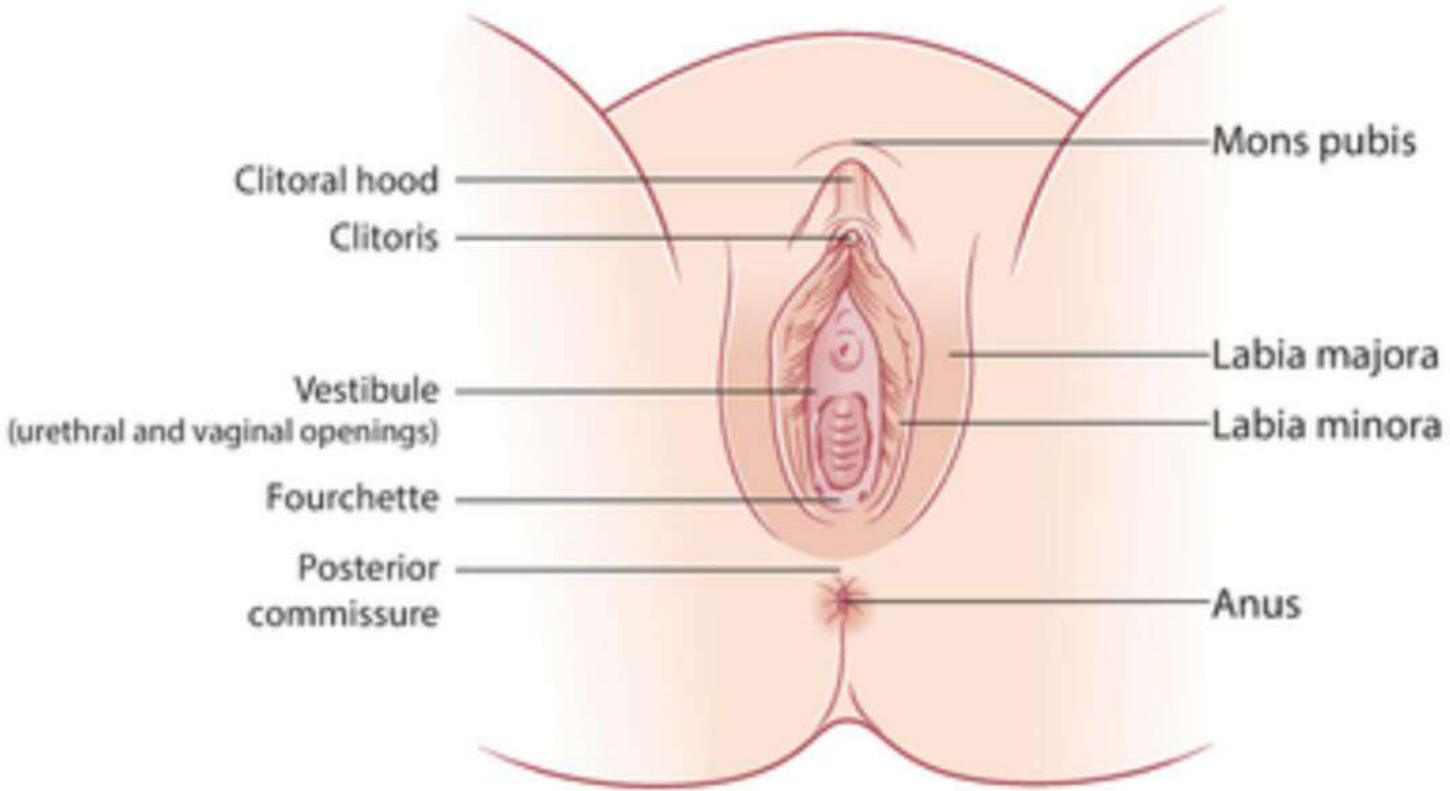


Figure 1.3 Anatomy of the external genitalia.

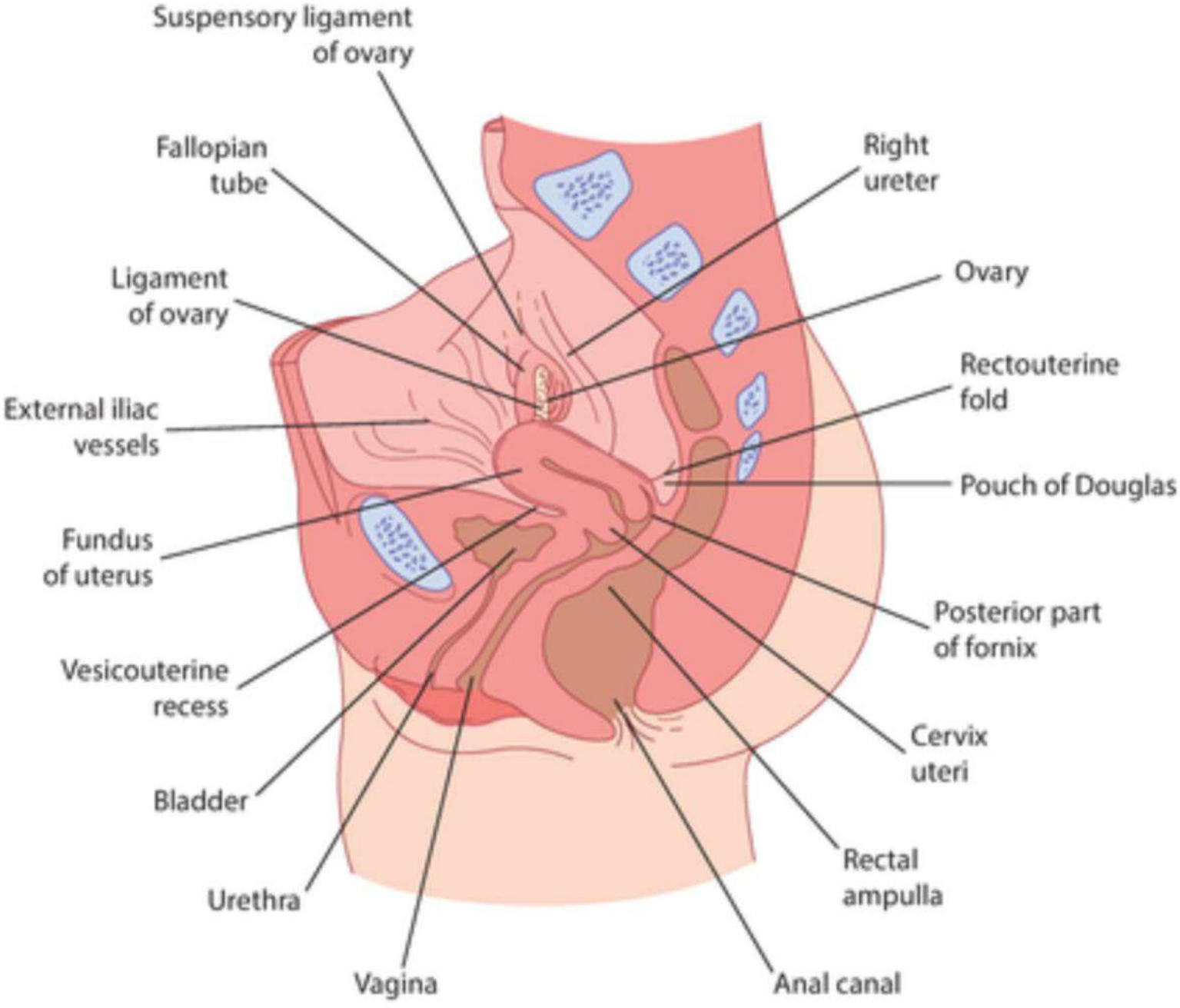


Figure 1.4 Sagittal section of the female pelvis.

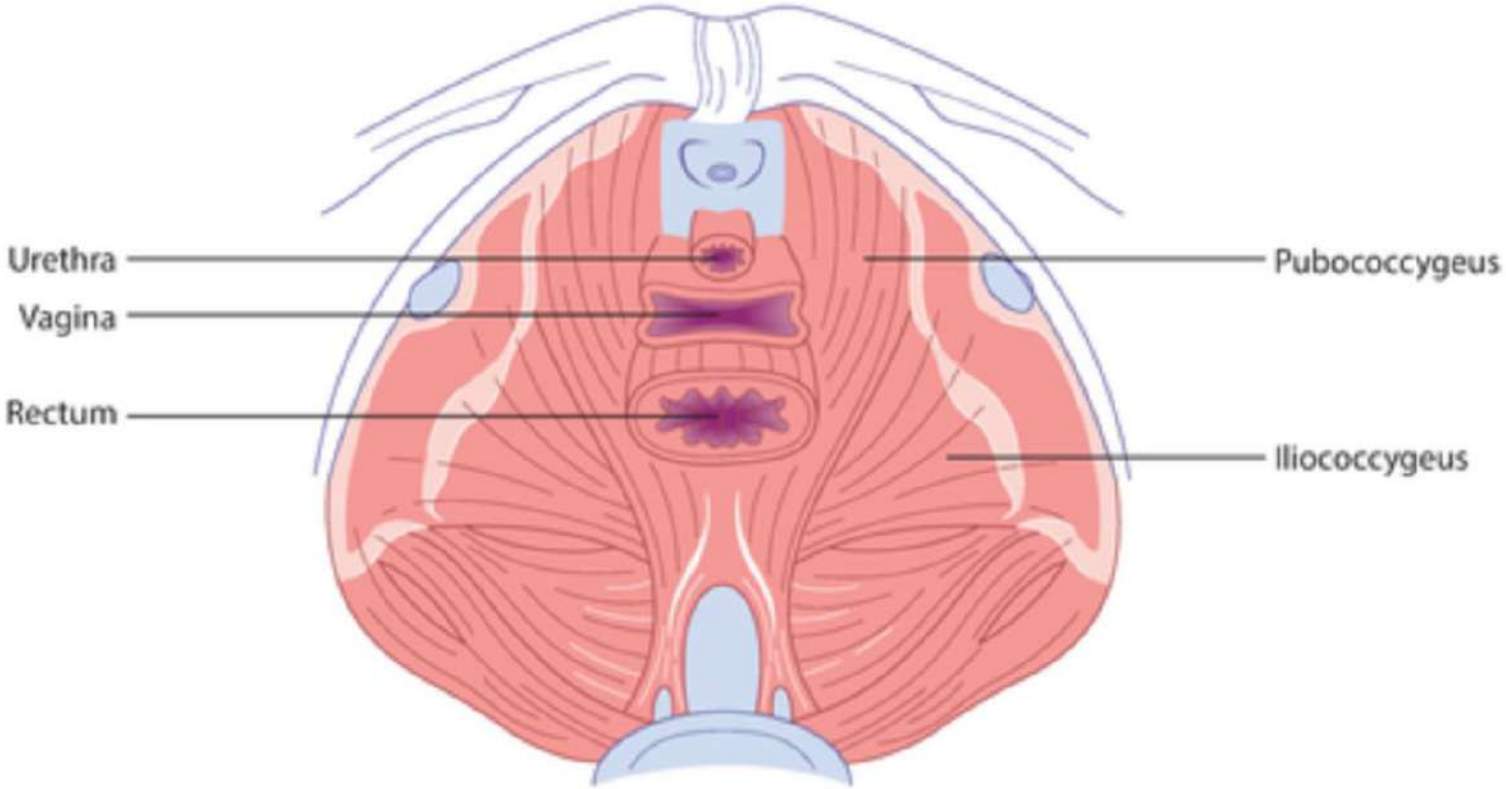
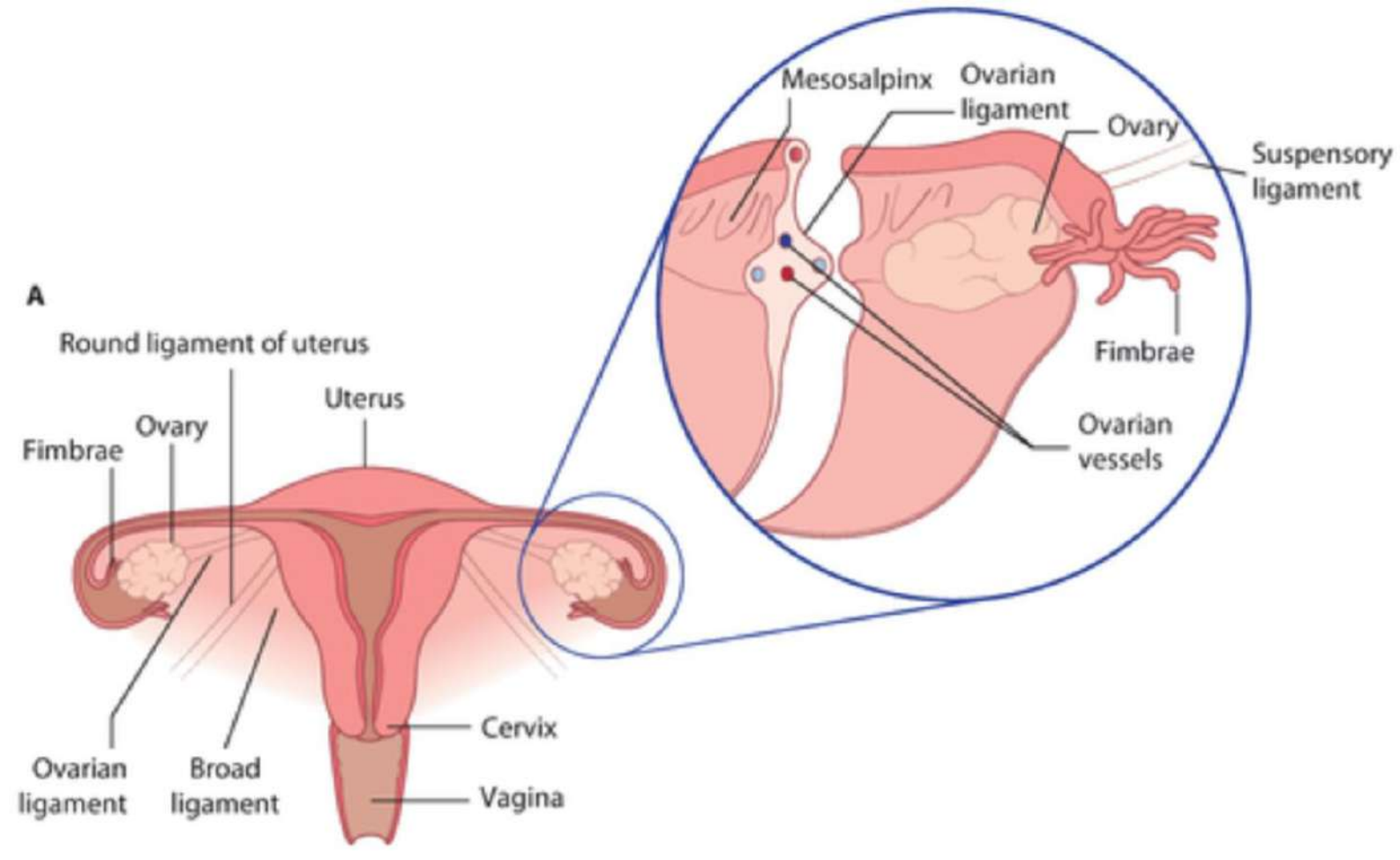


Figure 1.5 Pelvic floor musculature.


A
Round ligament of uterus
Uterus
Ovary
Fimbrae
Ovarian ligament
Broad ligament
Cervix
Vagina
Mesosalpinx
Ovarian ligament
Ovary
Suspensory ligament
Fimbrae
Ovarian vessels

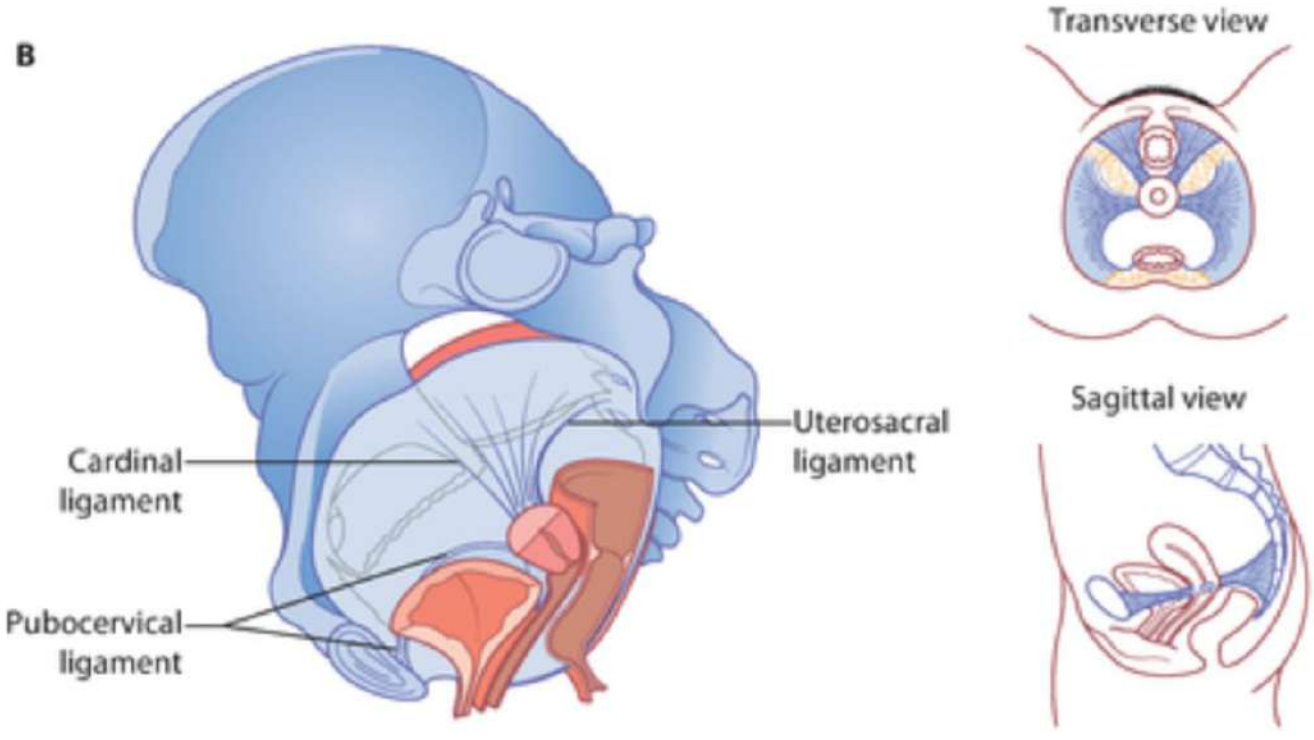
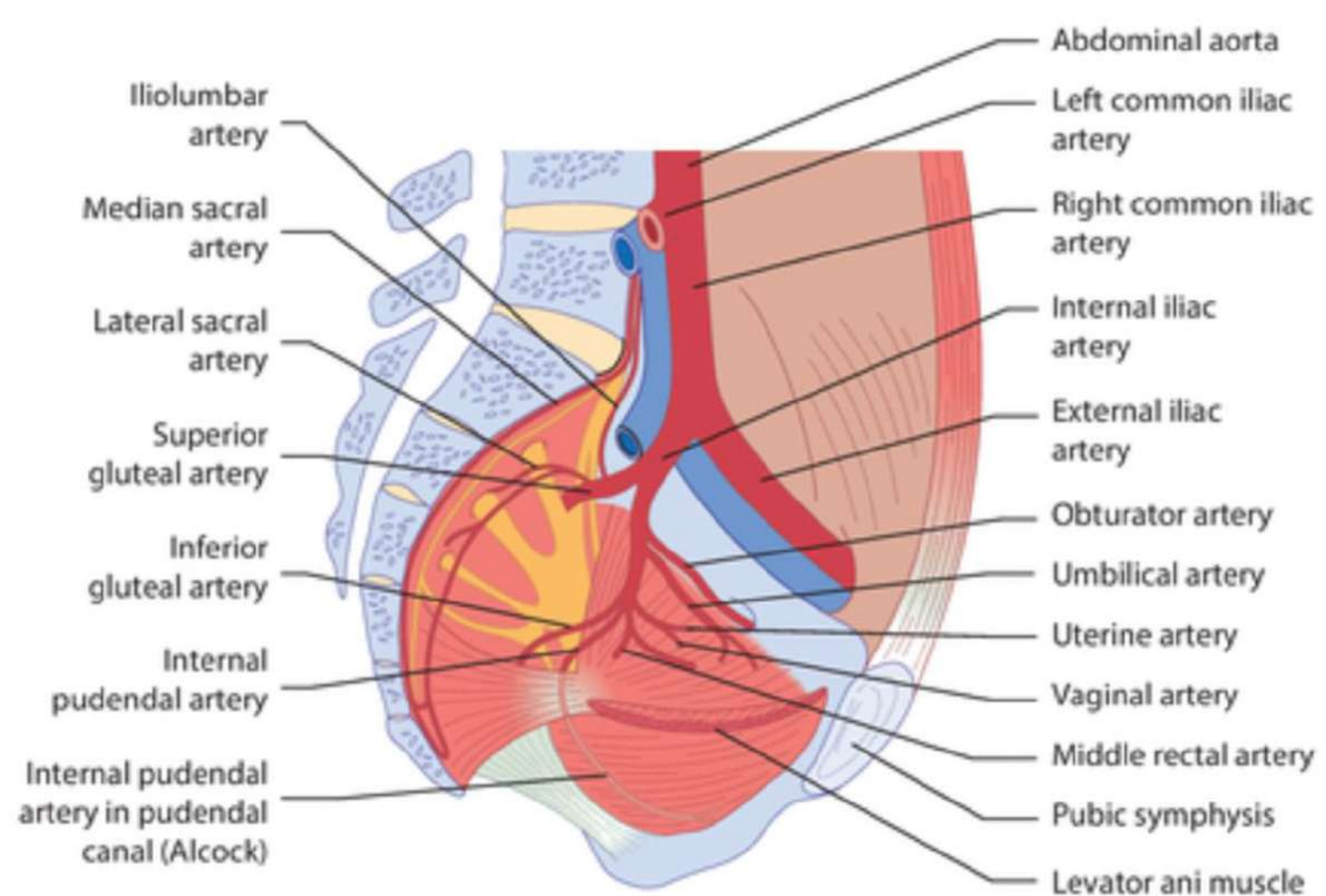


Figure 1.6 (**A**) The round and broad ligaments. (**B**) The cervical and uterine ligaments.


Iliolumbar artery
Median sacral artery
Lateral sacral artery
Superior gluteal artery
Inferior gluteal artery
Internal pudendal artery
Internal pudendal artery in pudendal canal (Alcock)
Abdominal aorta
Left common iliac artery
Right common iliac artery
Internal iliac artery
External iliac artery
Obturator artery
Umbilical artery
Uterine artery
Vaginal artery
Middle rectal artery
Pubic symphysis
Levator ani muscle

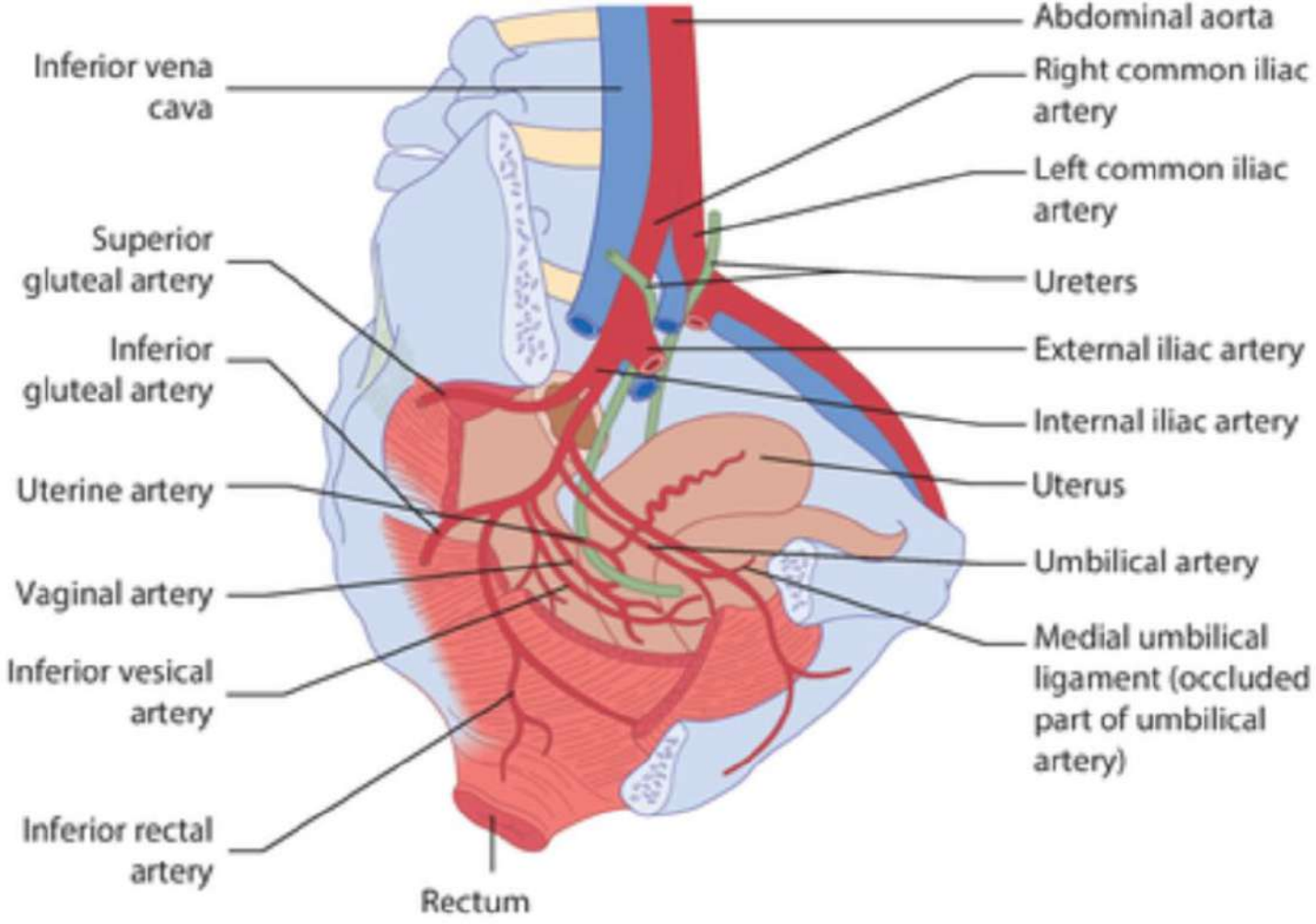


Figure 1.7 Blood supply of the pelvis and perineum.

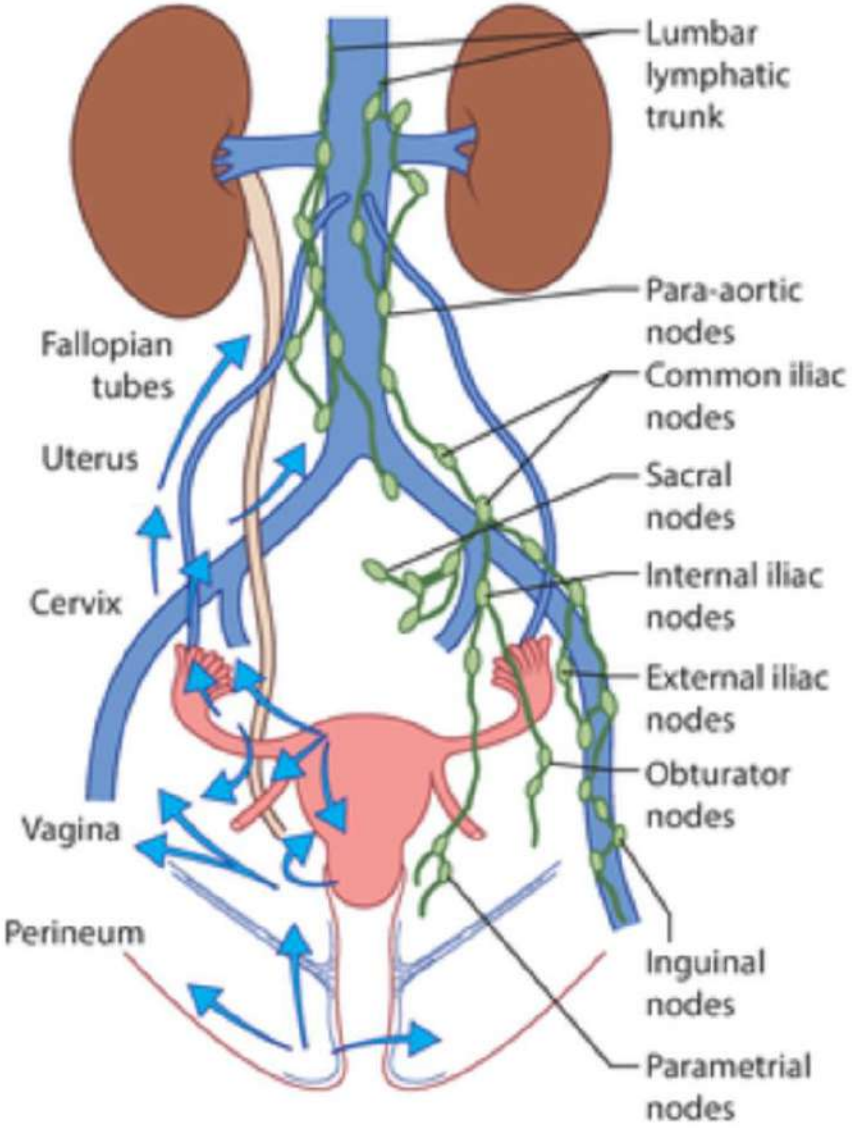


Figure 1.8 Lymphatic drainage of the pelvis and perineum.

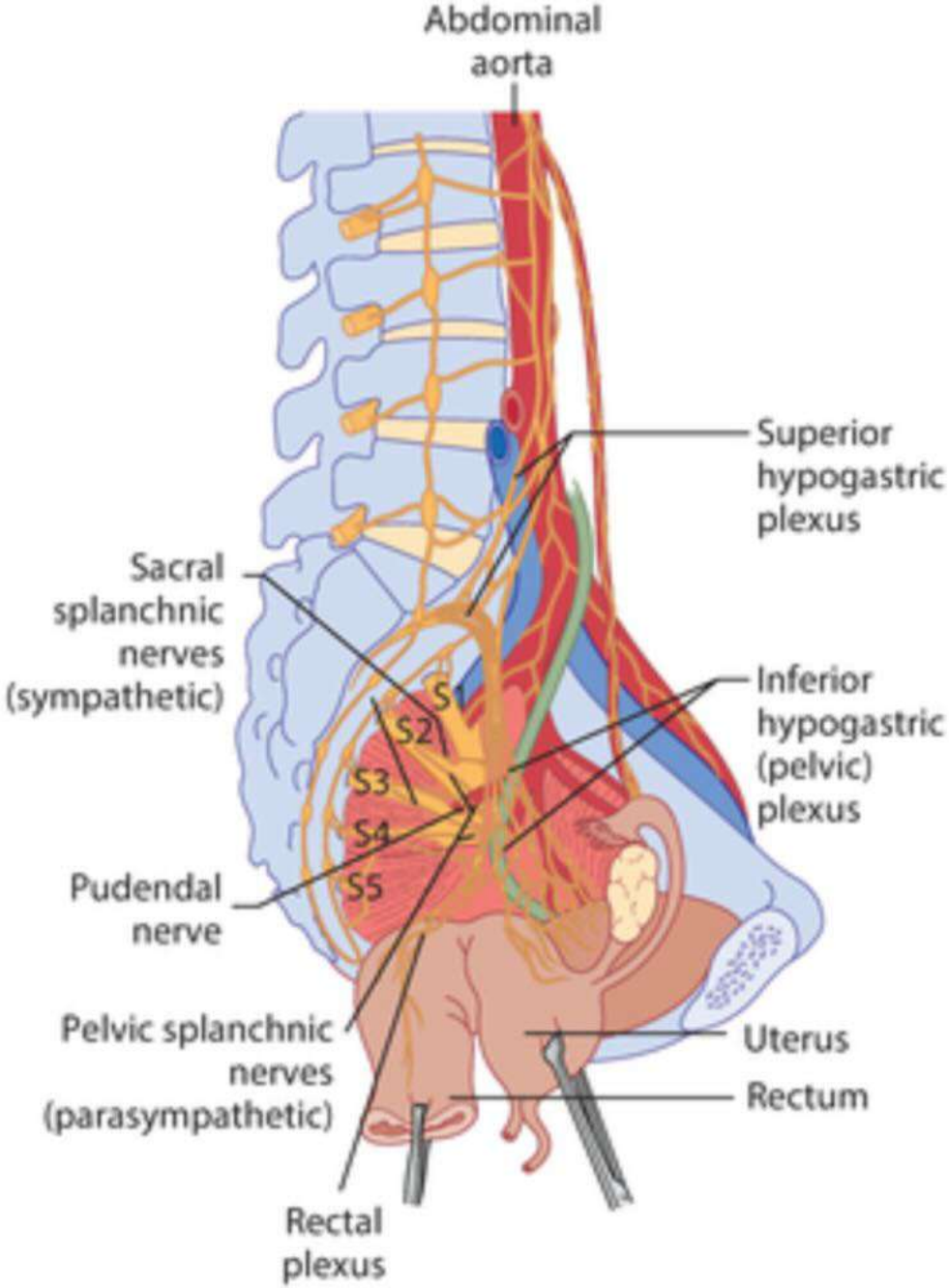


Figure 1.9 Nerve supply of the pelvis and perineum.

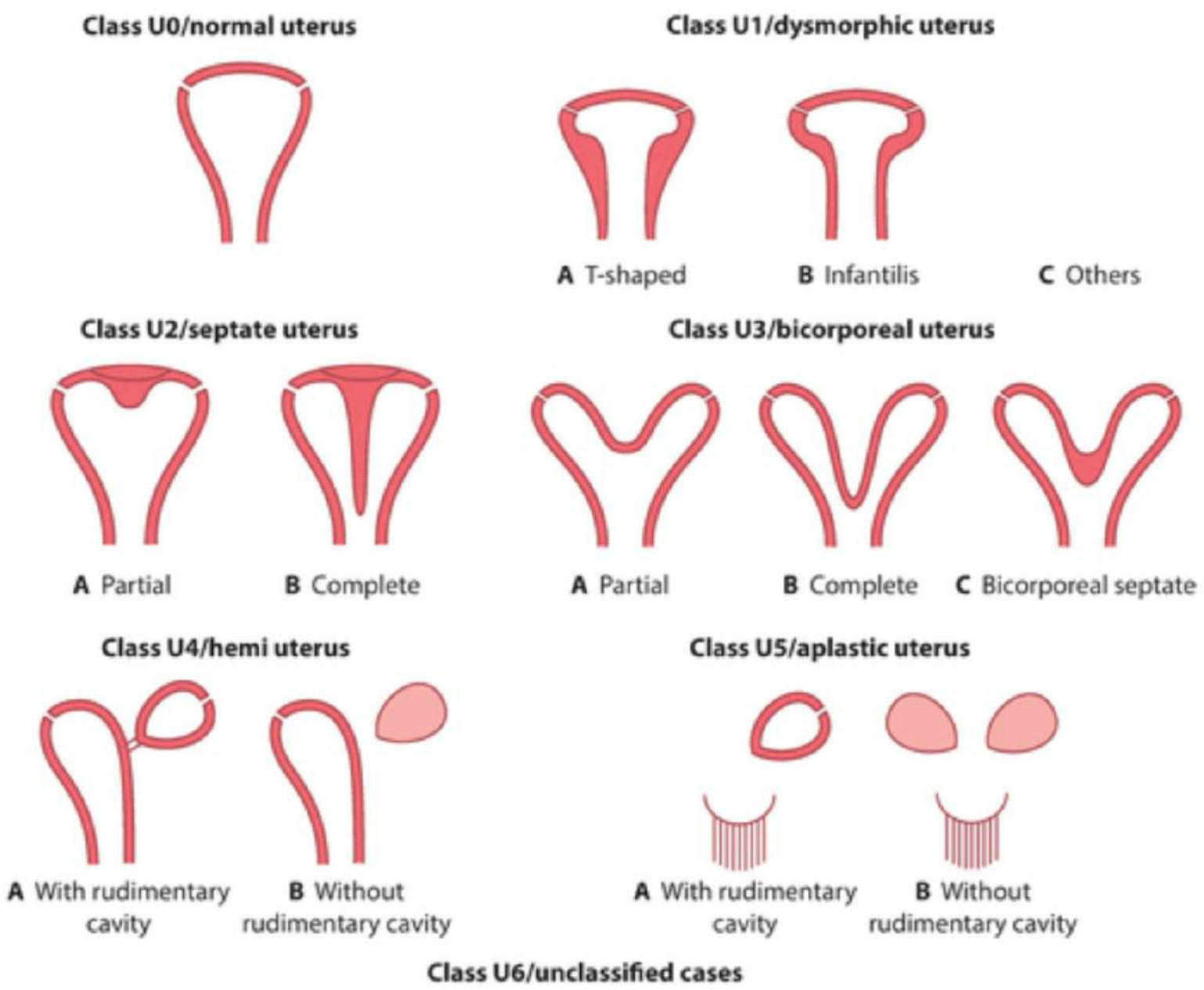


Figure 1.10 Müllerian structural abnormalities.

2 Gynaecological history, examination and investigations

DOI: 10.1201/9781003218036-2

CLAUDINE DOMONEY

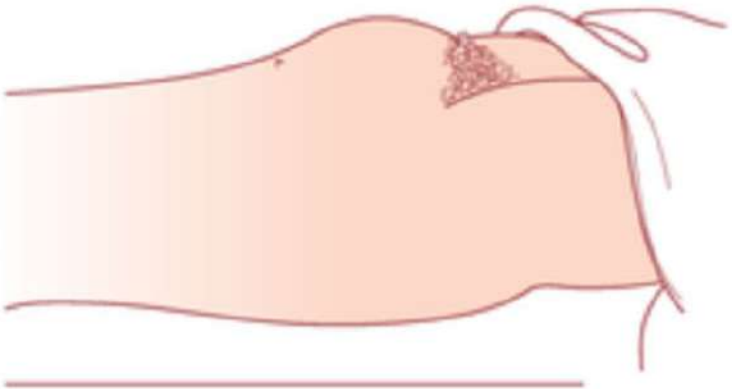
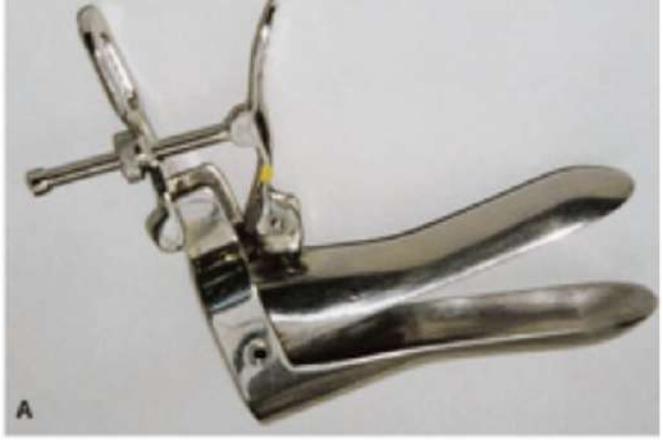


Figure 2.1 A patient in the correct position for abdominal examination, showing obvious abdominal distension.

Figure 2.2 The normal vulva.



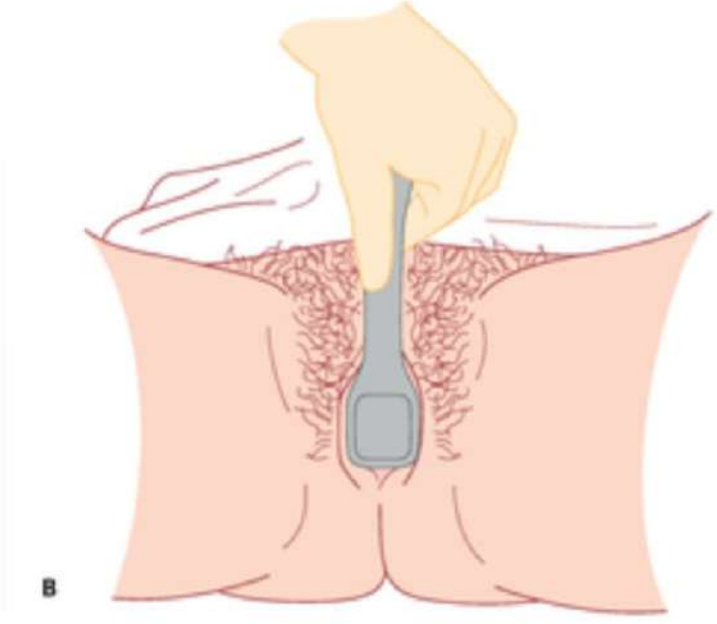
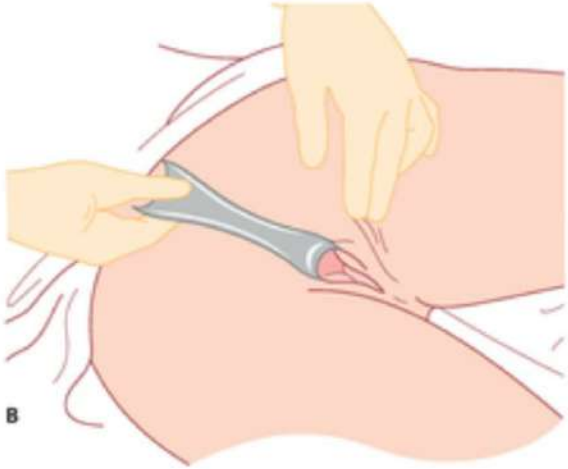


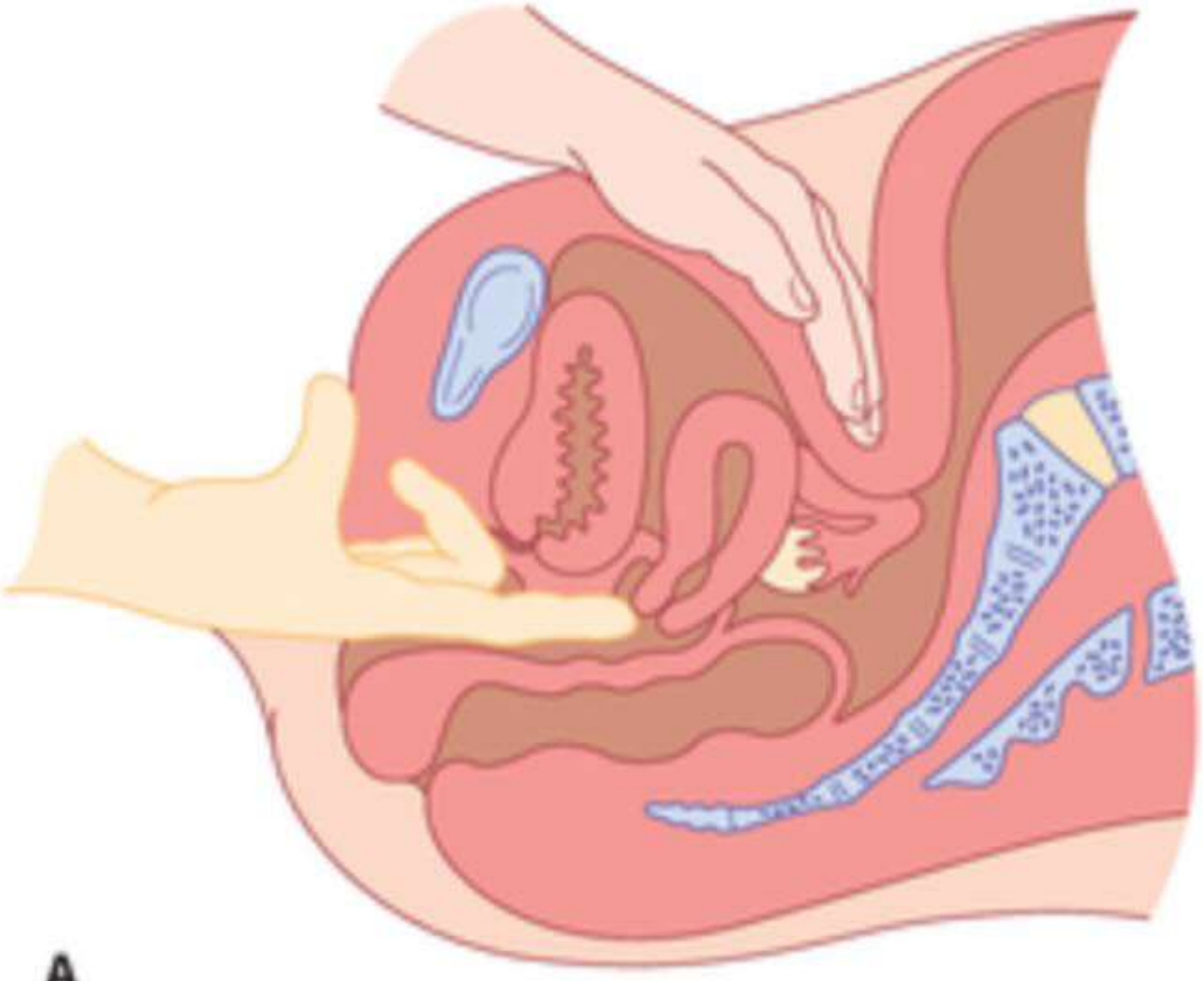
Figure 2.3 (**A**) Cusco's speculum. (**B**) Cusco's speculum in position. The speculum should be inserted at about 45° to the vertical and rotated to the vertical as it is introduced. Once it is fully inserted, the blades should be opened up to visualize the cervix.

Figure 2.4 (**A**) Sim's speculum. (**B**) Sim's speculum inserted with the patient in the left lateral position. The speculum is used to hold back the posterior vaginal walls to allow inspection of the anterior wall and vault. The speculum can be rotated 180° or withdrawn slowly to visualize the posterior wall. A Valsalva manoeuvre (bearing down) may be needed to demonstrate prolapse.



The choice of speculum will depend on the patient's presenting problem or both may be used.

Excessive lubrication should be avoided and, if a cervical screening sample is being taken, lubrication with water should be Considered, as lubricant may interfere with cytological analysis. Microbiology swabs are taken from the vaginal fornices and endocervix. Endocervical swabs for chlamydia and gonorrhoea may be taken from the endocervical canal (see **Chapter 9**), although urine tests are also available. Swabs can also be directed to areas of purulent/significant discharge. Cervical screening samples are taken according to specific guidance.



A

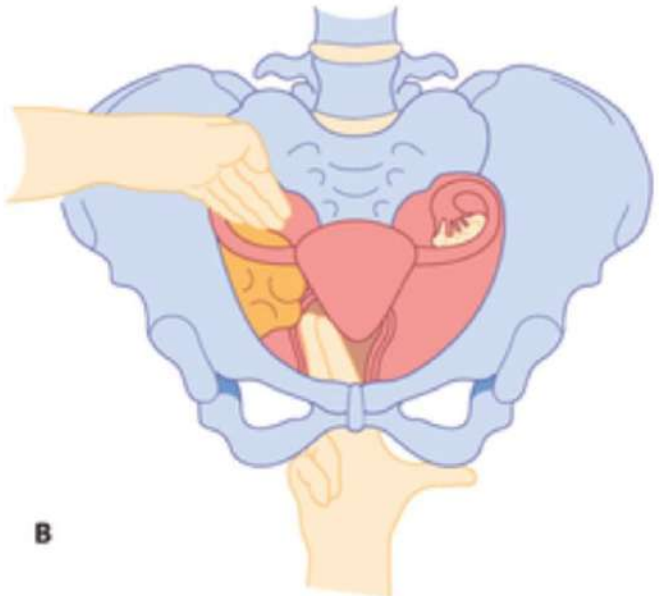
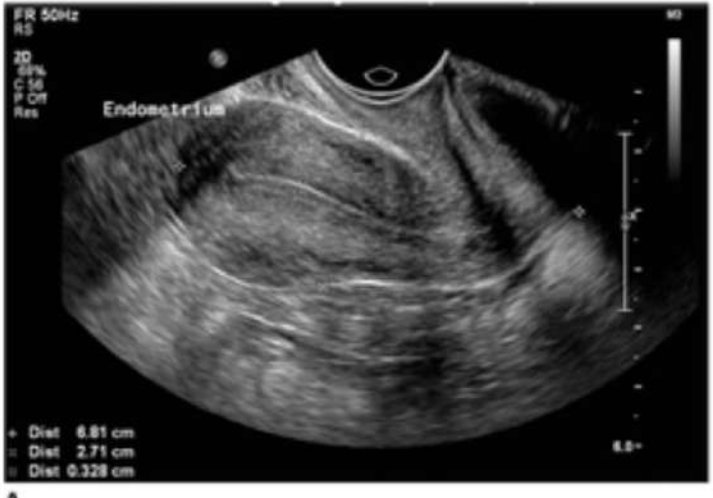
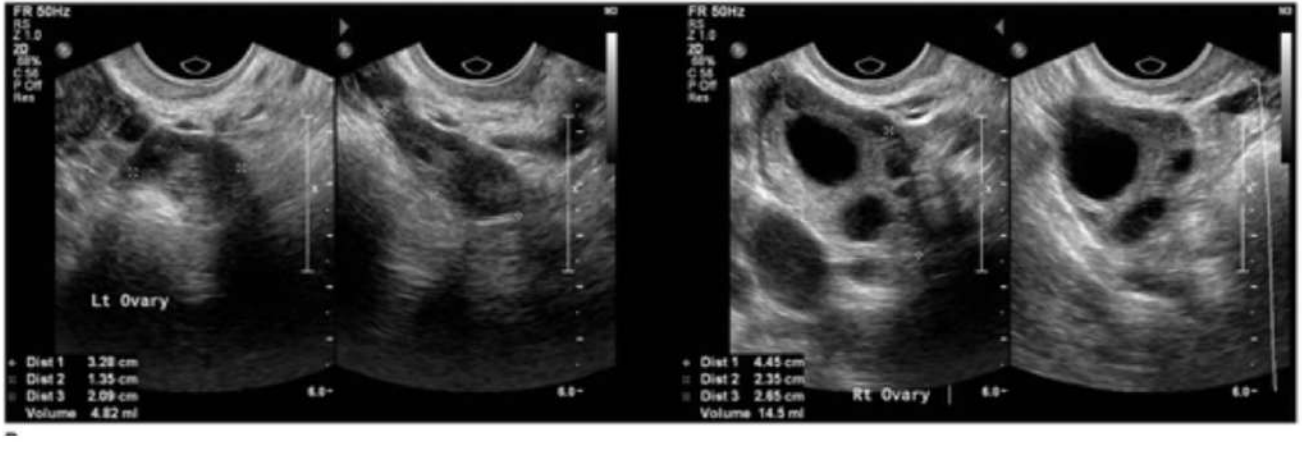


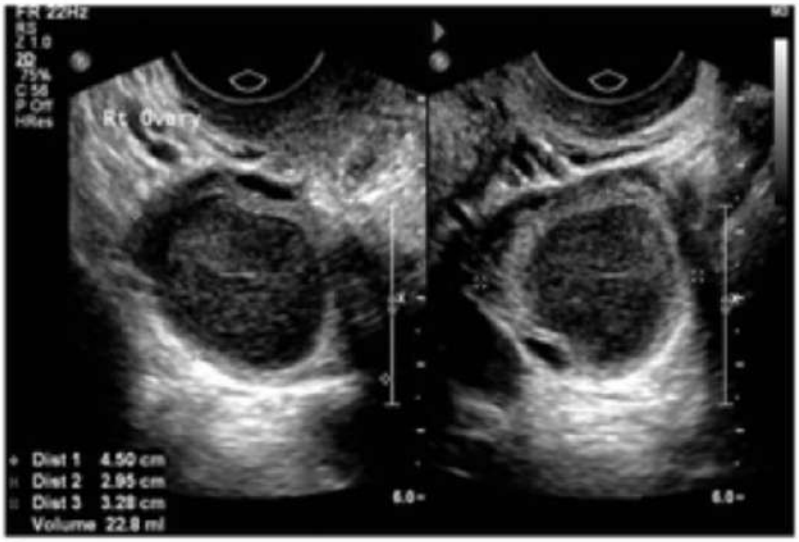
Figure 2.5 (**A**) Bimanual examination of the pelvis assessing the uterine position and size. (**B**) Bimanual examination of the lateral fornix.

Pelvic ultrasound using a transvaginal ultrasound scan (TVUSS) is performed is the investigation of choice for many gynaecological problems in adults. The probe is cleaned in the presence of the patient and covered with a probe cover (or commonly a latex-free condom), containing ultrasound gel on the inside and outside. The probe is inserted into the vagina while the images are viewed on a screen. The images can be shared with the patient, if appropriate, once the correct image has been determined. The presence of pain and the correlation with images can be useful diagnostically. The resolution of TVUSS is high, particularly if the organ lies close to the probe, and the depth of images visible is around 12 cm. Excellent images of the uterus and adnexa, including the internal architecture of the myometrium, endometrium, fallopian tubes *when abnormal* and ovaries are achievable (**Figure 2.6A-D**), as well as images of early intrauterine pregnancies. For those who have not been sexually active, children and teenagers, and some elderly patients, an abdominal ultrasound is more

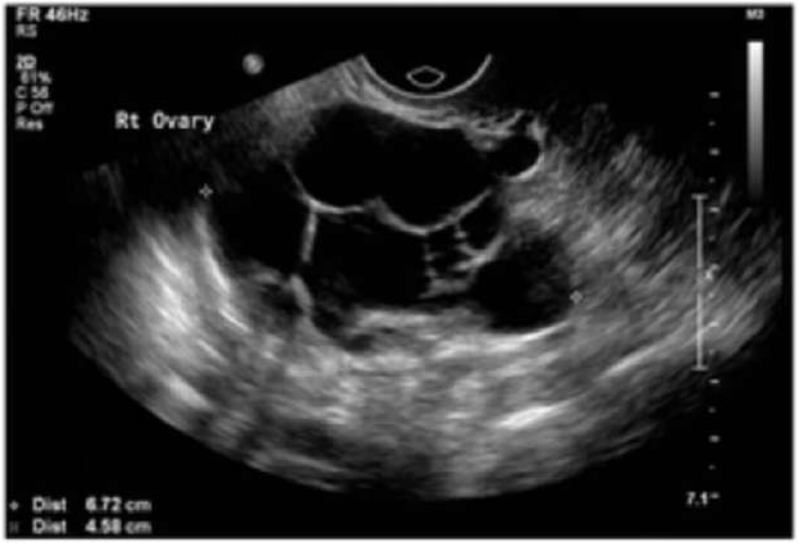

FR 50Hz
Endometrium
Dist 6.81 cm
Dist 2.71 cm
Dist 0.328 cm

A


FR 50Hz
Lt Ovary
Dist 1 3.28 cm
Dist 2 1.35 cm
Dist 3 2.09 cm
Volume 4.82 ml
FR 50Hz
Rt Ovary
Dist 1 4.45 cm
Dist 2 2.35 cm
Dist 3 2.65 cm
Volume 14.5 ml

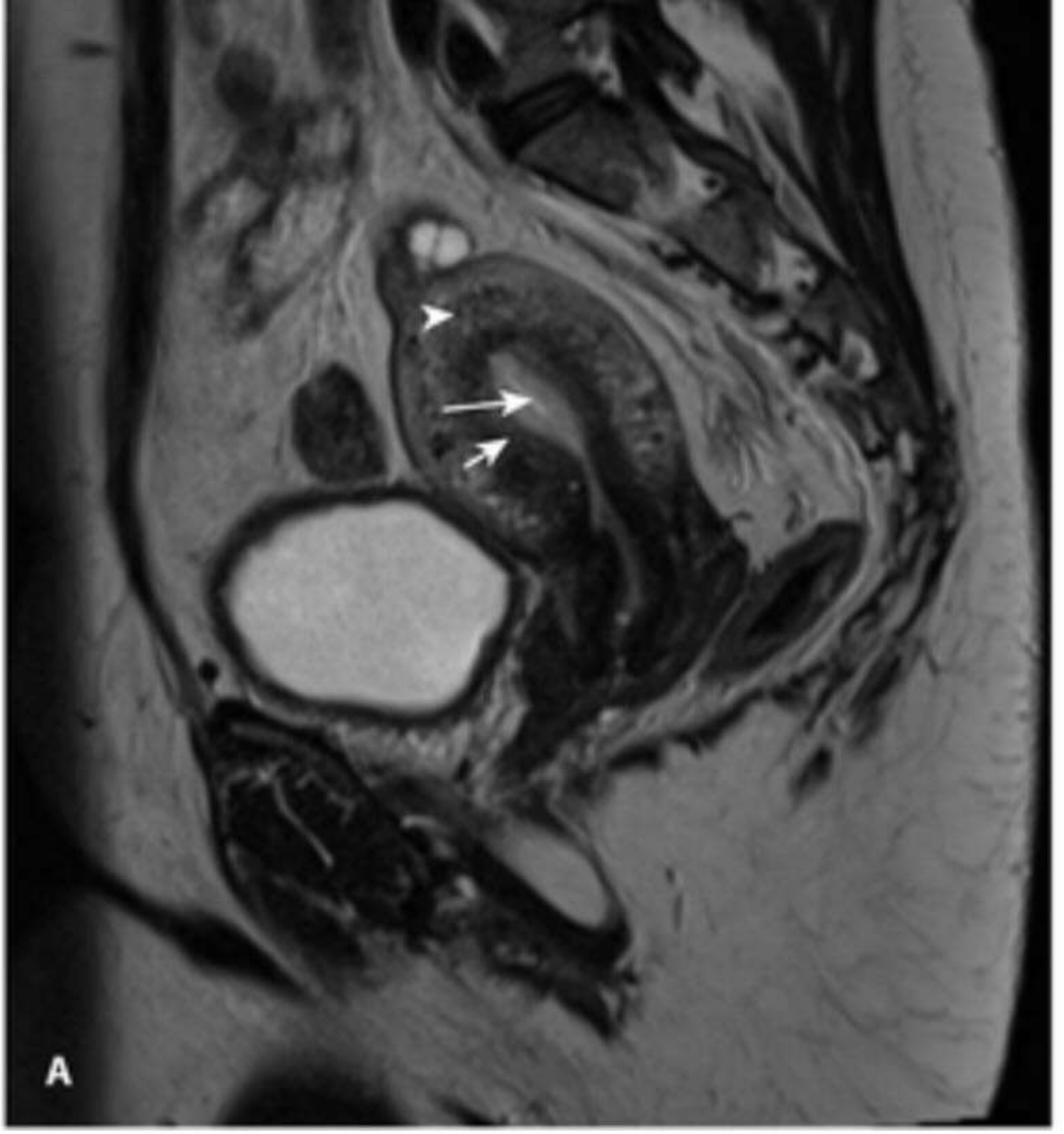


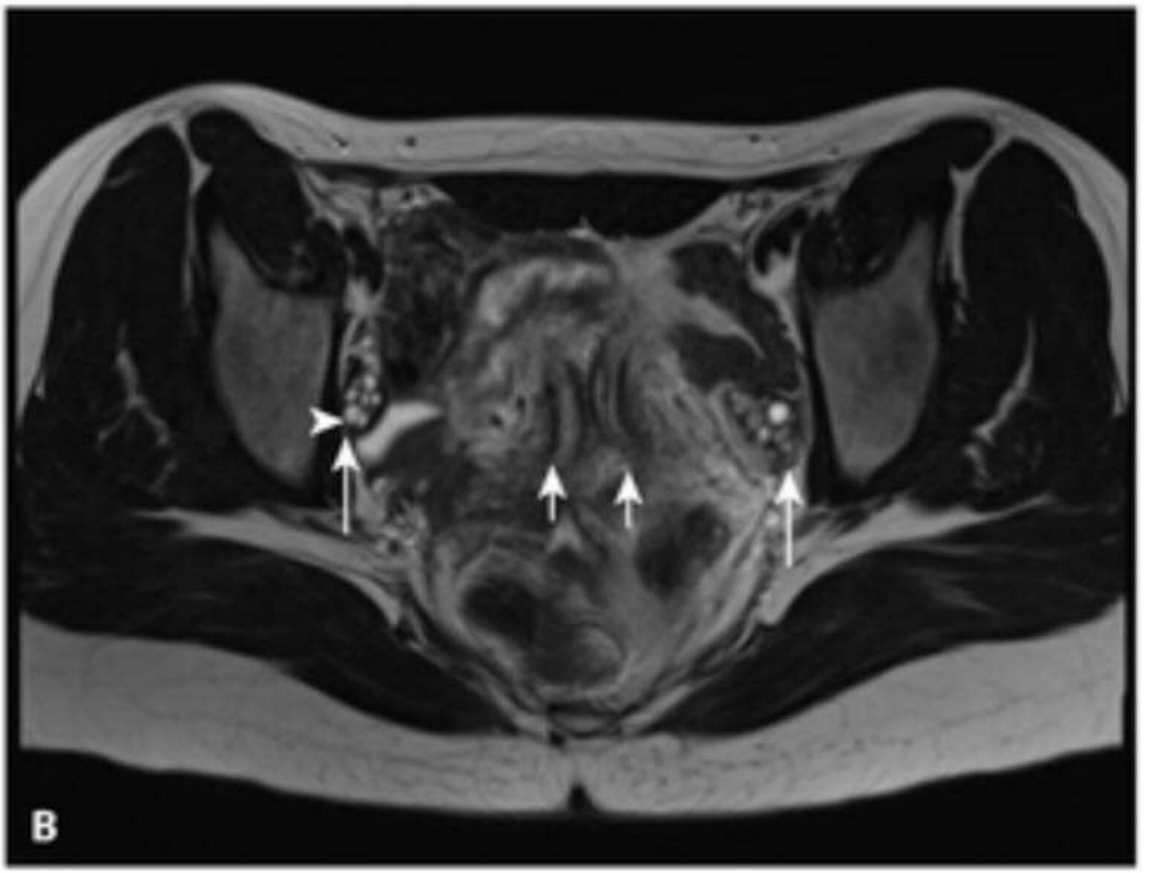
C



D

Figure 2.6 (**A**) Transvaginal ultrasound scan (TVUSS) of normal uterus. (**B**) TVUSS of left and right ovaries. (**C**) TVUSS of haemorrhagic cyst. (**D**) TVUSS of multiseptated cyst.


A


B

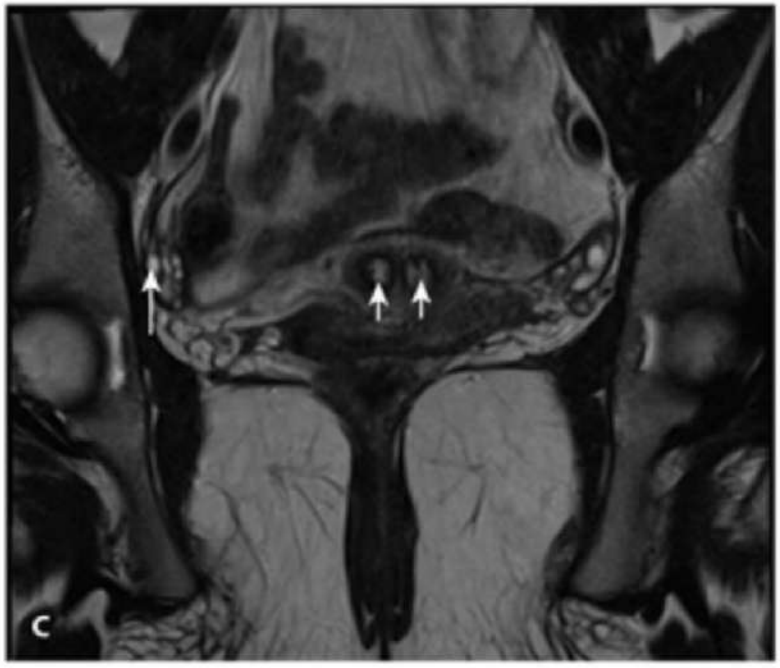


Figure 2.7 (**A**) Magnetic resonance imaging (MRI) of normal pelvis (long arrow, endometrium; short arrow, inner myometrium and cervix; arrowhead, outer myometrium). (**B**) Axial MRI of pelvis in a patient with uterus didelphys and double cervices (long arrows, ovaries; short arrows, cervices; arrowhead, follicle). (**C**) Coronal MRI in a patient with uterus didelphys (long arrow, right ovary; short arrows, cervices). (Images courtesy of Dr Sarah Natas, Consultant Radiologist.)

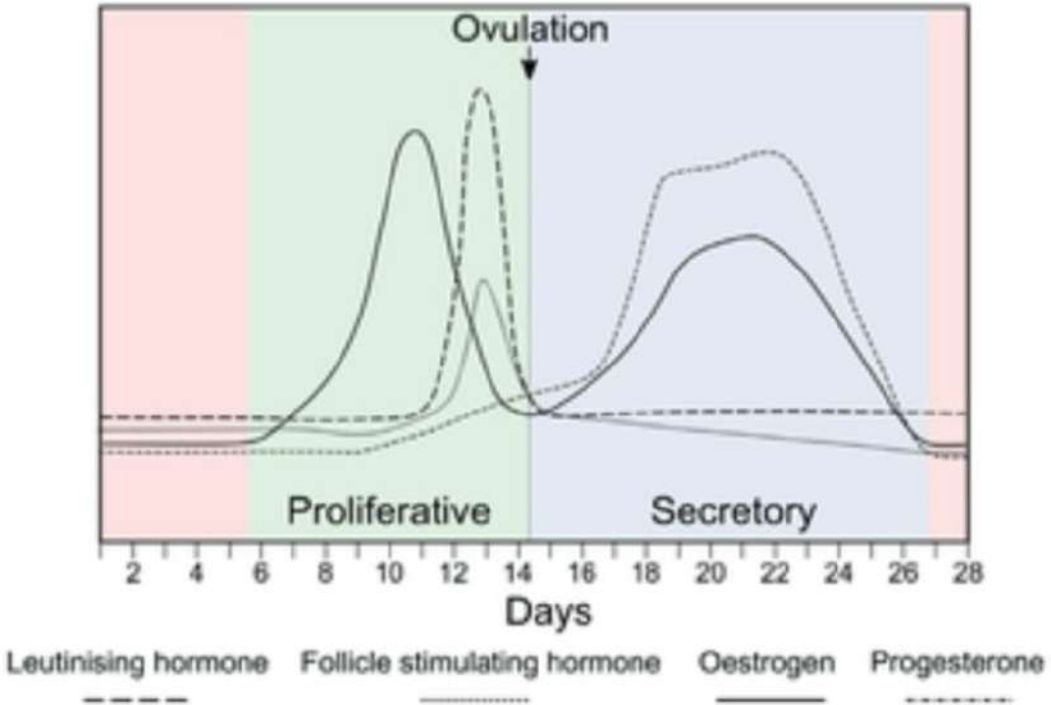
Figure 2.8 Endometrial sampler.

3 Hormonal control of the menstrual cycle and hormonal disorders

DOI: 10.1201/9781003218036-3

DHARANI K HAPANGAMA

A


Ovulation
Proliferative
Secretory
2 4 6 8 10 12 14 16 18 20 22 24 26 28
Days
Leutinising hormone
Follicle stimulating hormone
Oestrogen
Progesterone

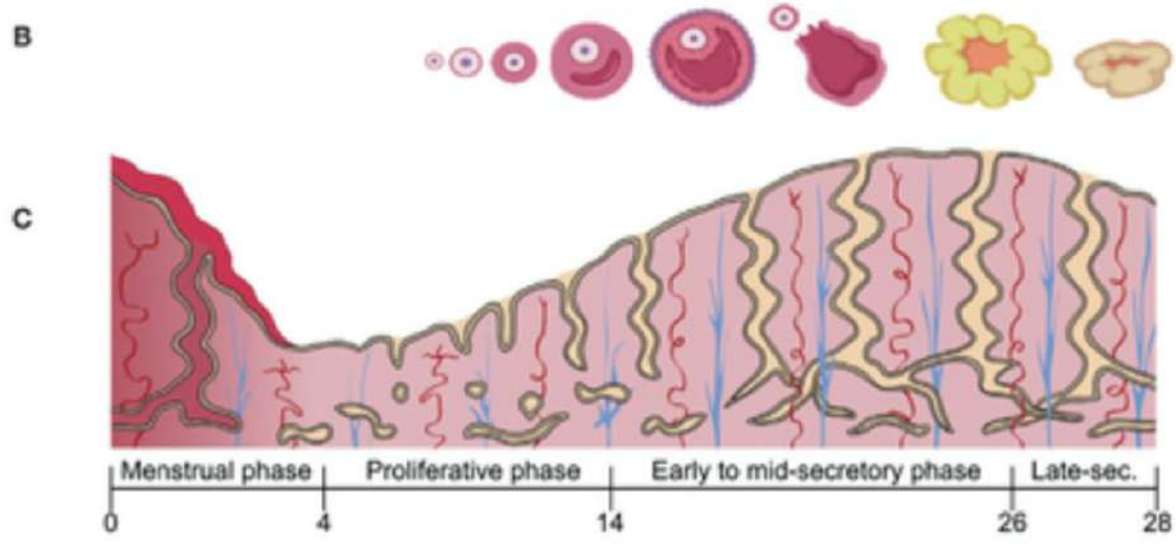
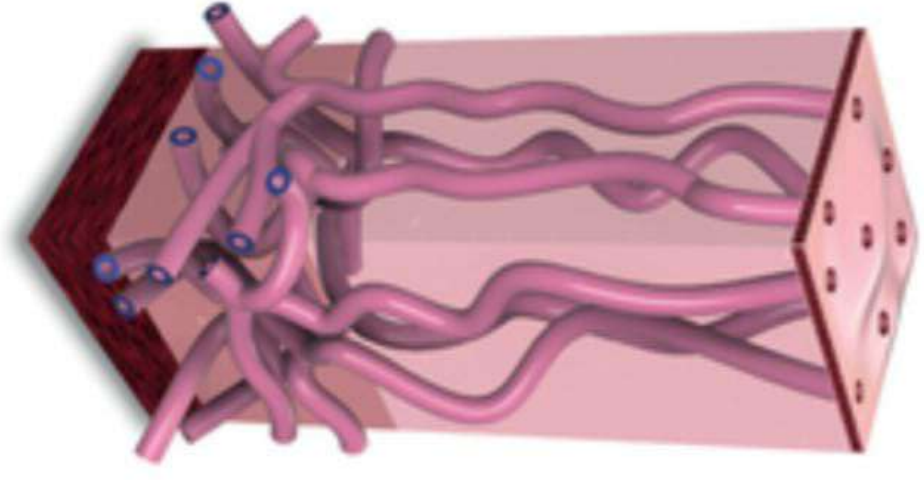
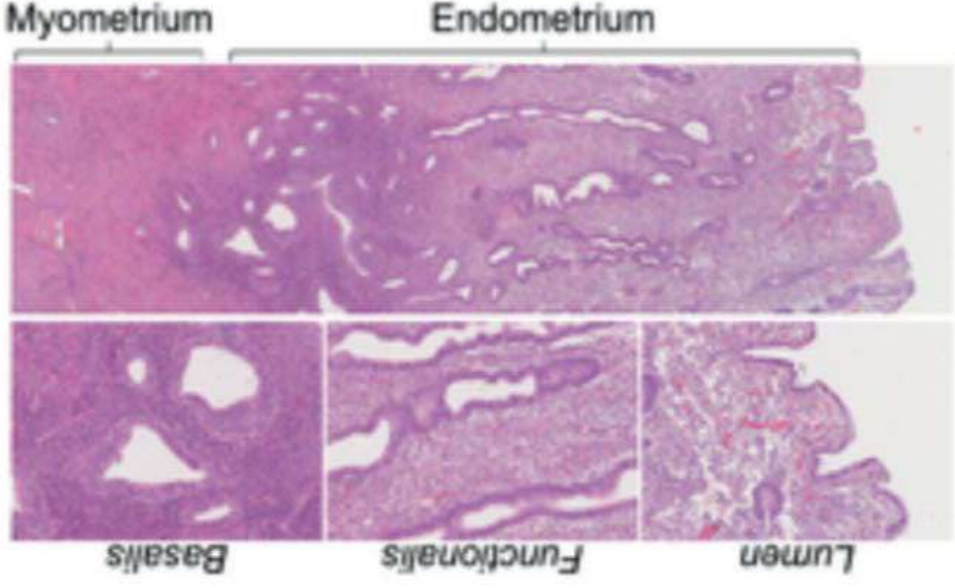


Figure 3.1 Changes in hormone levels of the hypothalamic–pituitary–ovarian axis (**A**), ovarian follicular activity (**B**) and endometrium (**C**), during the menstrual cycle.



B



A

Figure 3.2 Uterine wall. Full thickness normal endometrium demonstrating basalis and functionalis (**A**) and schematic of the unique endometrial glandular organisation in women (**B**). (Modified from Tempest *et al.* (2022). Novel microarchitecture of human endometrial glands: implications in endometrial regeneration and pathologies. *Human Reproduction Update*, 28(2): 153-171.)

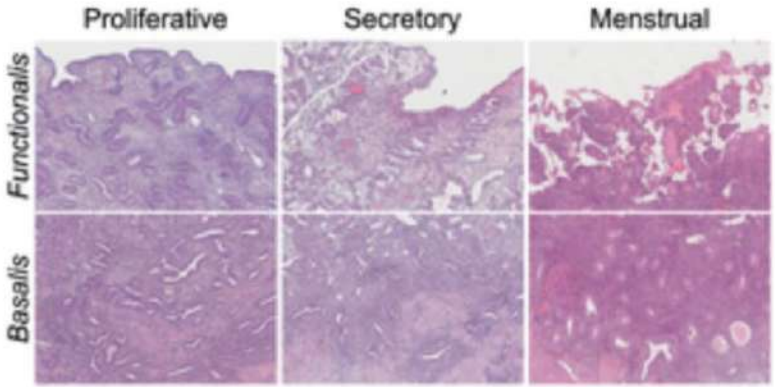


Figure 3.3 Tissue sections of normal endometrium during proliferative, secretory and menstrual phases of the menstrual cycle.

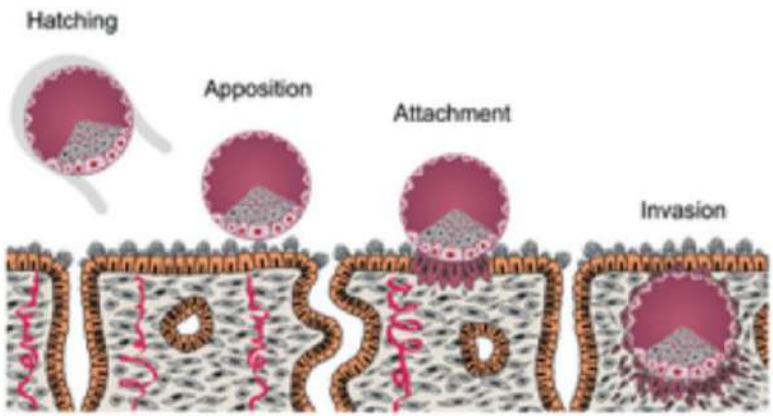


Figure 3.4 The three steps of human embryo implantation: apposition, attachment and invasion.

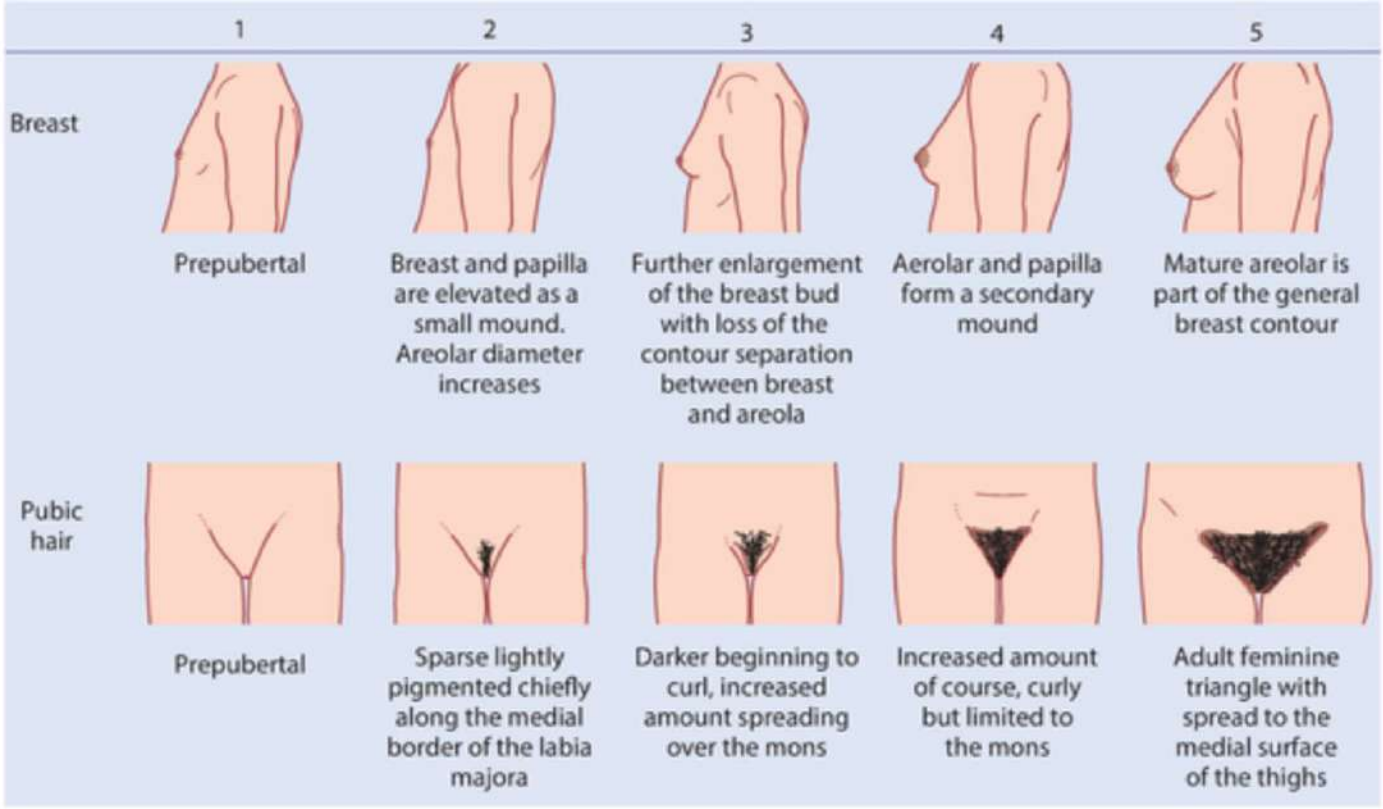


Figure 3.5 Tanner staging.

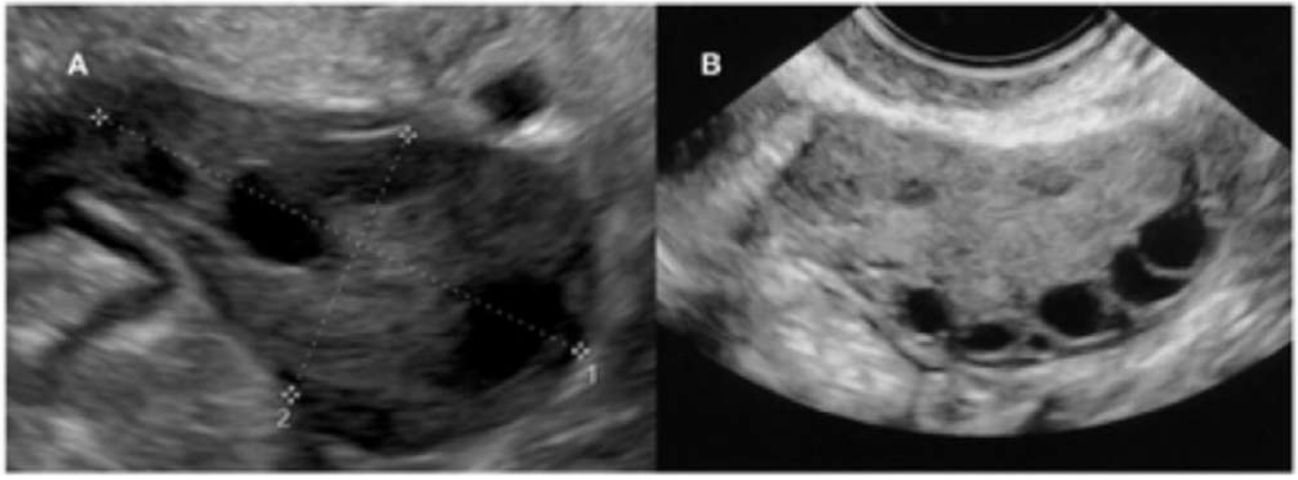


Table 3.4 Management of amenorrhoea/oligomenorrhoea

4 Disorders of menstrual bleeding

DOI: 10.1201/9781003218036-4

DHARANI K HAPANGAMA

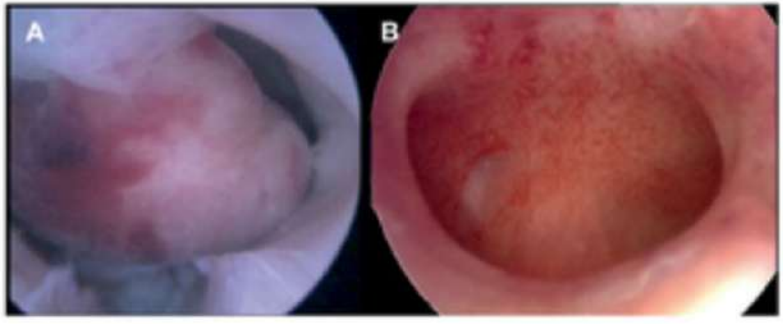


Figure 4.1 Hysteroscopic view of an endometrial polyp **(A)** and a normal uterine cavity **(B)**.

Associated with structural abnormalities (PALM)

- Endometrial polyps (Figure 4.1)

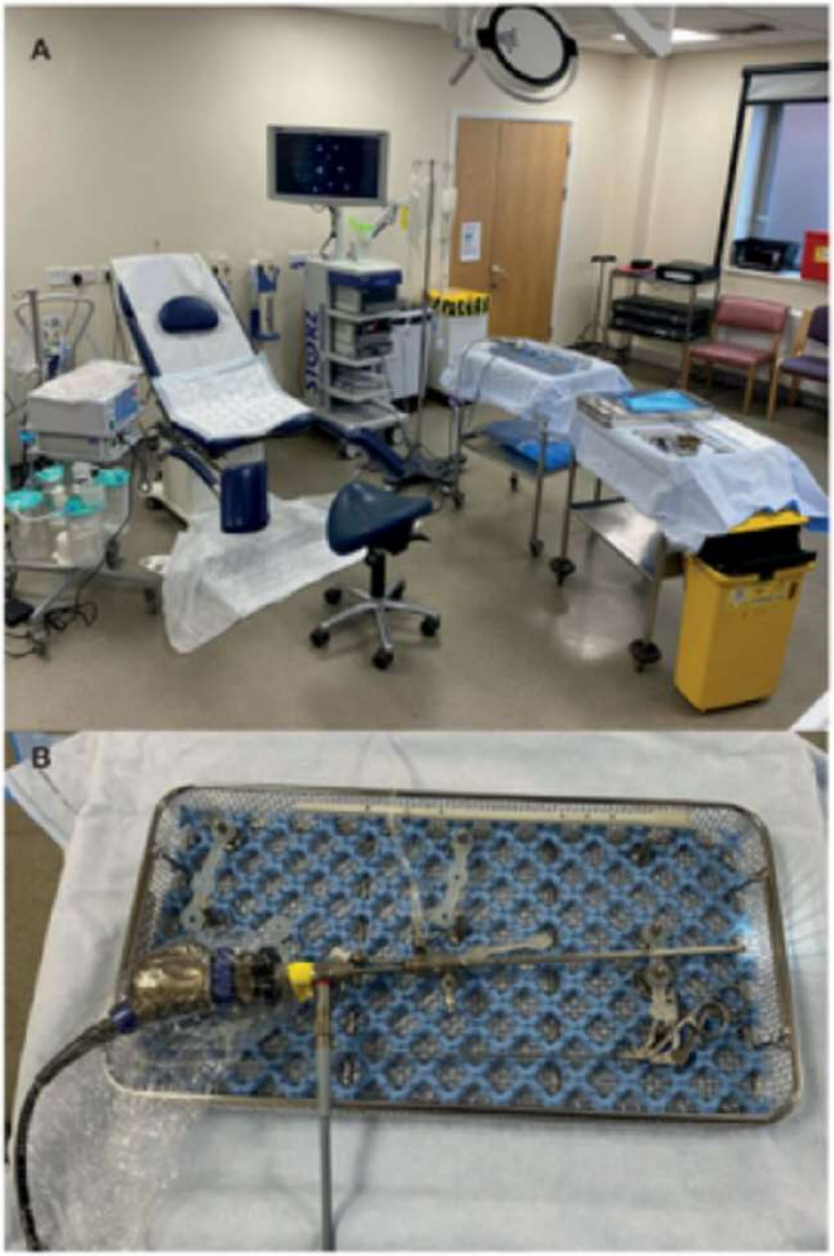


Figure 4.2 An outpatient hysteroscopy clinic setting (**A**) and hysteroscope (**B**).

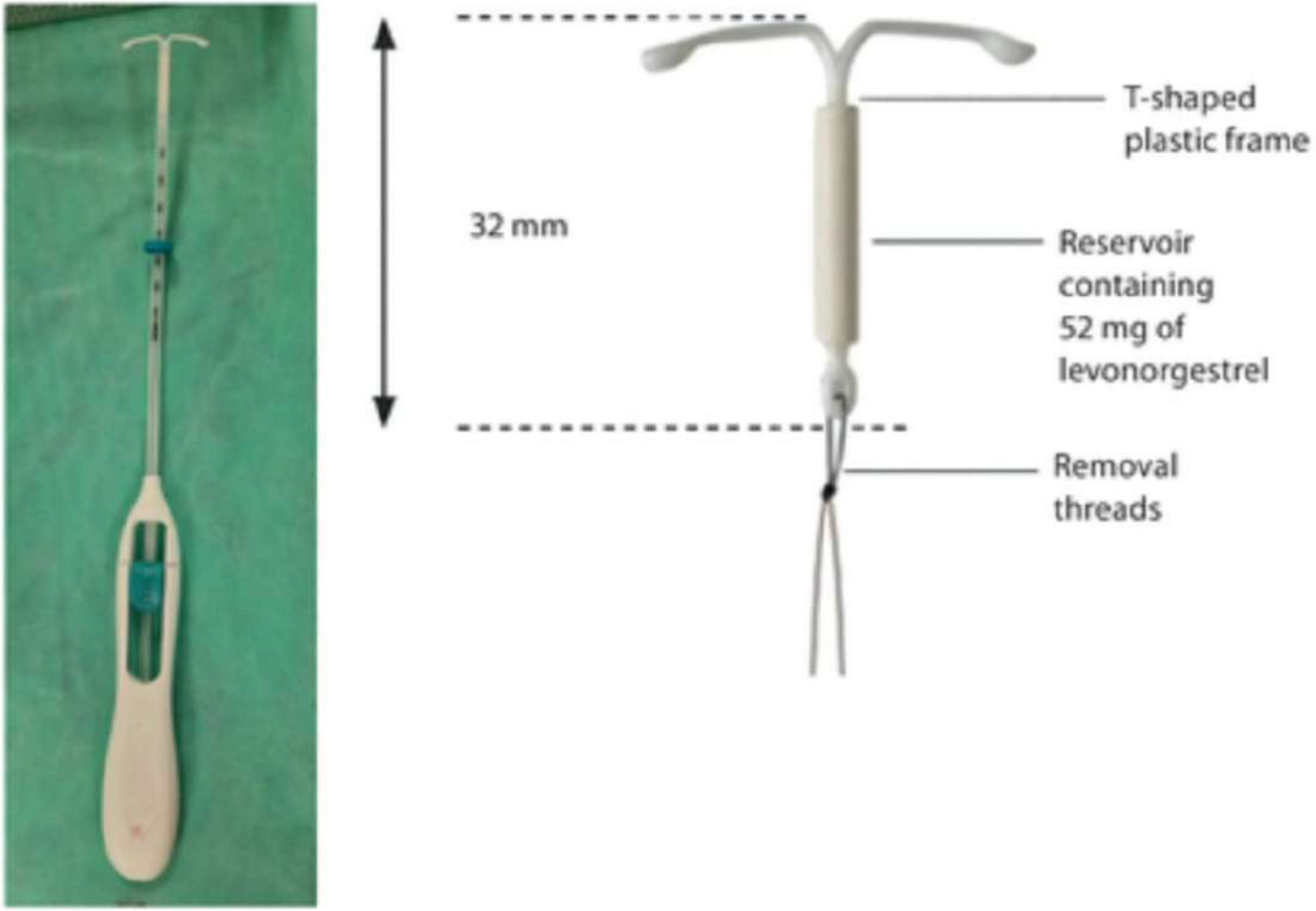


Figure 4.3 Levonorgestrel intrauterine system (Mirena™).

5 Implantation and early pregnancy

DOI: 10.1201/9781003218036-5

ANDREW HORNE

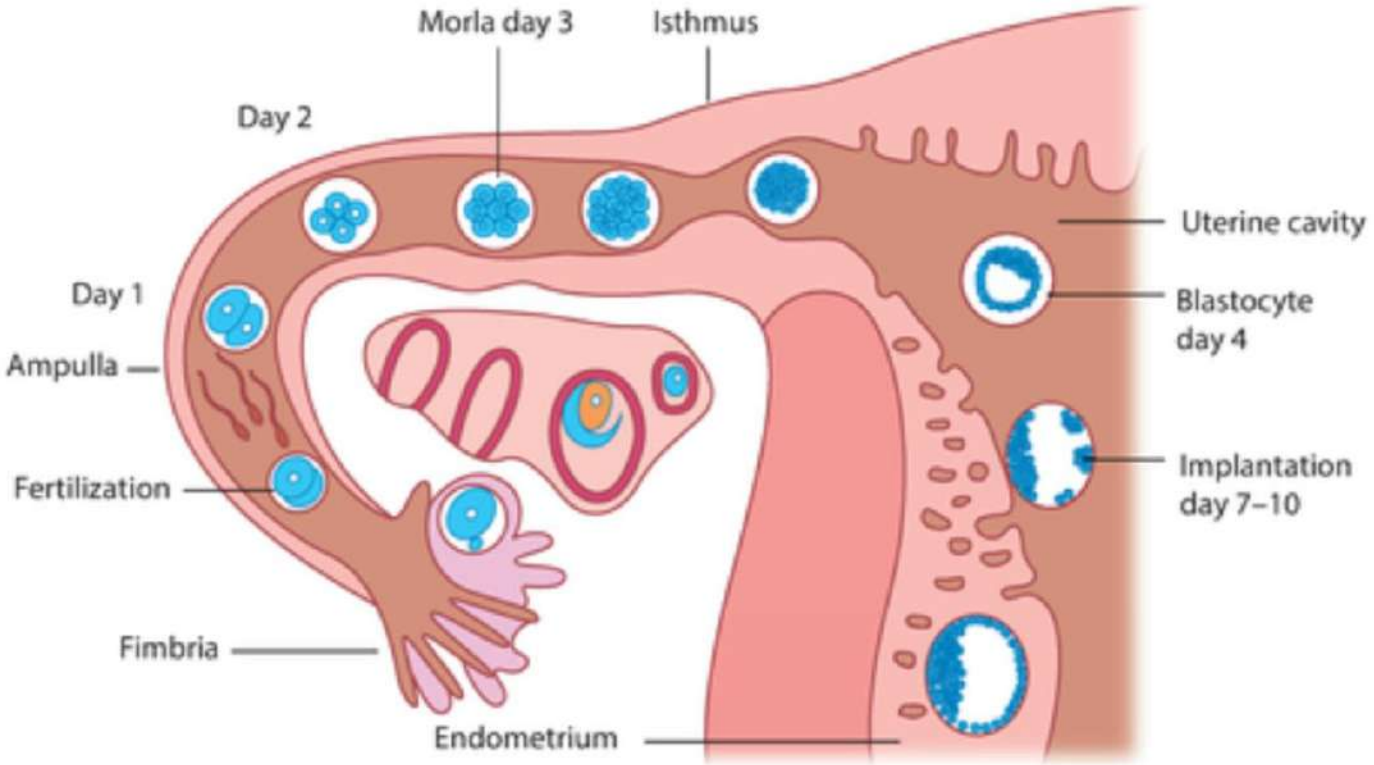


Figure 5.1 Pre-implantation development and intrauterine implantation.

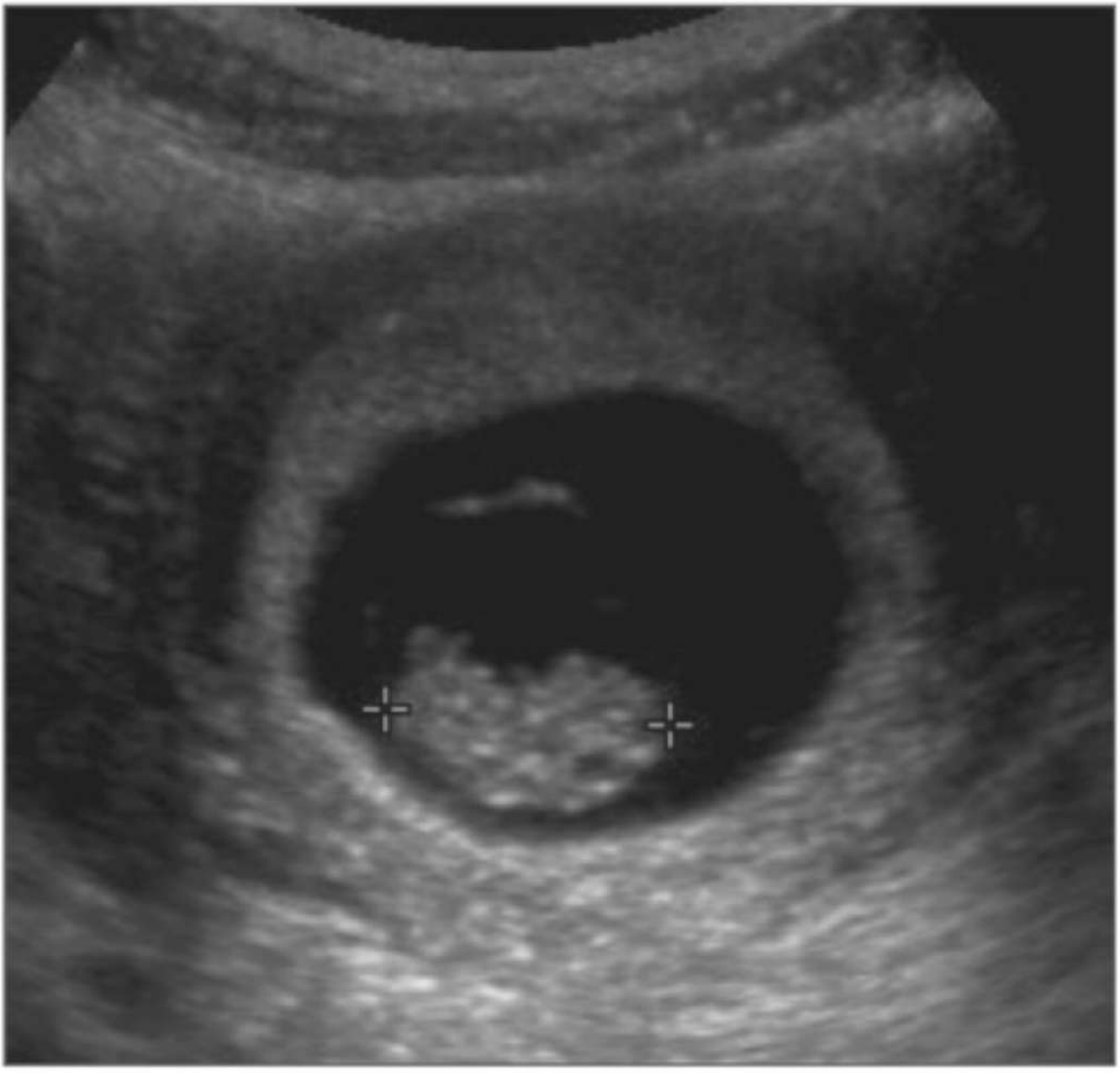


Figure 5.2 Image of an early intrauterine pregnancy with yolk sac and pole (~5–6 weeks).

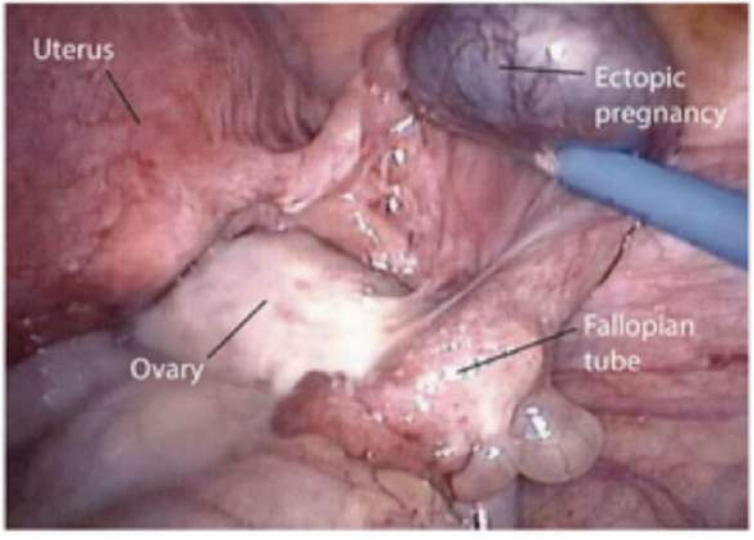


Figure 5.3 Image of tubal ectopic pregnancy taken at laparoscopy.

6 Contraception and abortion

DOI: 10.1201/9781003218036-6

SHARON CAMERON

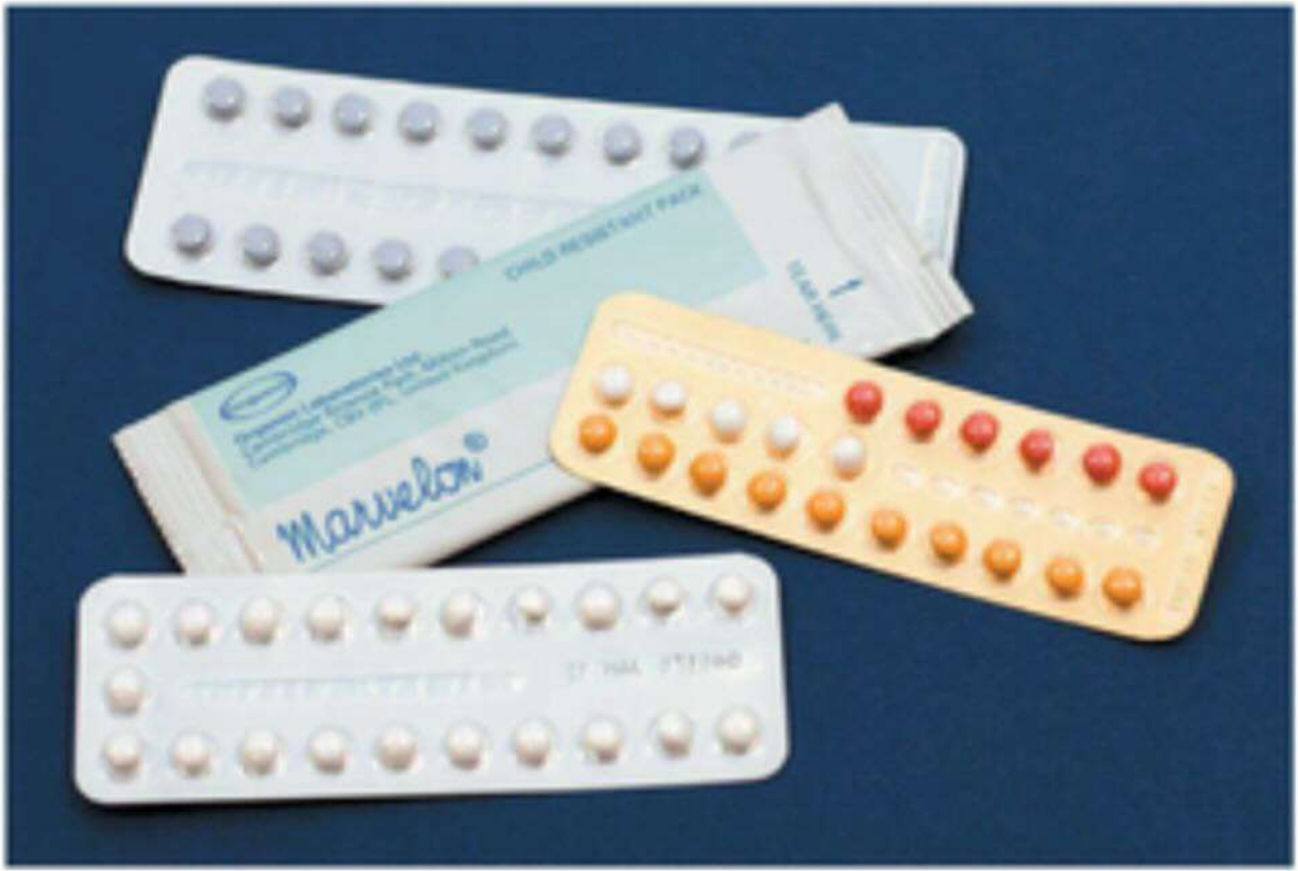


Figure 6.1 The oral contraceptive pill.

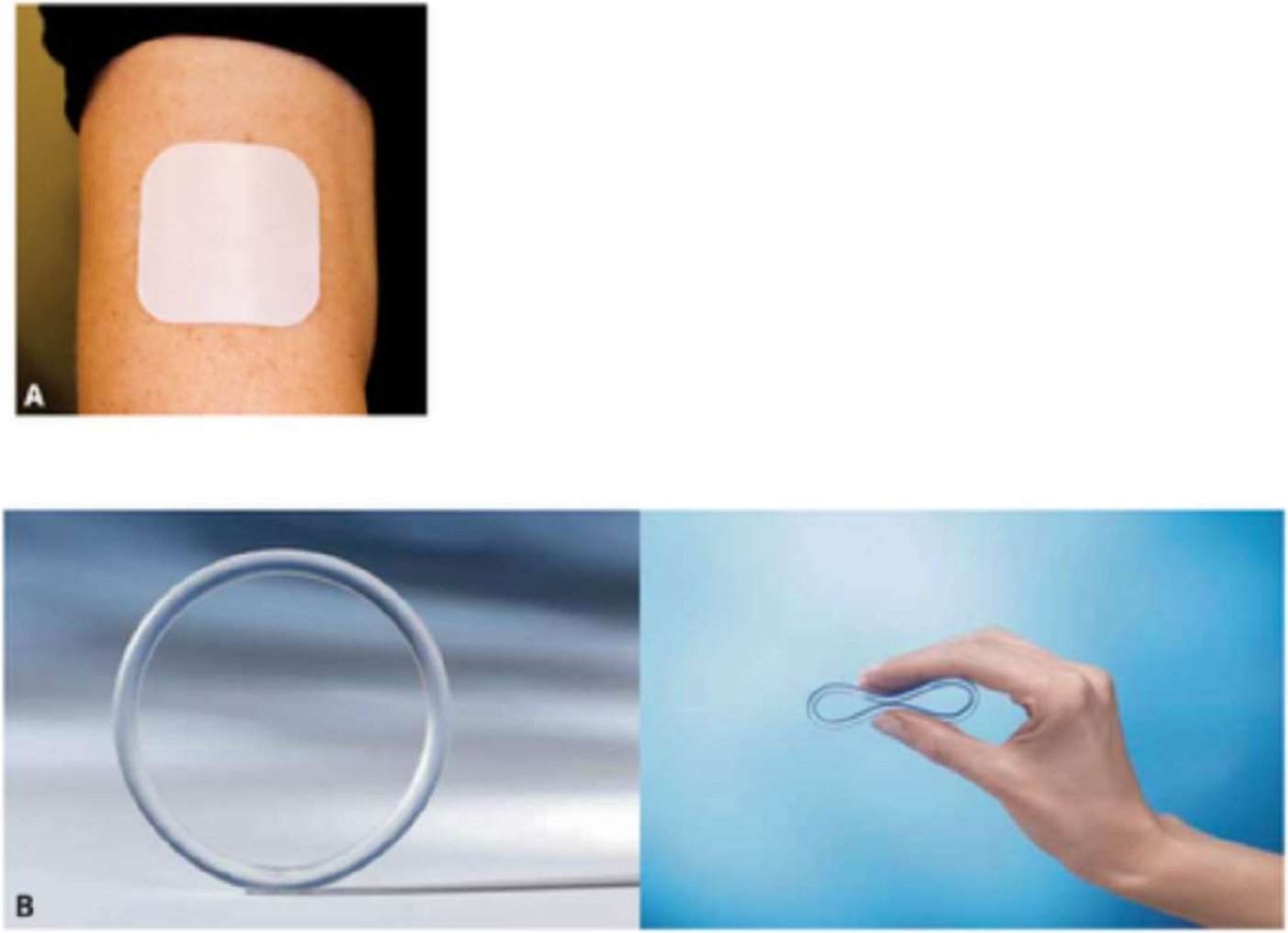


Figure 6.2 (**A**) Combined hormonal patch. (**B**) Combined hormonal vaginal contraceptive ring.

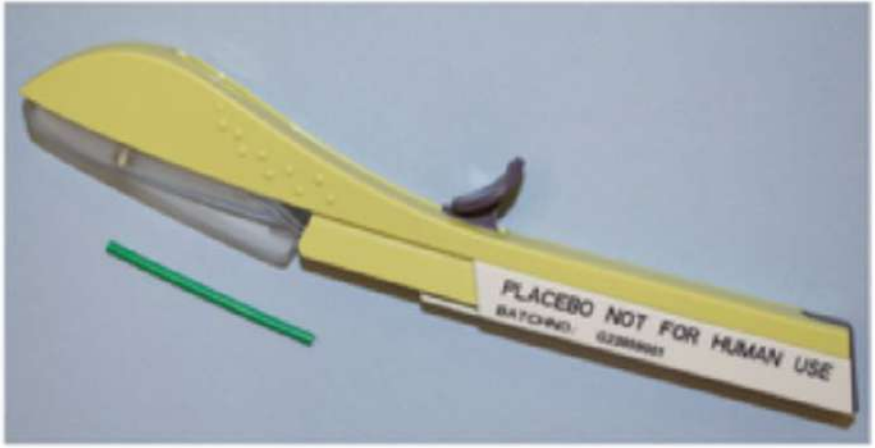


Figure6.4 Nexplanon®.

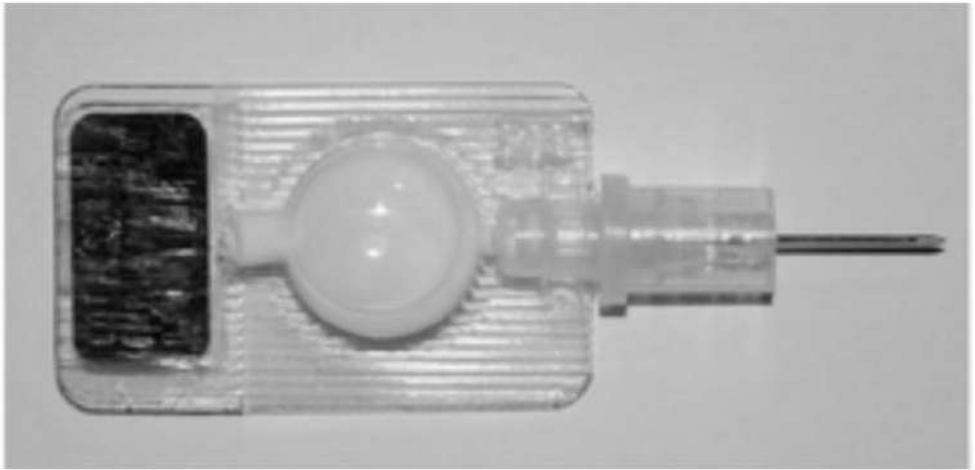


Figure 6.5 Sayana® Press single-dose container.

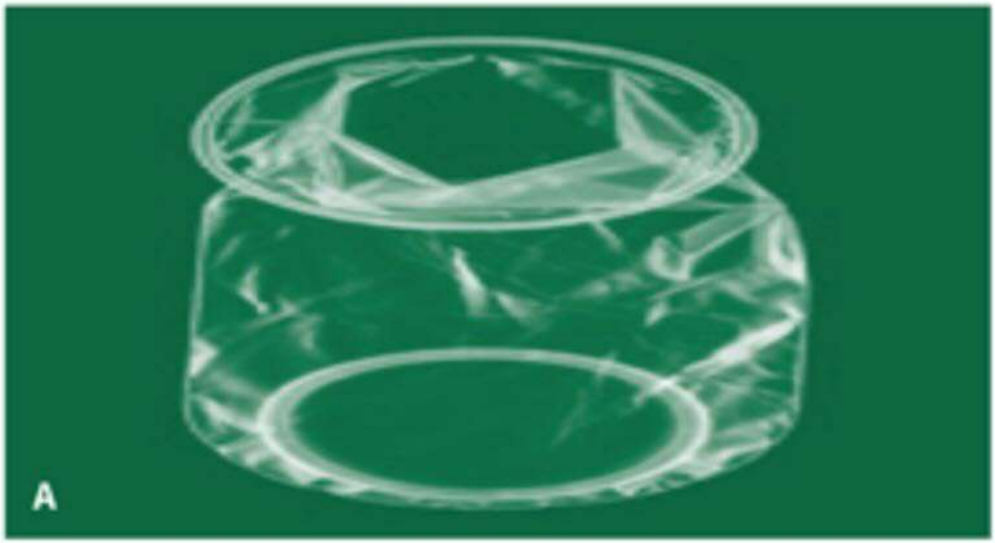


Figure 6.6 (**A**) Female condom. (**B**) Male condom.

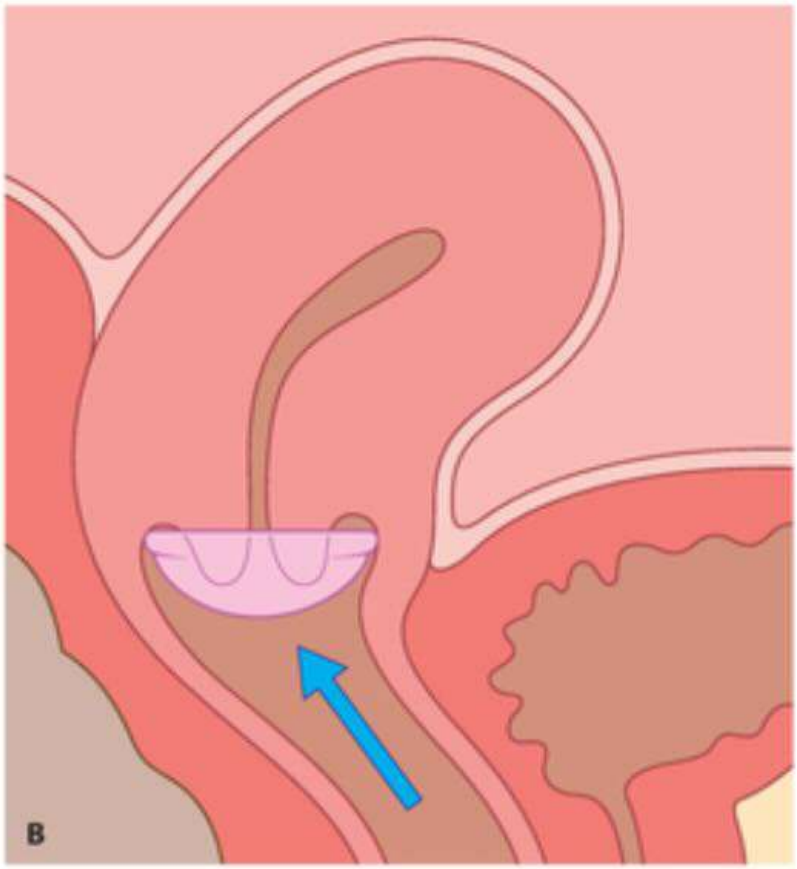


Figure 6.7 (**A**) A cap. (**B**) Correct position of a cap.

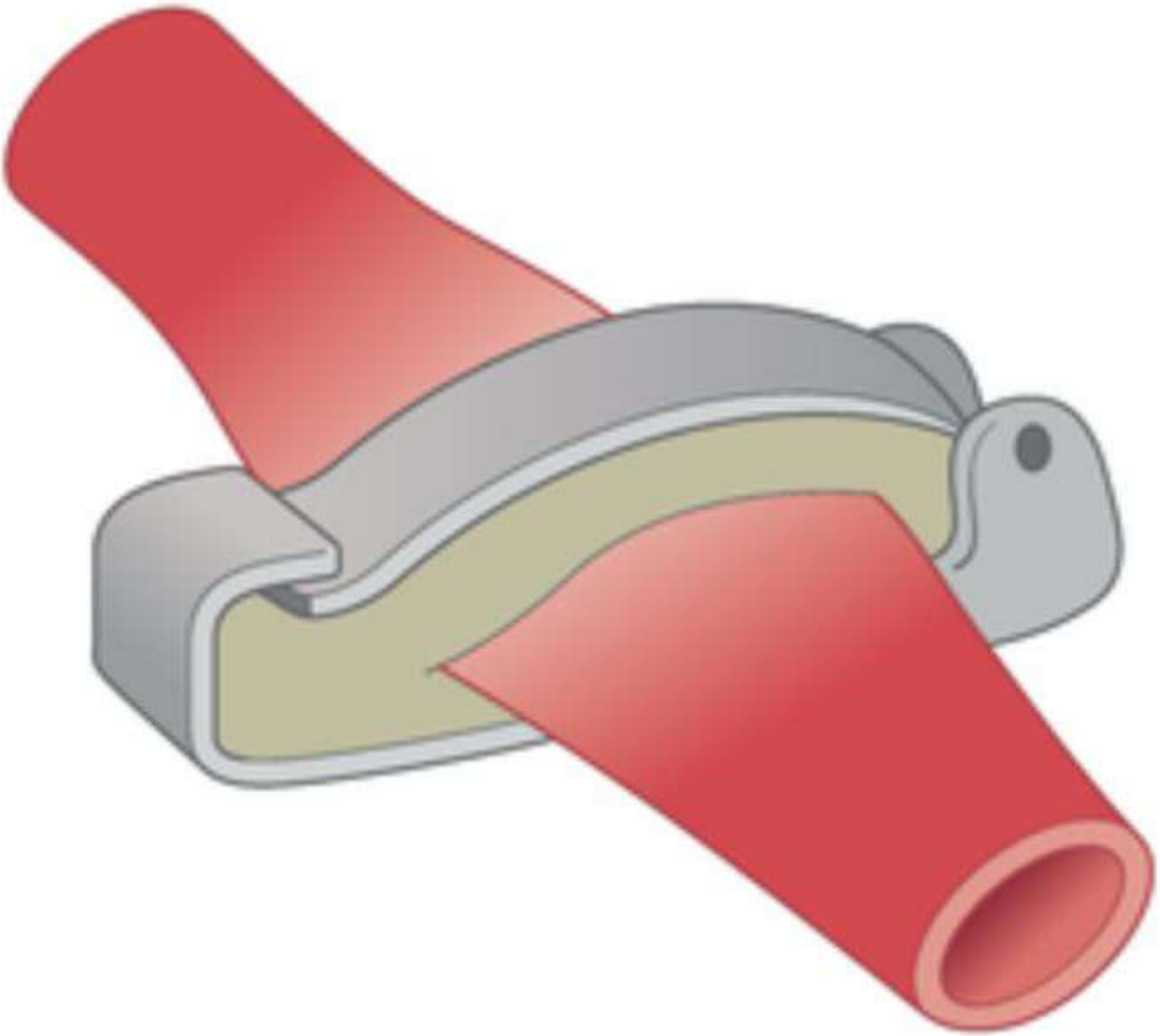


Figure 6.8 Filshie clip.

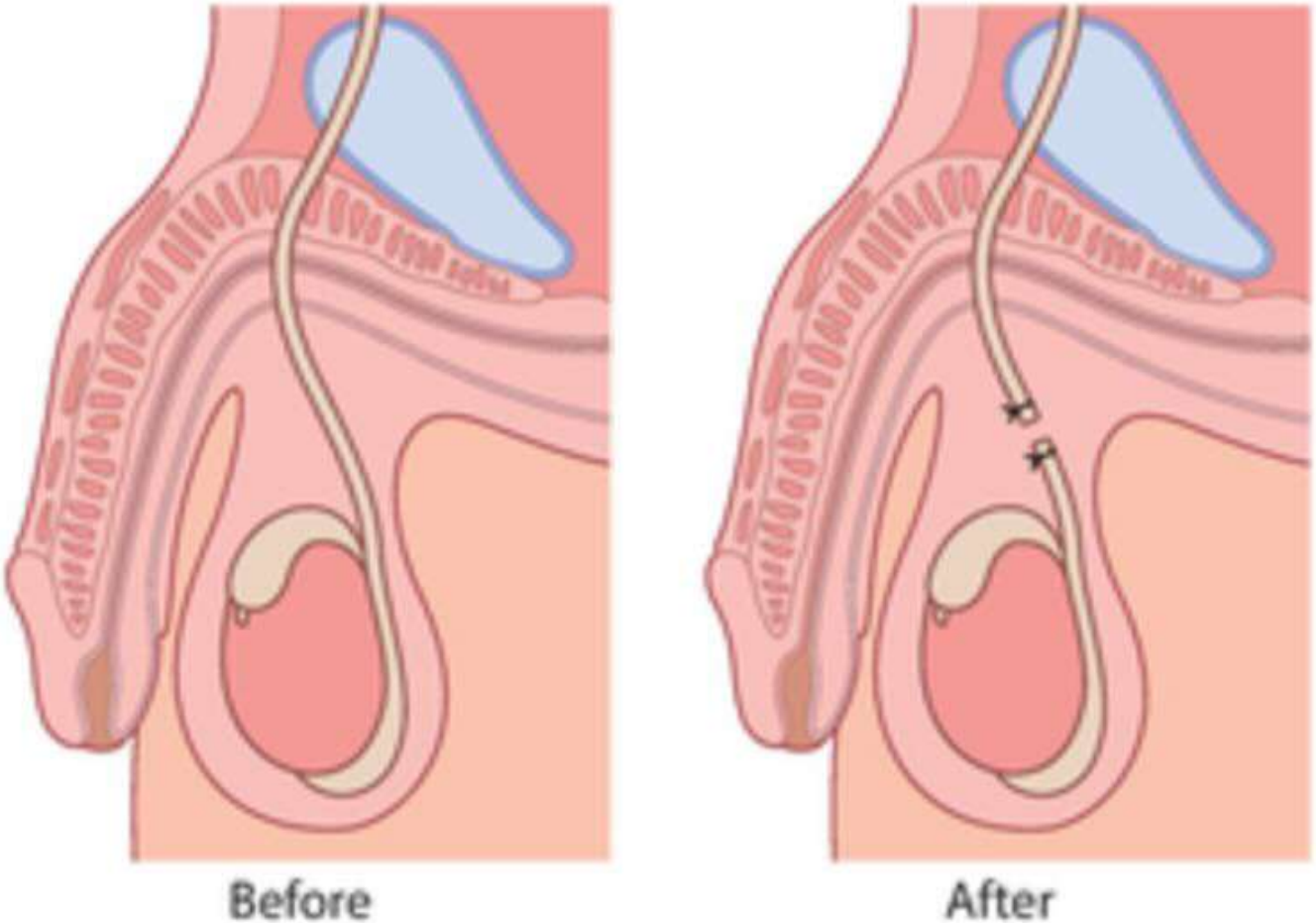


Figure 6.9 Vasectomy.

7 Subfertility

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YING CHEONG

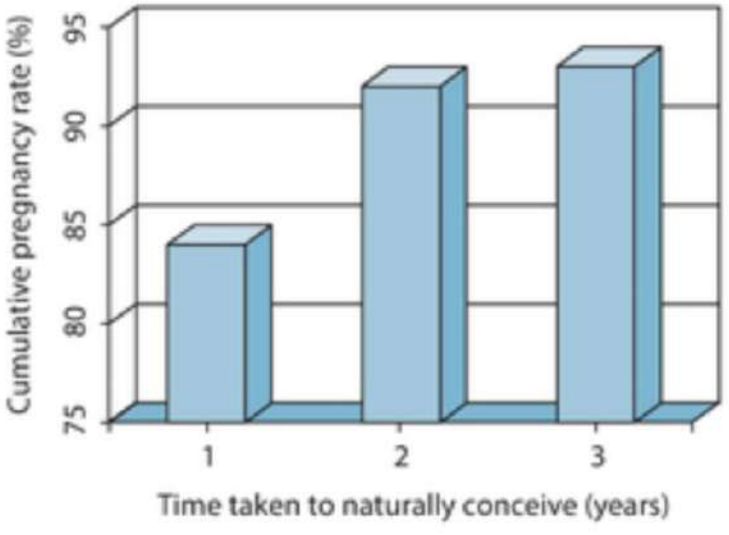


Figure 7.1 The natural conception rate over a 3-year period.

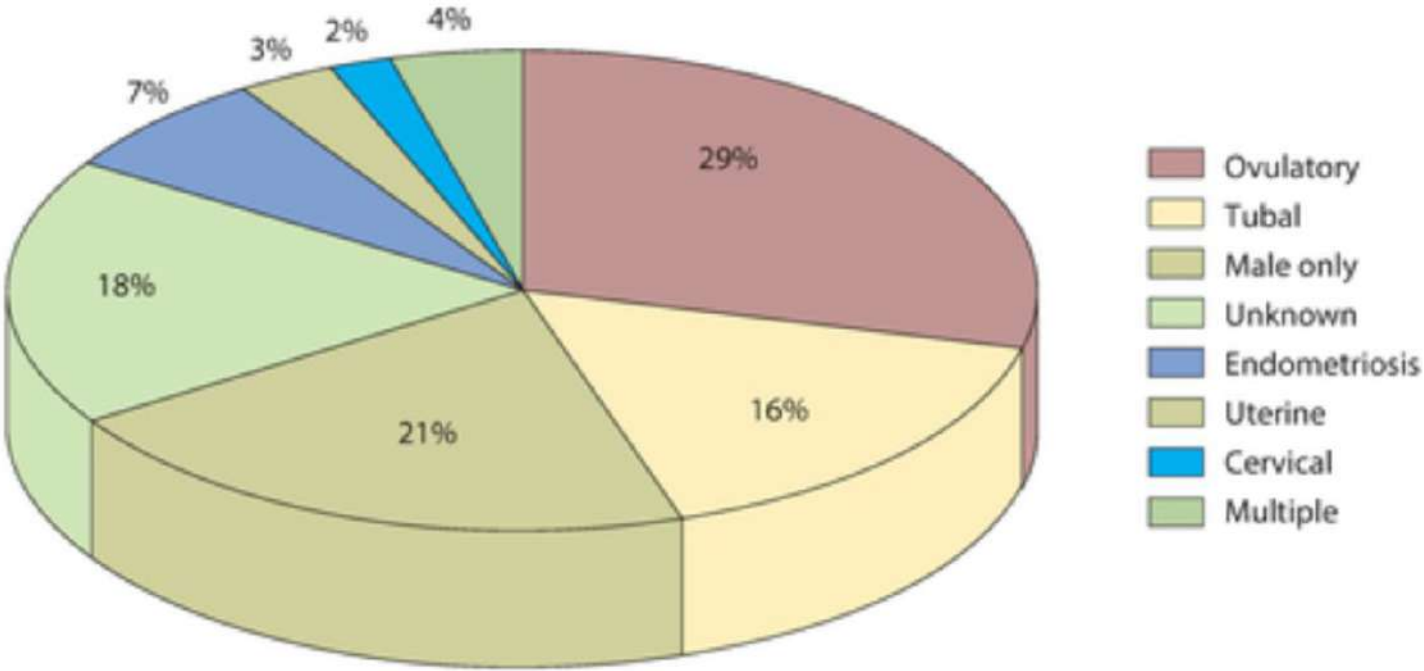
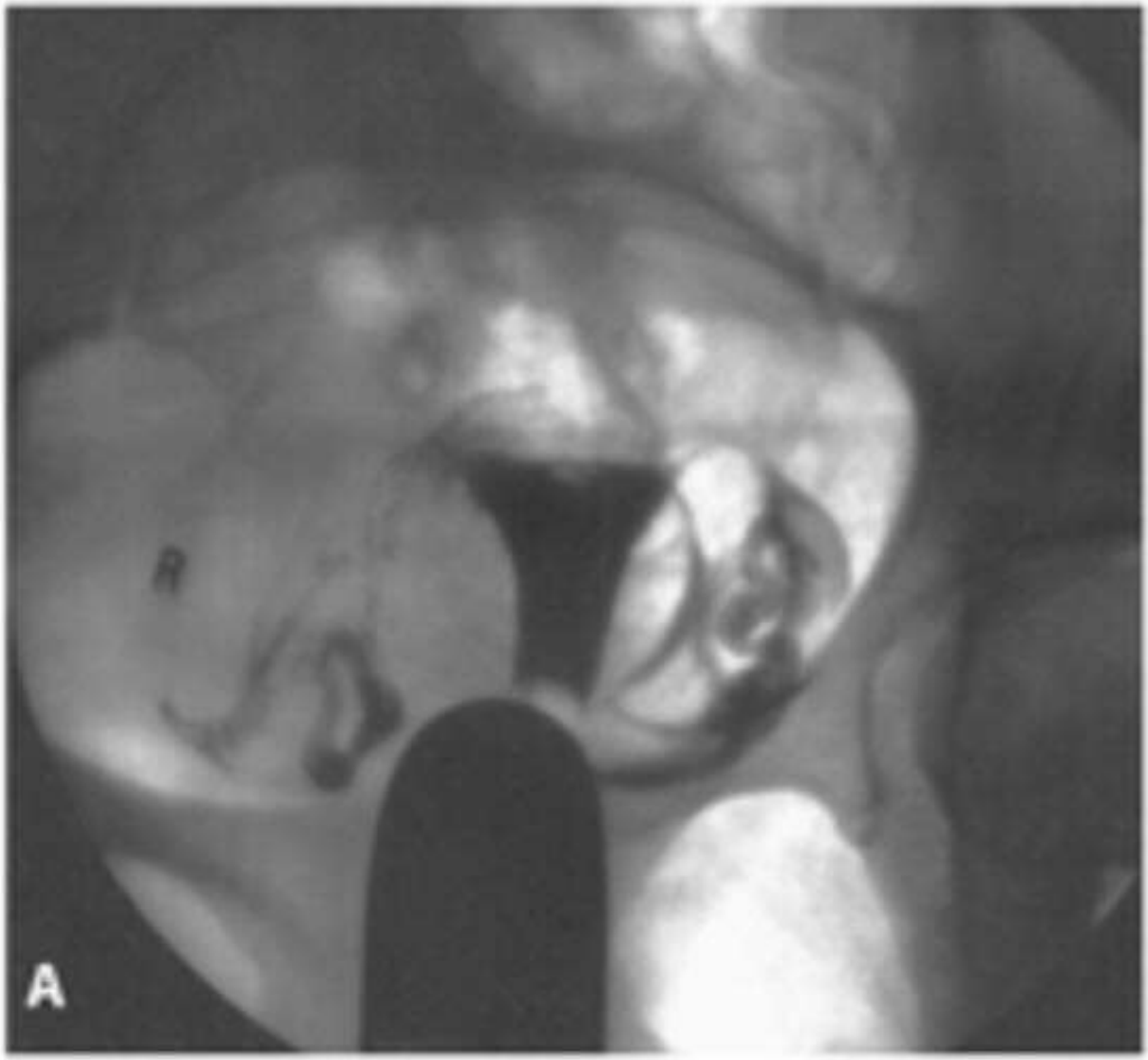


Figure 7.2 Causes of subfertility.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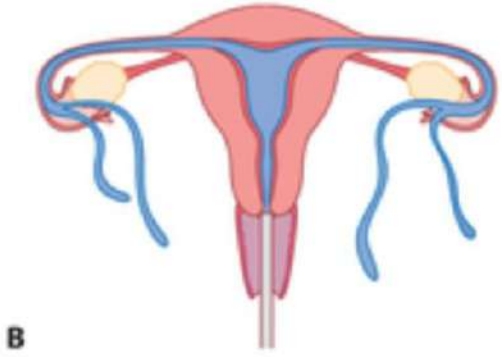


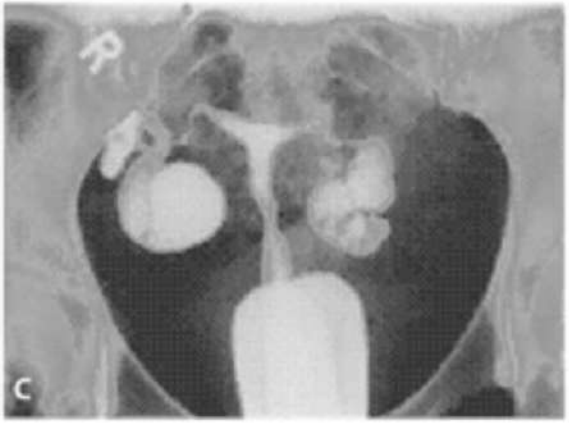
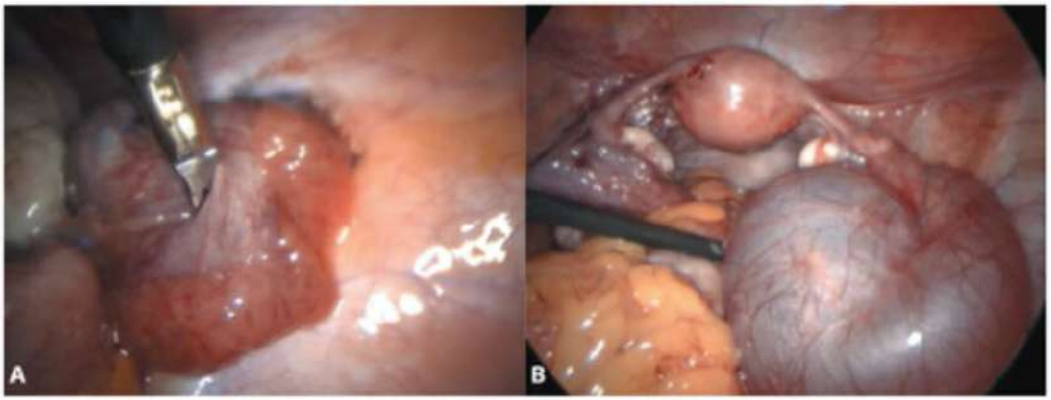


Figure 7.3 (**A**) Hysterosalpingogram showing normal patency of the fallopian tubes. (**B**) Pictorial illustration of a normal hysterosalpingogram. (**C**) Abnormal hysterosalpingogram with pocketed areas suggesting blocked tubes.



Investigation of subfertility and tubal patency testing by minimal access surgery is undertaken if the patient is symptomatic or if specific therapeutic treatment is planned. There is good evidence that

laparoscopic ablation of endometriosis can help improve natural conception rates. Often, surgery may be used as an adjunct to ART. For example, the surgical disconnection from the uterus or removal of hydrosalpinges is associated with a significant improvement in in vitro fertilization (IVF) success rates (Figure 7.4). Some practitioners still recommend a more traditional open laparotomy approach for myomectomy for very large uterine fibroids or tubal microsurgery to reverse sterilization or for proximal or distal tubal microsurgery Submucosal fibroids, endometrial polyps, Asherman syndrome and some congenital uterine anomalies, such as a septum, are usually managed hysferoscopically.

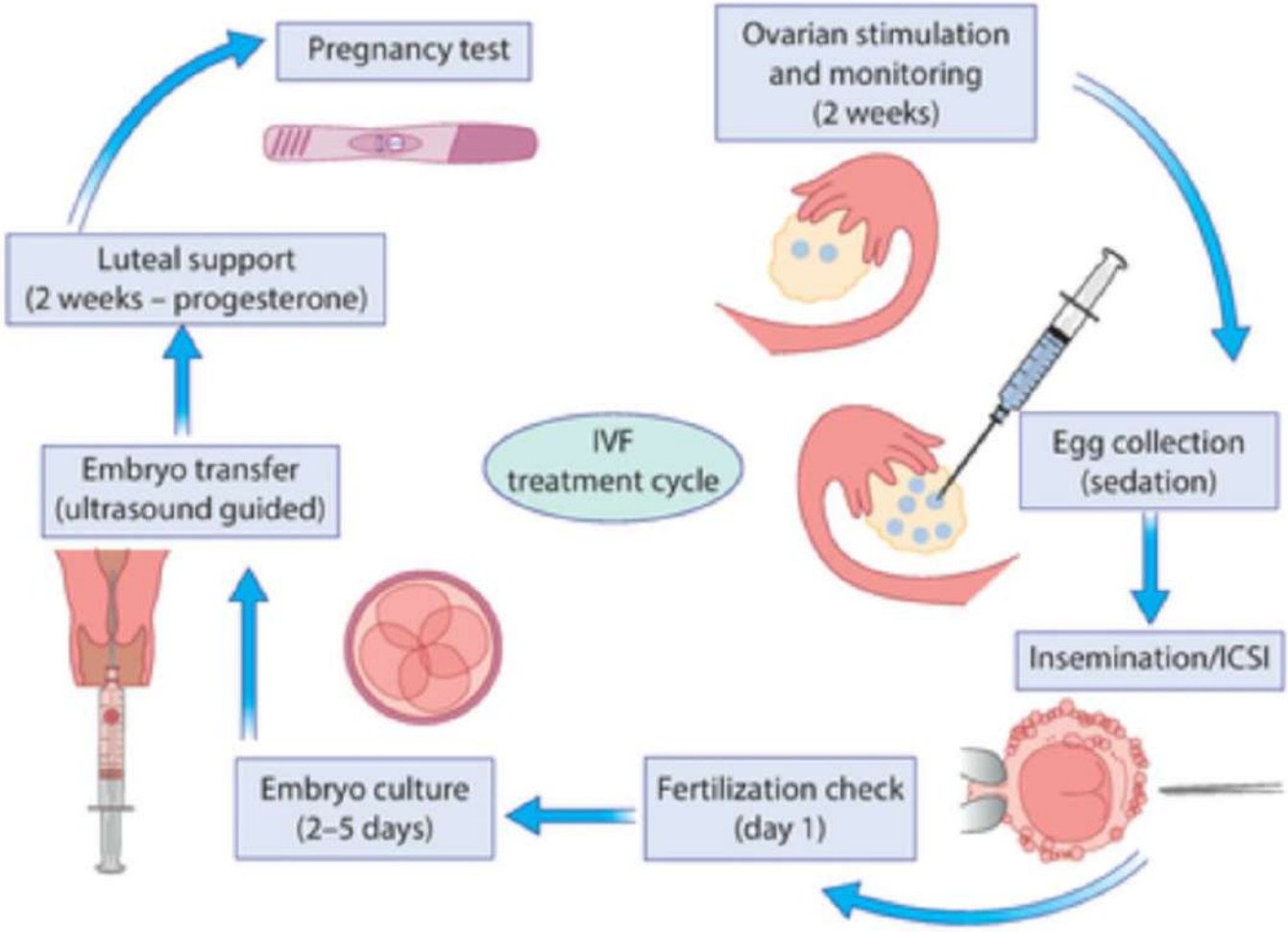


Figure 7.5 Pictorial in vitro fertilization cycle. (ICSI, intracytoplasmic sperm injection.)

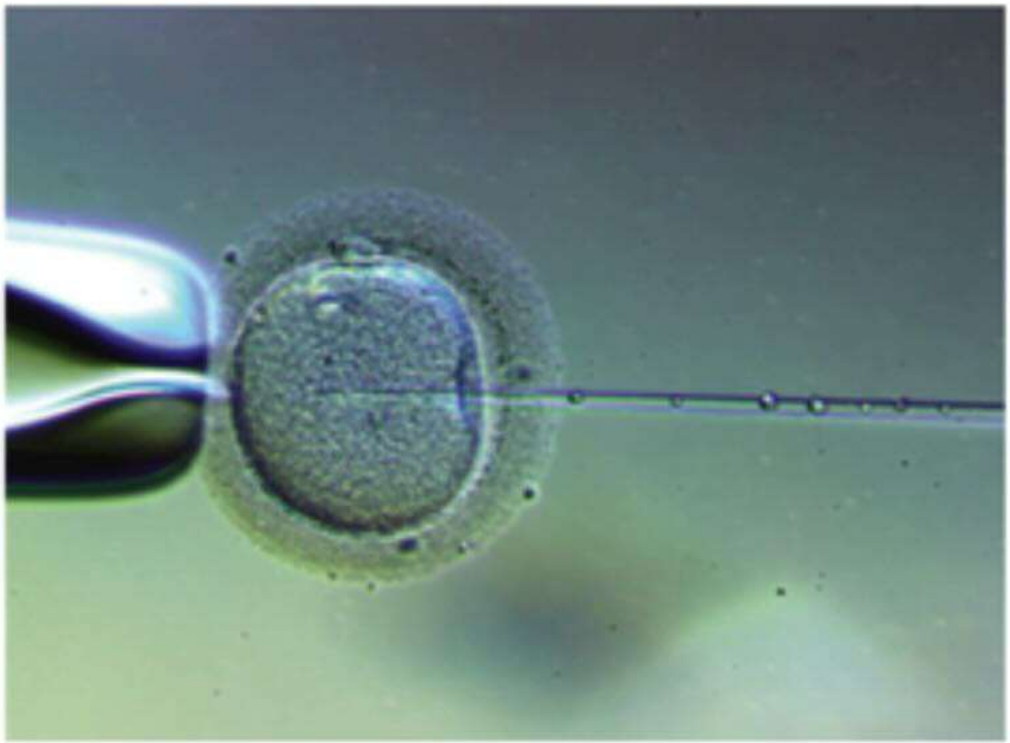


Figure 7.6 Intracytoplasmic sperm injection.

8 Menopause and post-reproductive health

DOI: 10.1201/9781003218036-8

TIMOTHY HILLARD

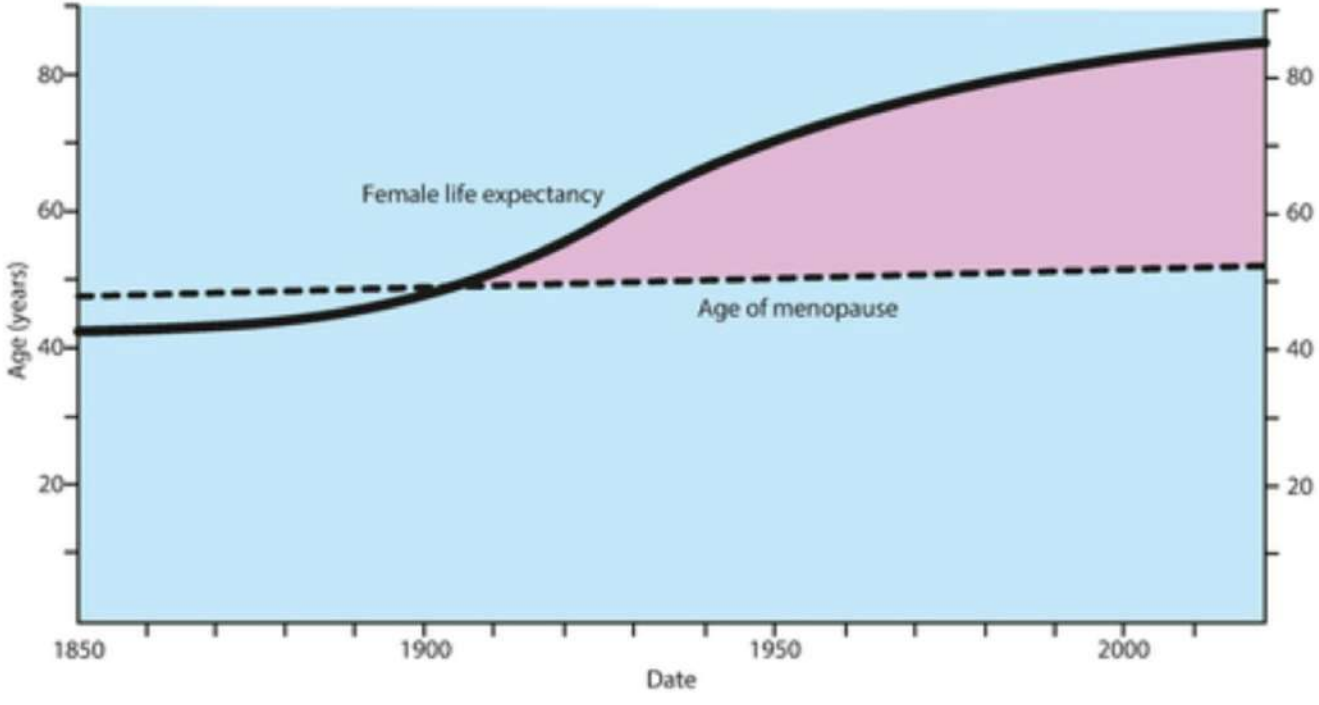


Figure 8.1 Age of menopause and mean life expectancy in the UK since 1850.

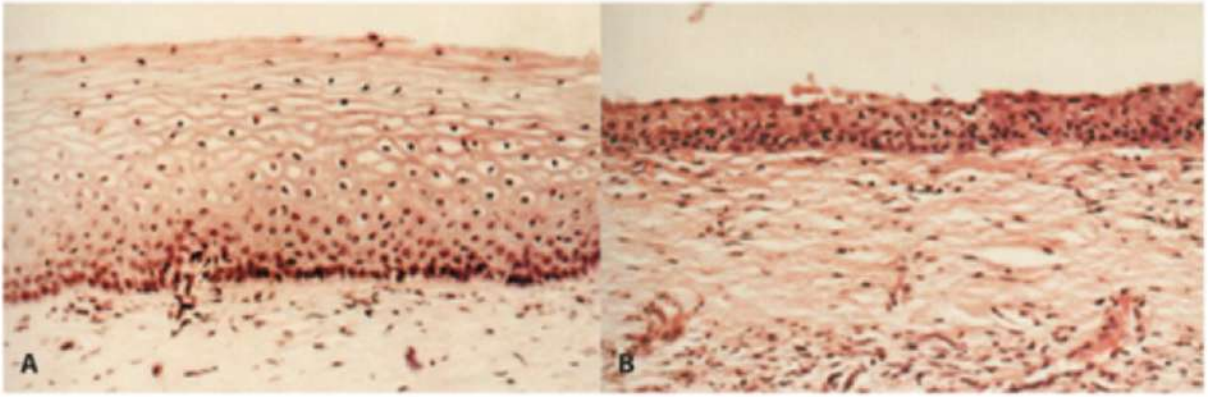


Figure 8.2 Vaginal epithelium in (**A**) a premenopausal woman and (**B**) a postmenopausal woman showing atrophic changes. Note the loss of epithelial structure and architecture. (Reproduced with permission from Whitehead MI, Whitcroft SIJ, Hillard TC (1993). *An Atlas of the Menopause*. Parthenon.)

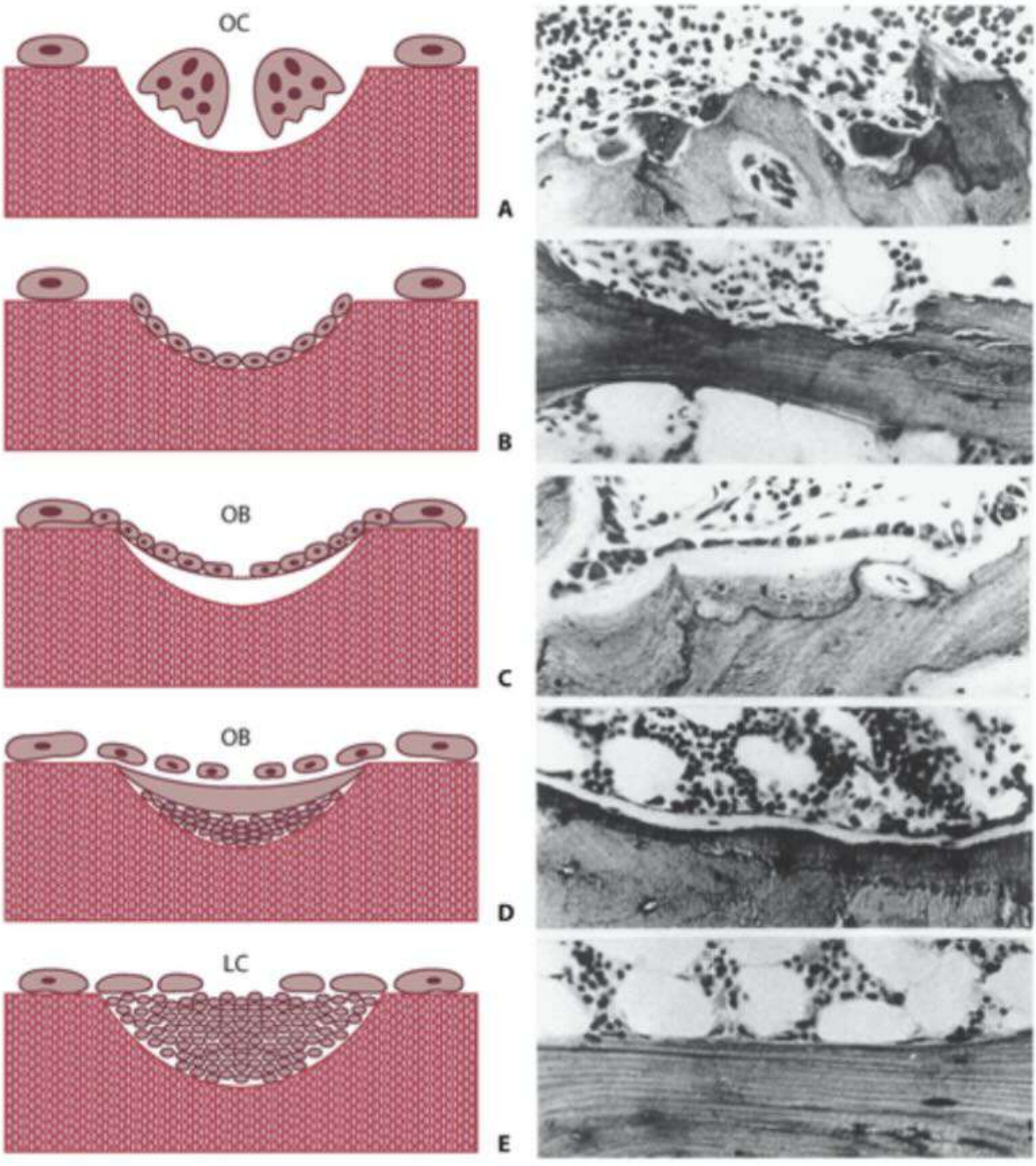


Figure 8.3 The principal stages of the bone remodelling cycle represented diagrammatically (left) with corresponding light micrographs of iliac crest biopsies (right). (**A**) Resorption by osteoclasts (OCs). (**B**) Reversal with disappearance of OCs. (**C**) OC formation with the deposition of osteoid by osteoblasts (OBs). (**D**) Mineralization of the osteoid. (**E**) Completion of the cycle with bone lining cells (LCs) on the surface. (Light micrographs reproduced with permission from Dempster DW (1992). *Disorders of the Bone and Mineral Metabolism*. Raven Press.)

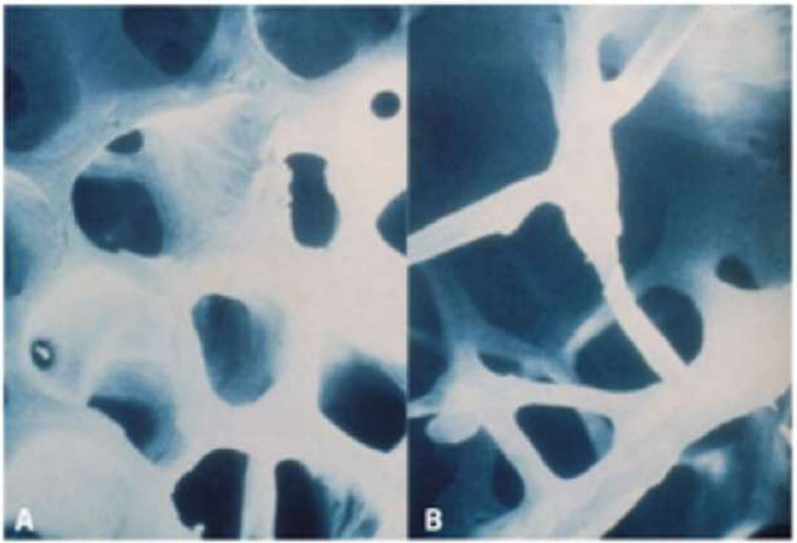


Figure 8.4 Electron micrograph of trabecular bone showing (**A**) normal structure and (**B**) osteoporotic bone. Note the loss of architecture and density in (**B**) making the bone weaker and more prone to fracture. (Reproduced with permission from Whitehead Malcolm I, Whitcroft SIJ, Hillard TC (1993). *An Atlas of the Menopause*. Parthenon.)

9 Sexually transmitted infections and related conditions

DOI: 10.1201/9781003218036-9

MARGARET KINGSTON

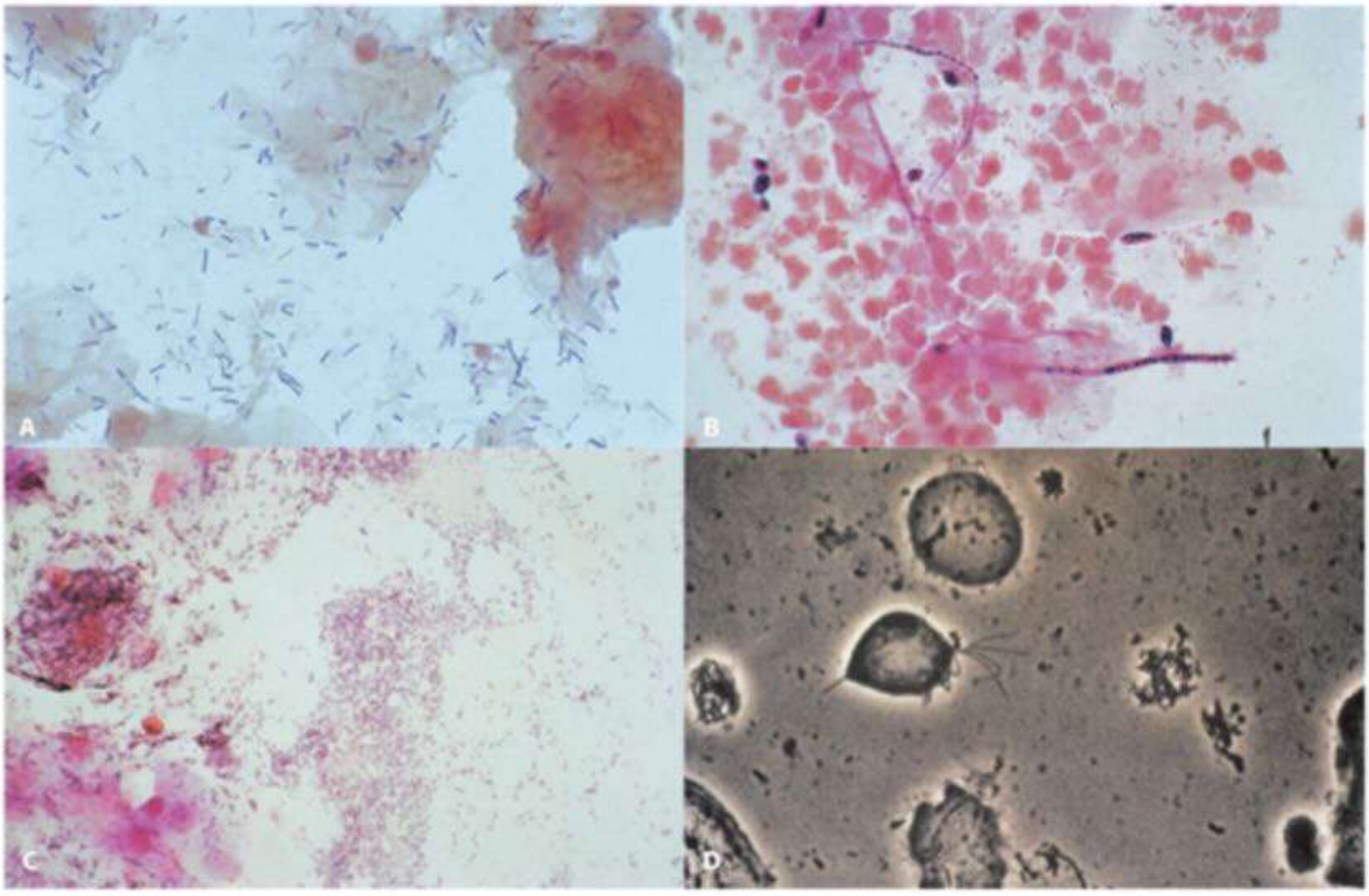


Figure 9.1 Vaginal and cervical flora (×1,000 magnified). (**A**) Normal: lactobacilli (seen as large Gram-positive rods) predominate. Squamous epithelial cells are Gram-negative with a large amount of cytoplasm. (**B**) Candidiasis: there are speckled Gram-positive spores and long pseudohyphae visible. There are numerous polymorphs present and the bacterial flora is abnormal, resembling bacterial vaginosis. (**C**) Bacterial vaginosis: there is an overgrowth of anaerobic organisms, including *Gardnerella vaginalis* (small Gram-variable cocci), and a decrease in the numbers of lactobacilli. A 'clue cell' is seen. This is an epithelial cell covered with small bacteria, so the edge of the cell is obscured. (**D**) Trichomoniasis: an unstained 'wet mount' of vaginal fluid from a woman with *Trichomonas vaginalis* infection. There is a cone-shaped, flagellated organism in the centre, with a terminal spike and four flagella visible. In practice, the organism is identified under the microscope by movement, with amoeboid motion and its flagella waving.

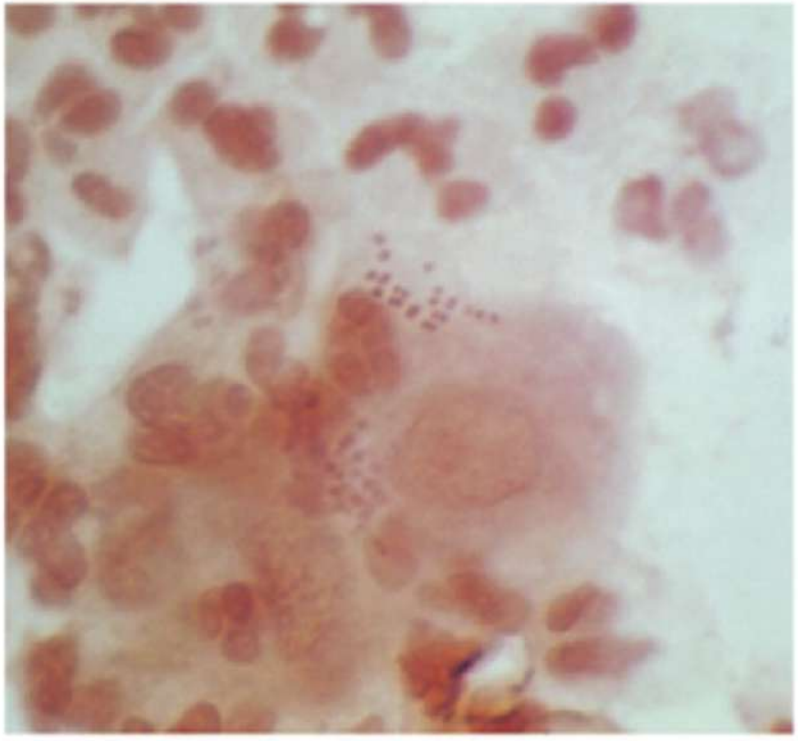


Figure 9.2 Gram-stained smear of cervical secretions showing polymorphs and Gram-negative intracellular diplocoeci (x1,000 magnified). This appearance is highly suggestive of gonorrhoea.

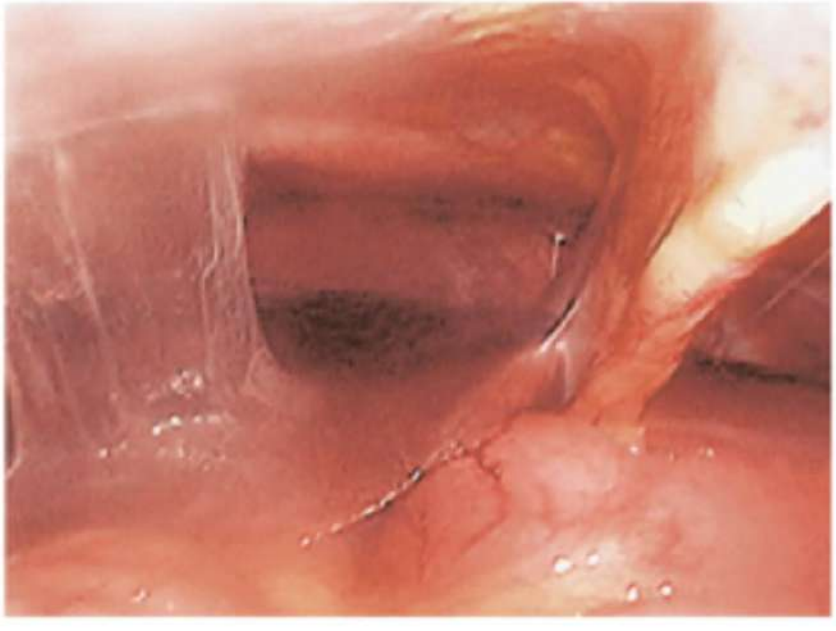


Figure 9.3 Fitz-Hugh–Curtis syndrome showing perihepatic adhesions (typical violin string appearance).

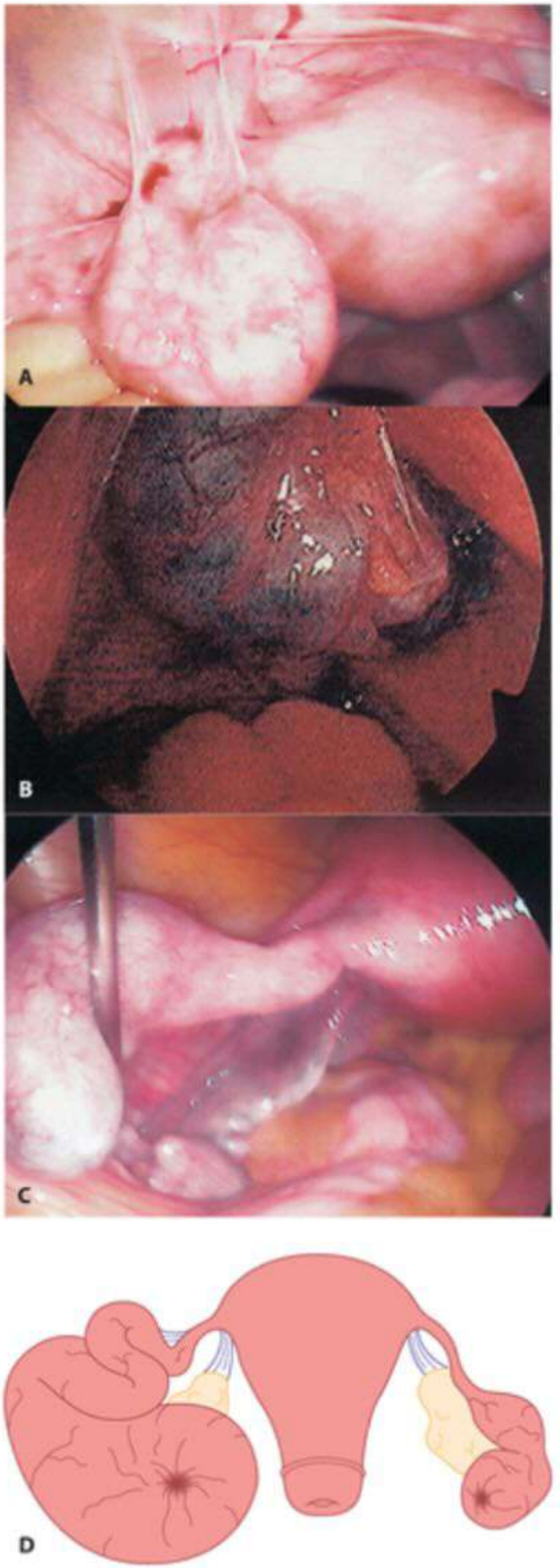


Figure 9.4 (**A**) Peritubal adhesions of the left fallopian tube. (**B**) Ectopic pregnancy within hydrosalpinx. (**C**) Left fallopian tube hydrosalpinx. (**D**) Large hydrosalpinx of the left fallopian tube with a smaller hydrosalpinx on the right side.

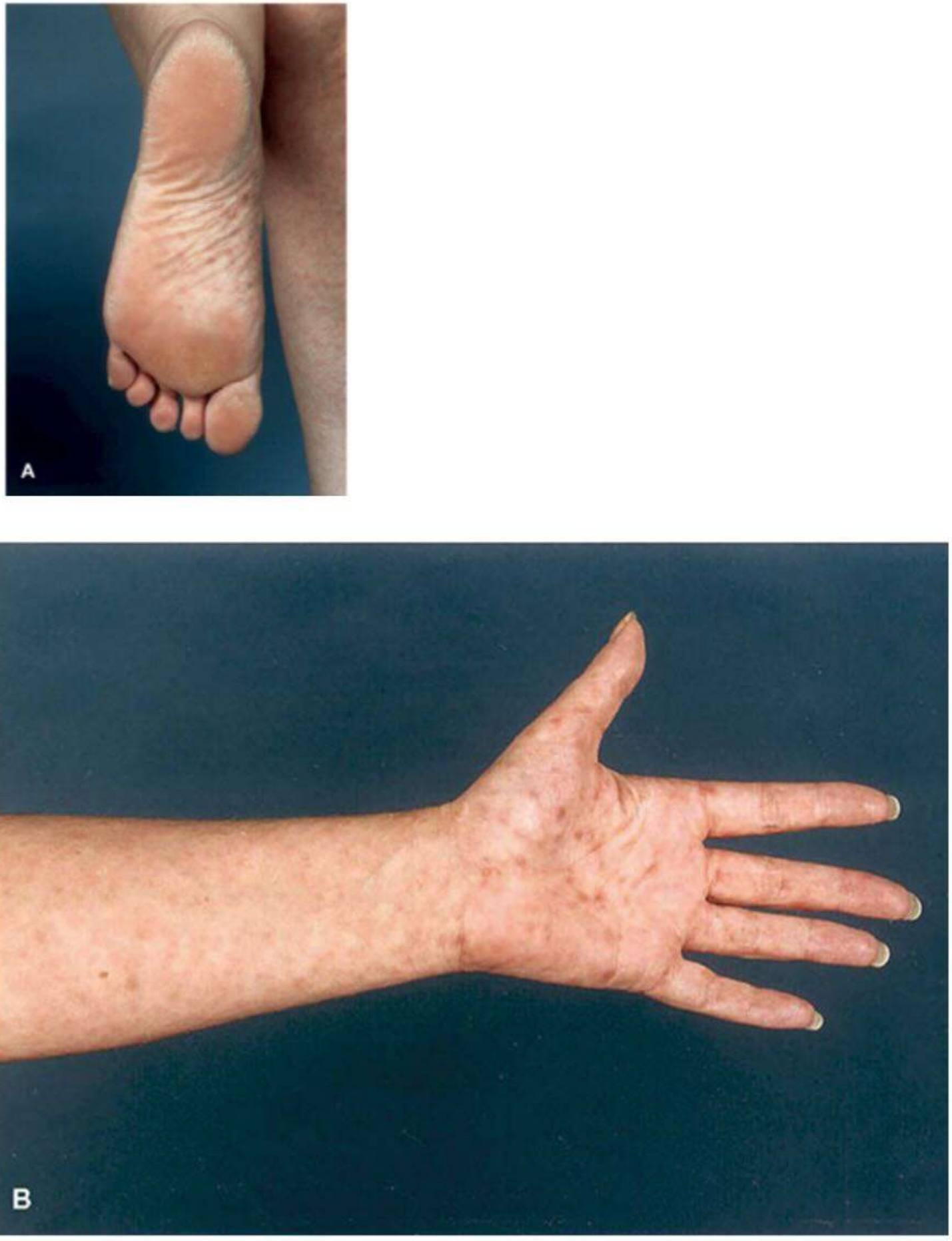


Figure 9.5 A typical rash of secondary syphilis: widespread and characteristically involving soles of feet (**A**) and/or palms of hands (**B**).

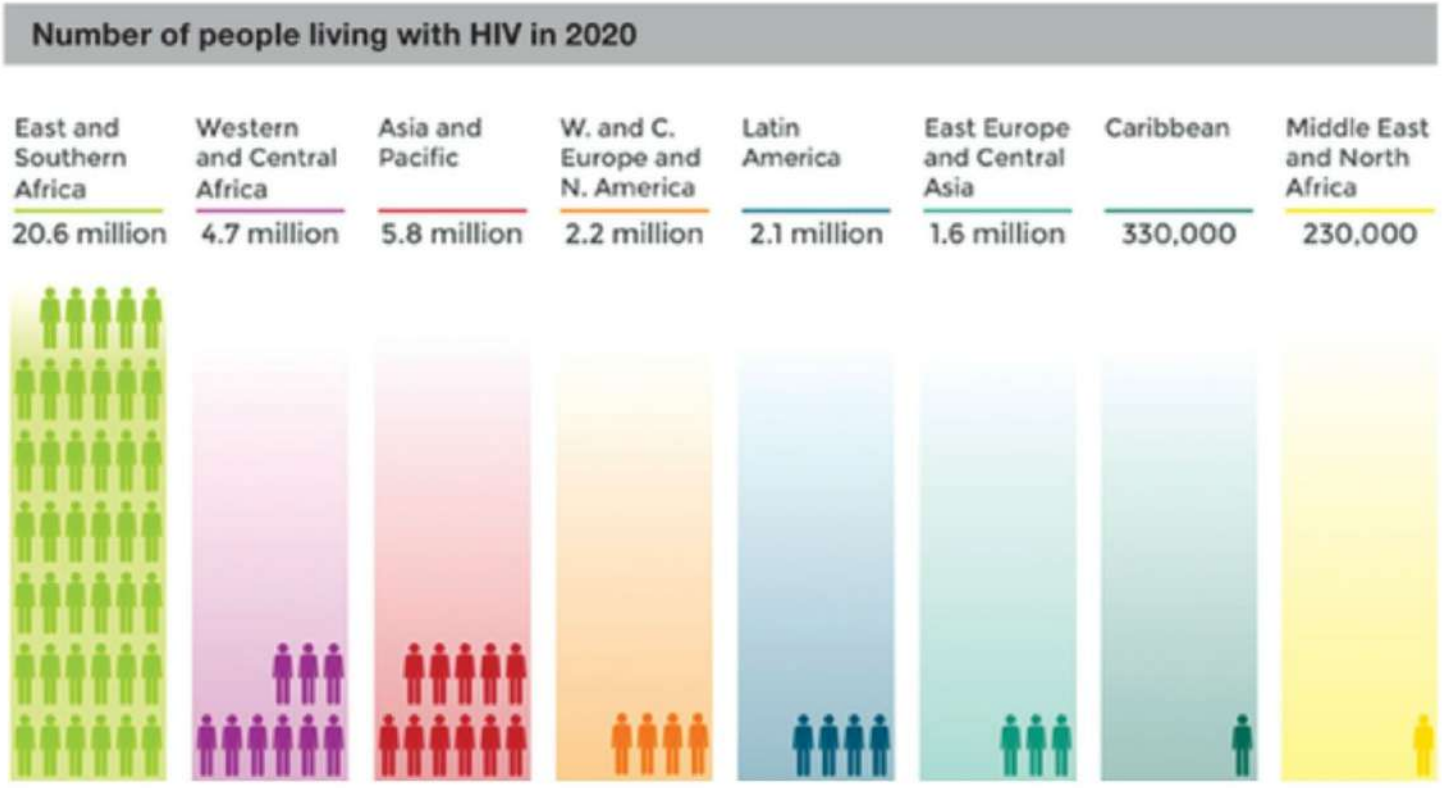


Figure 9.6 Global burden of HIV infection. (HIV, human immunodeficiency virus.)

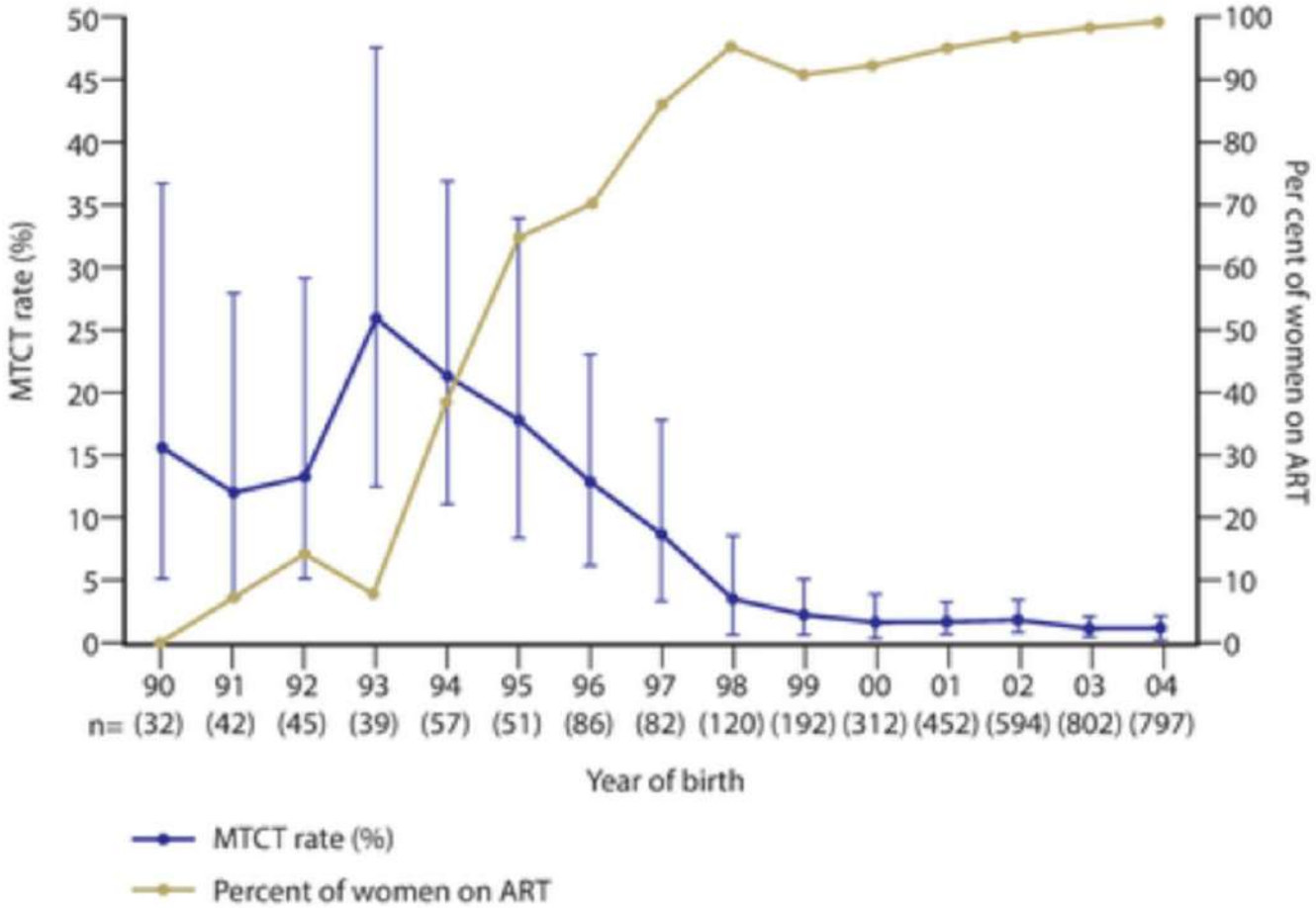


Figure 9.7 UK data from the Integrated Screening Outcomes Surveillance Service, demonstrating extremely low rates of vertical transmission of HIV due to screening and appropriate management. (ART, antiretroviral therapy; HIV, human immunodeficiency virus; MTCT, mother-to-child transmission.)

10 Urogynaecology and pelvic floor problems

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RANEE THAKAR

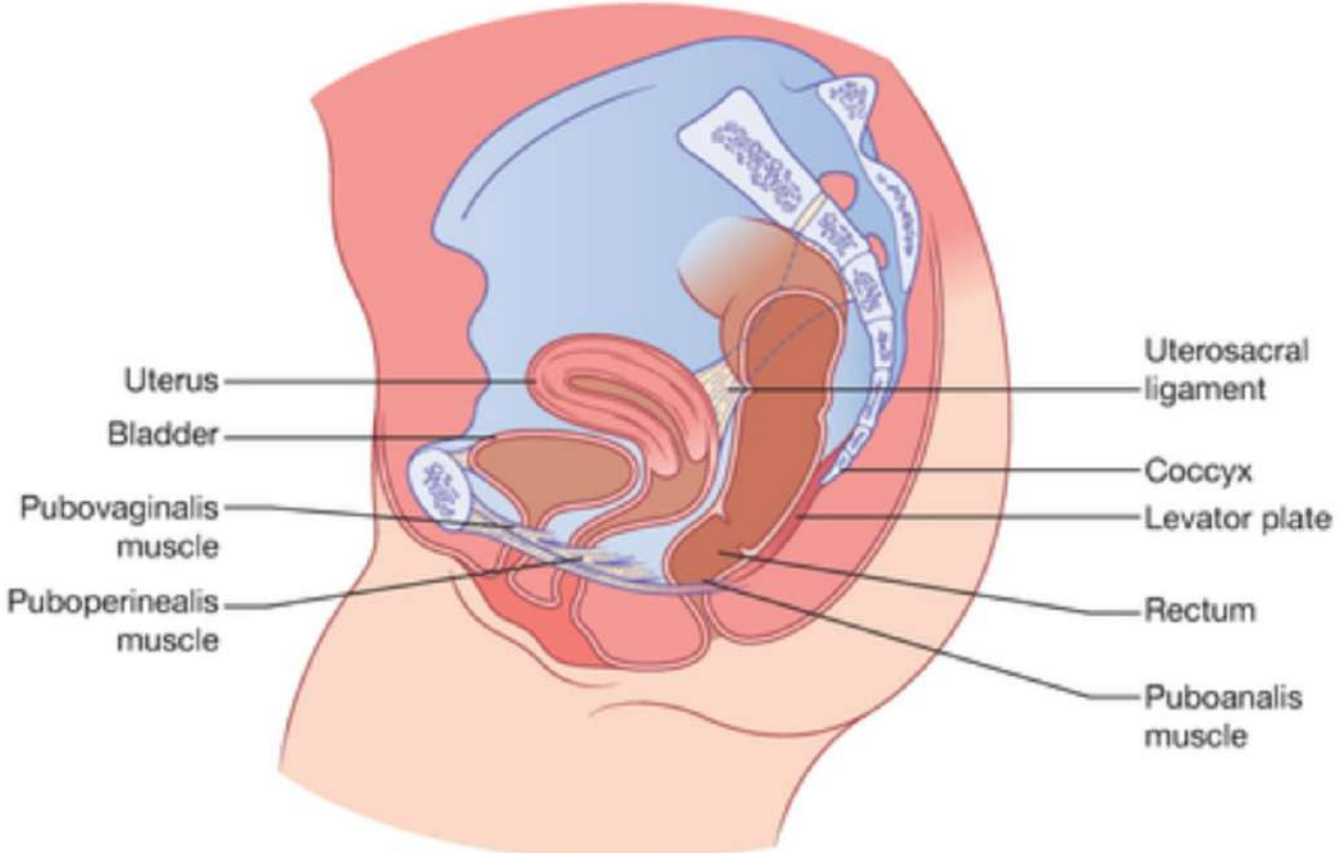

Figure 10.1 Female pelvic anatomy.

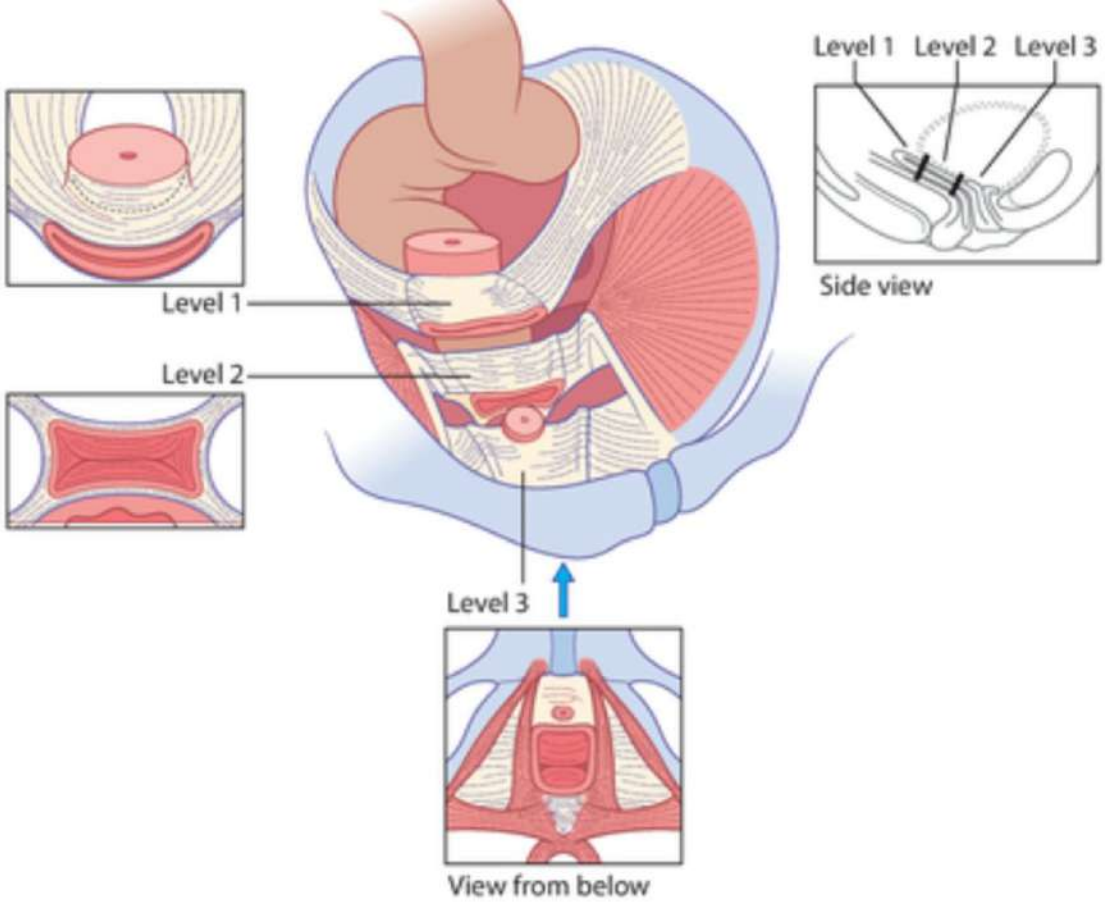

Figure 10.2 Fascial supports of the pelvic organs. Level 1 support is provided by the uterosacral ligaments, suspending the uterus and vaginal vault. Level 2 (mid-vagina) support is provided by the

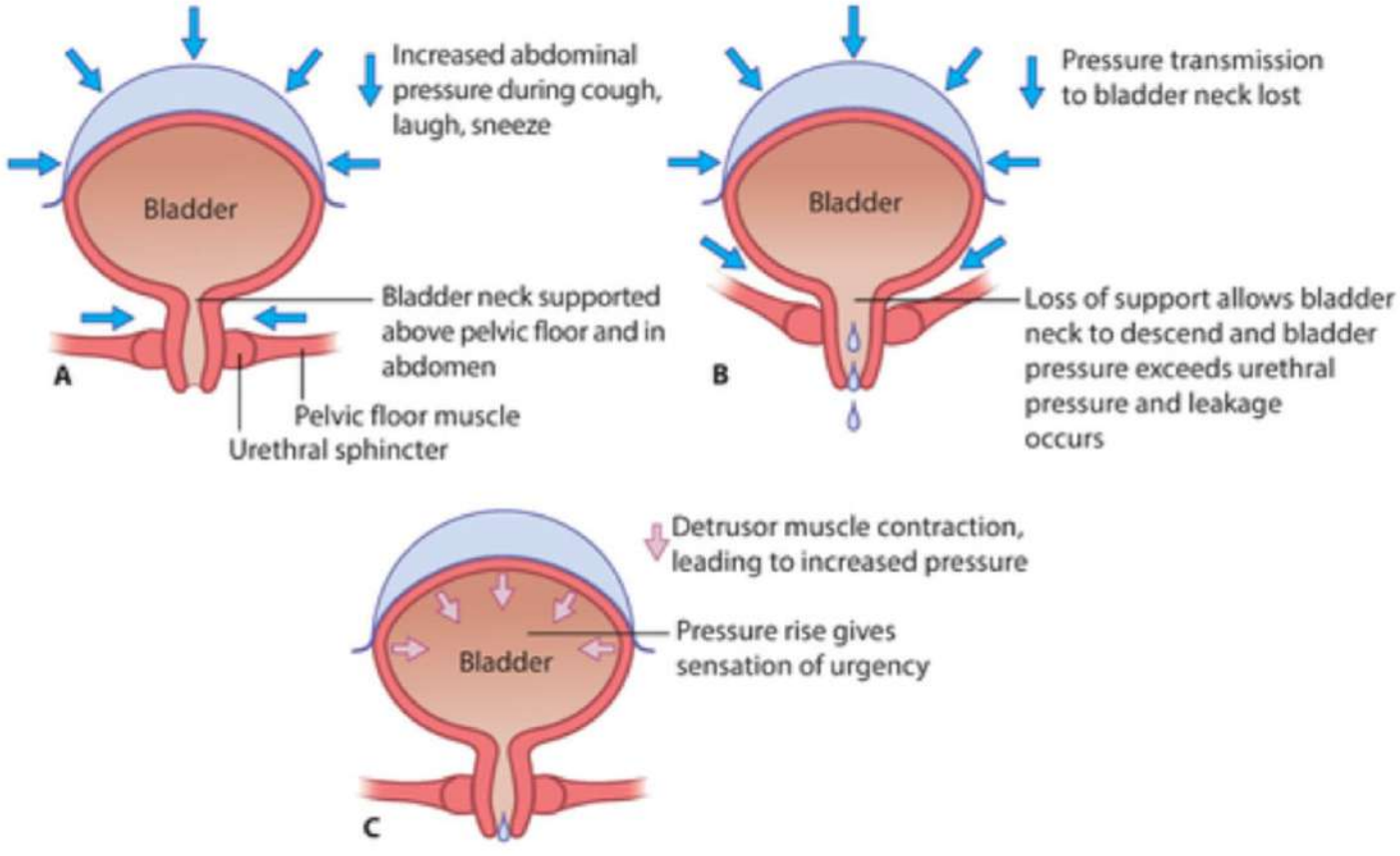

Figure 10.3 Mechanism of incontinence. In healthy women, the bladder neck is supported above the pelvic floor and increases in abdominal pressure are transmitted to the bladder neck (**A**). Loss of bladder neck support results in descent of the bladder neck and loss of pressure transmission, resulting in leaking when coughing, straining, etc, (stress incontinence) (**B**). Detrusor overactivity causes increased sensation; leakage occurs only if the contraction pressure exceeds the pelvic floor and sphincter pressure (**C**).

Date: Sunday 27th November 2016

I got up at...7 am I went to bed at...10.30 pm

Time	Record drinks taken (type and amount)	Volume of urine passed (mL)	Each time you leak, circle whether you were:	Each time you pass water, circle how severe the urgency was:
6 am			Almost Dry Damp Wet Soaked	None Mild Moderate Severe
7 am		400 mL	Almost Dry Damp Wet Soaked	None Mild Moderate Severe
8 am	1 cup of tea 200 mL		Almost Dry Damp Wet Soaked	None Mild Moderate Severe
9 am		200 mL	Almost Dry Damp Wet Soaked	None Mild Moderate Severe
10 am	1 cup of tea 200 mL		Almost Dry Damp Wet Soaked	None Mild Moderate Severe
11 am		200 mL	Almost Dry Damp Wet Soaked	None Mild Moderate Severe
Mid-day	1 glass of wine 150 mL 1 cup of coffee 200 mL	100 mL 150 mL	Almost Dry Damp Wet Soaked	None Mild Moderate Severe
1 pm			Almost Dry Damp Wet Soaked	None Mild Moderate Severe
2 pm	1 glass of orange 200 mL		Almost Dry Damp Wet Soaked	None Mild Moderate Severe
3 pm		250 mL	Almost Dry Damp Wet Soaked	None Mild Moderate Severe
4 pm		100 mL	Almost Dry Damp Wet Soaked	None Mild Moderate Severe
5 pm	1 cup of tea 200 mL		Almost Dry Damp Wet Soaked	None Mild Moderate Severe
6 pm		200 mL	Almost Dry Damp Wet Soaked	None Mild Moderate Severe
7 pm			Almost Dry Damp Wet Soaked	None Mild Moderate Severe
8 pm	1 can of coke 240 mL	100 mL	Almost Dry Damp Wet Soaked	None Mild Moderate Severe
9 pm		100 mL	Almost Dry Damp Wet Soaked	None Mild Moderate Severe
10 pm	1 cup of hot chocolate 150 mL	100 mL	Almost Dry Damp Wet Soaked	None Mild Moderate Severe
11 pm			Almost Dry Damp Wet Soaked	None Mild Moderate Severe
Mid-night			Almost Dry Damp Wet Soaked	None Mild Moderate Severe
1 am			Almost Dry Damp Wet Soaked	None Mild Moderate Severe
2 am			Almost Dry Damp Wet Soaked	None Mild Moderate Severe
3 am			Almost Dry Damp Wet Soaked	None Mild Moderate Severe
4 am			Almost Dry Damp Wet Soaked	None Mild Moderate Severe
5 am			Almost Dry Damp Wet Soaked	None Mild Moderate Severe

Reminders

1. Don't forget to record the time you woke up in the morning and the time you went to sleep
2. Don't forget to record what happened overnight
3. Try and make a record of things just after they happen
4. Record things to the nearest hour
5. Record type and amount of drinks taken (e.g. 2 cups of tea, 1 can of coke)

Urgency severity scale

NONE: no urgency

MILD: awareness of ugency but easily tolerated

MODERATE: enough urgency discomfort that it interferes with usual activities/tasks

SEVERE: extreme urgency discomfort that abruptly stops all activities/tasks

Figure 10.4 An example of a bladder diary, including columns for recording fluid intake (volume and amount), voided volume, the amount of leakage and the severity of urgency.

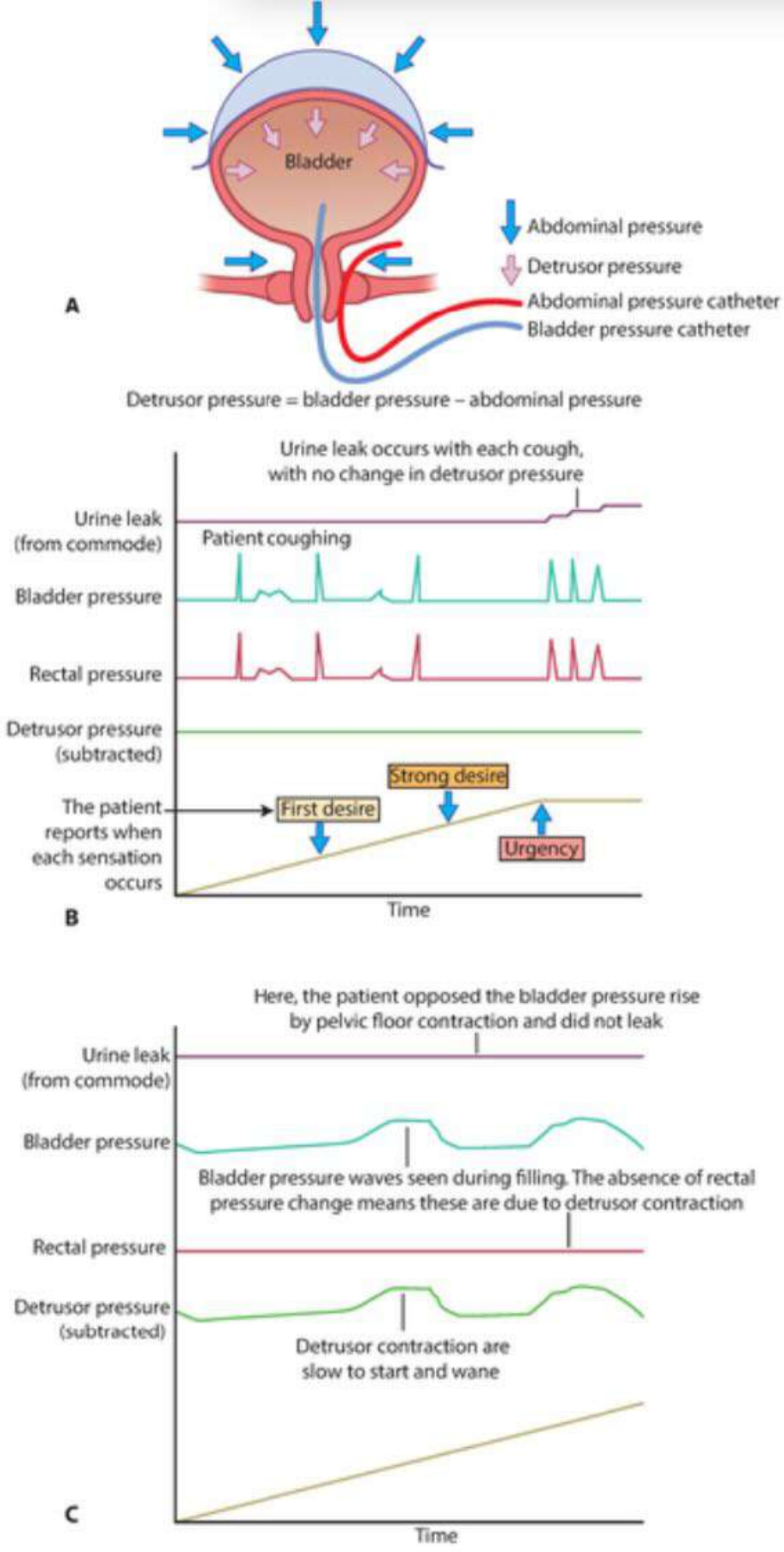

Figure 10.5 A urodynamic investigation (cystometry) records bladder pressure and abdominal pressure (usually via a rectal pressure catheter) and calculates detrusor pressure by subtraction (**A**). During filling, the patient is asked to report the occurrence of first desire to void (usually about 150 mL), strong desire and urgency (at functional bladder capacity) (**B**). With urodynamic stress incontinence, leakage is seen with increases in abdominal

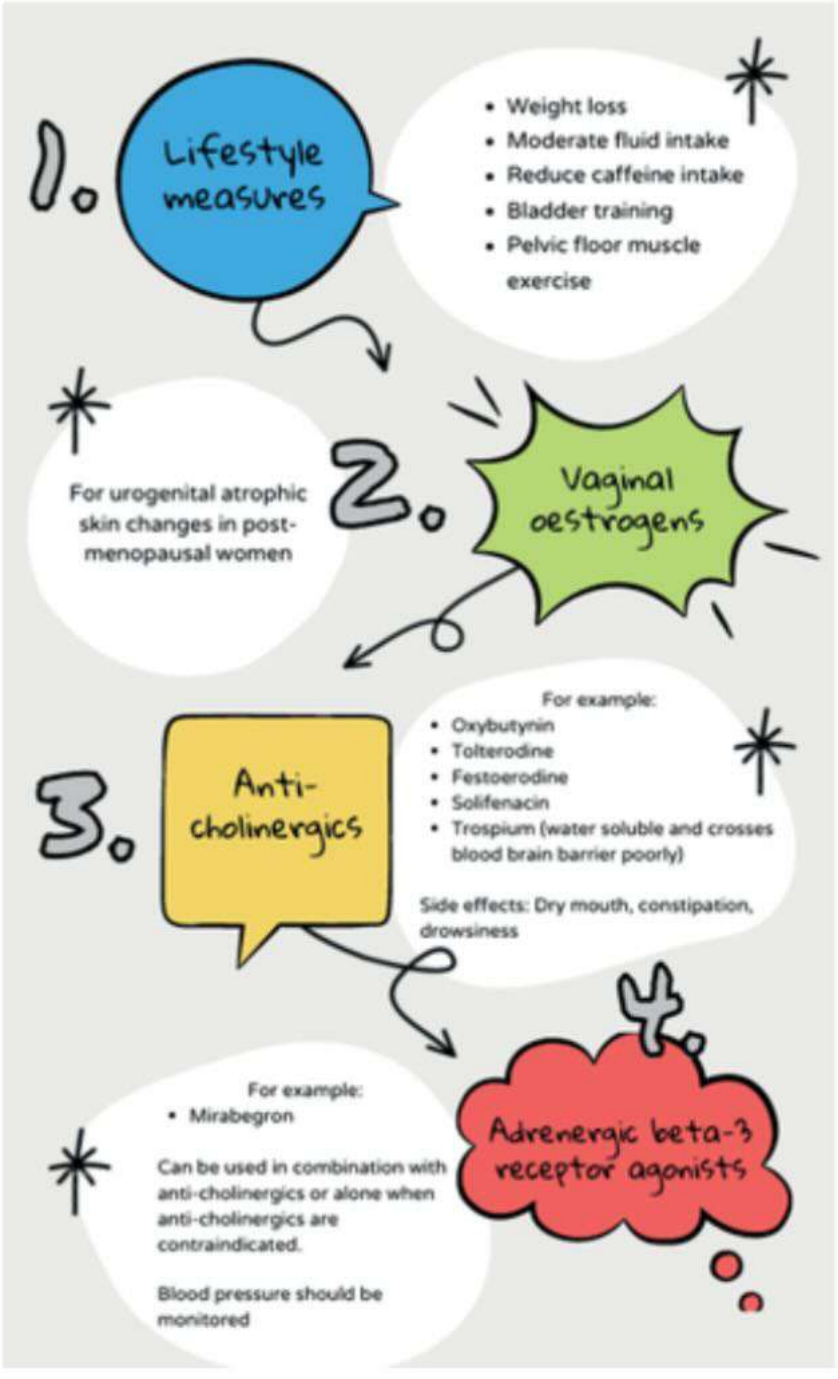

Figure 10.6 Treatment ladder for overactive bladder. Review the effects of conservative management (step 1) after 8–12 weeks and of medication (steps 2–4) after 4 weeks.

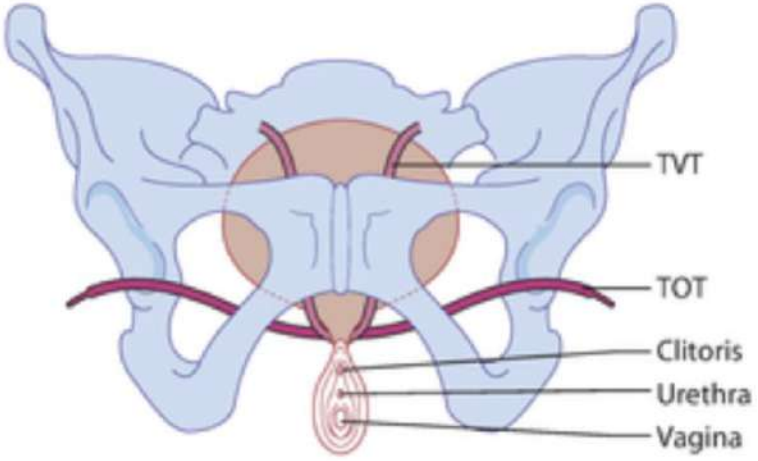

Figure 10.7 The position of tension-free vaginal (TVT) and transobturator (TOT) midurethral tapes. The TVT lies under the midurethra and in the retropubic space between the pelvis and bladder. The introducing trocars pass through the urogenital diaphragm and the rectus sheath. The TOT lies in a more horizontal position under the midurethra and exits through the obturator foramen, piercing the obturator muscle and the adductor longus tendon in the thigh.

Common surgical complications include:

- voiding difficulty (usually short term) in 2-5%

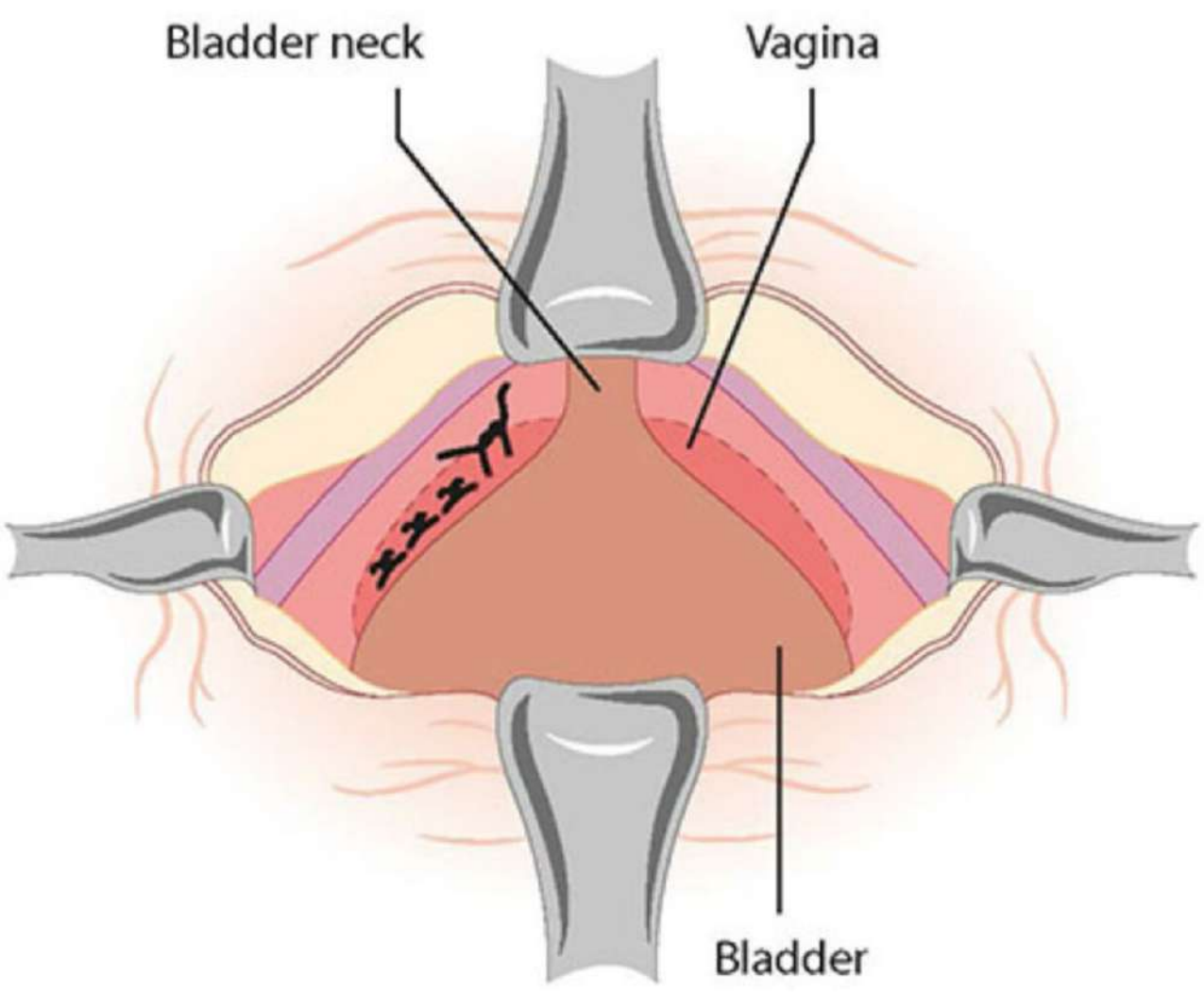

Figure 10.8 A sketch of a colposuspension through a Pfannenstiel incision. The patient's head is at the bottom of the picture, and interrupted sutures are being placed in the paravaginal fascia at the level of the bladder neck through the pectineal ligament on the posterior surface of the superior pubic ramus.

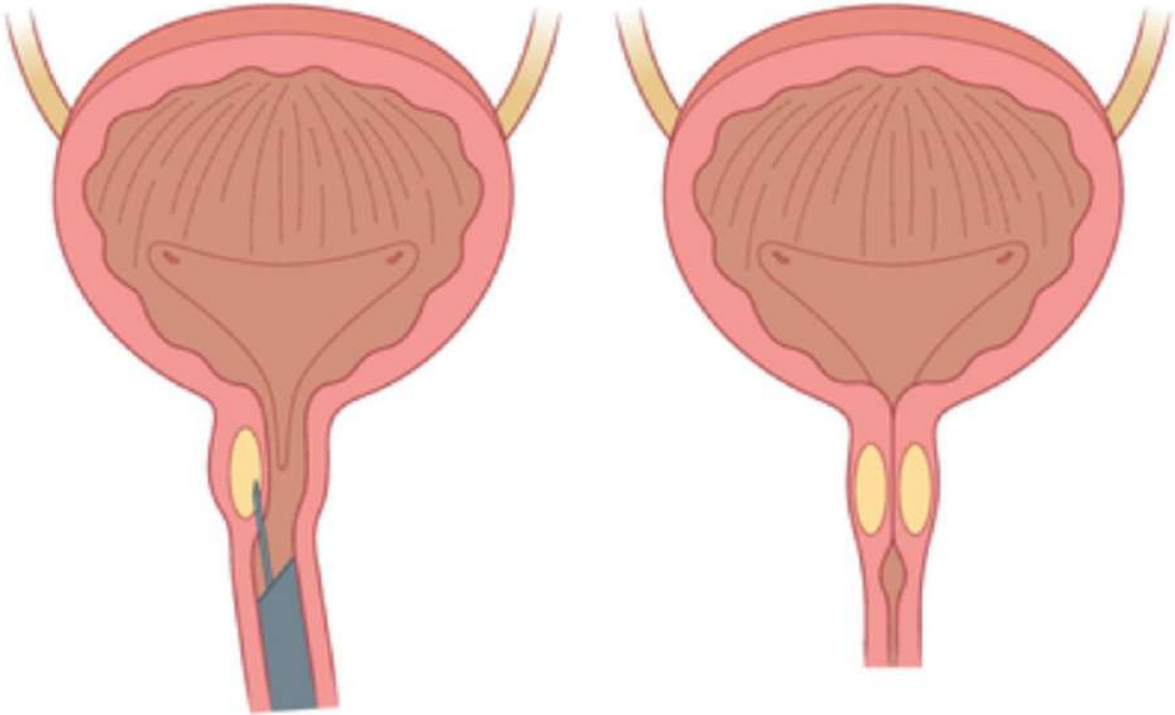

Figure 10.9 Urethral bulking agents reduce the calibre of the urethra and support the bladder neck to reduce urinary incontinence.

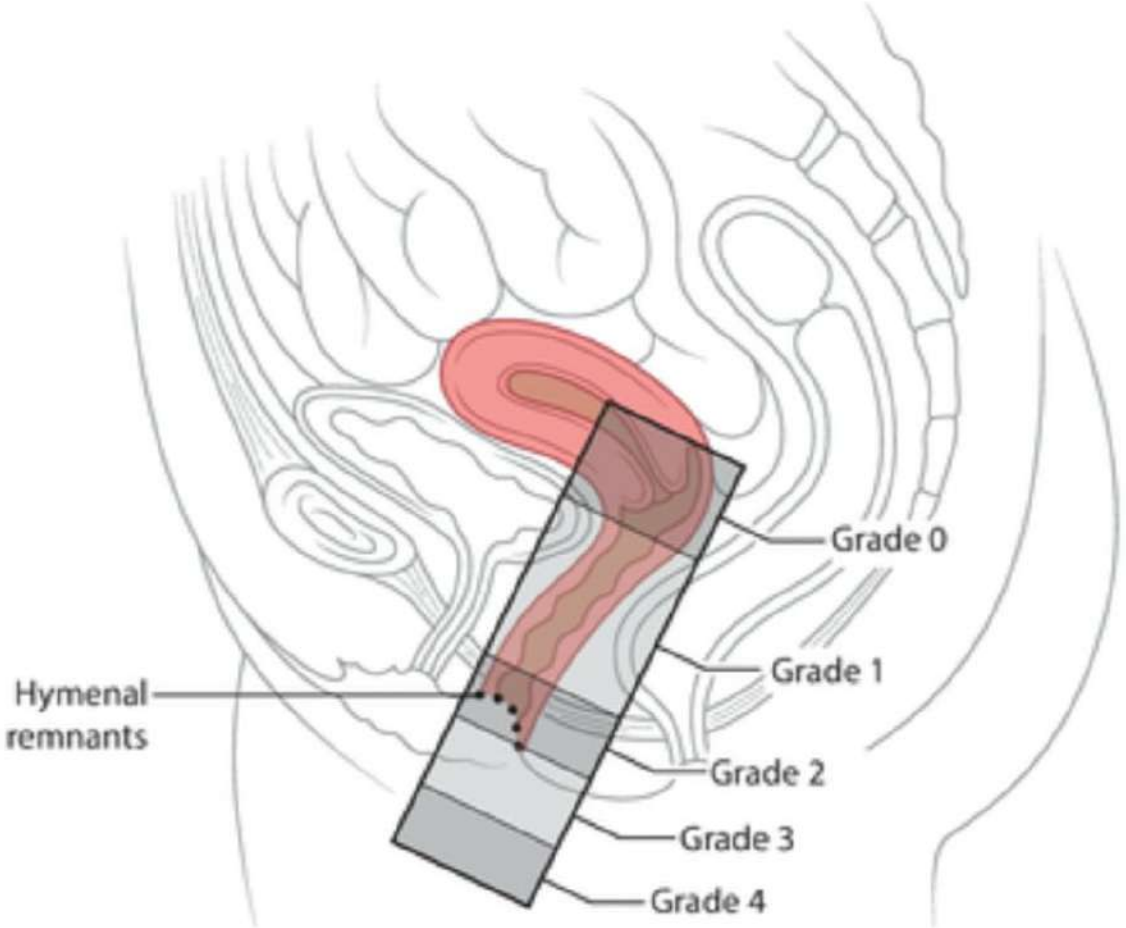

Figure 10.10 Pelvic organ prolapse staging system.

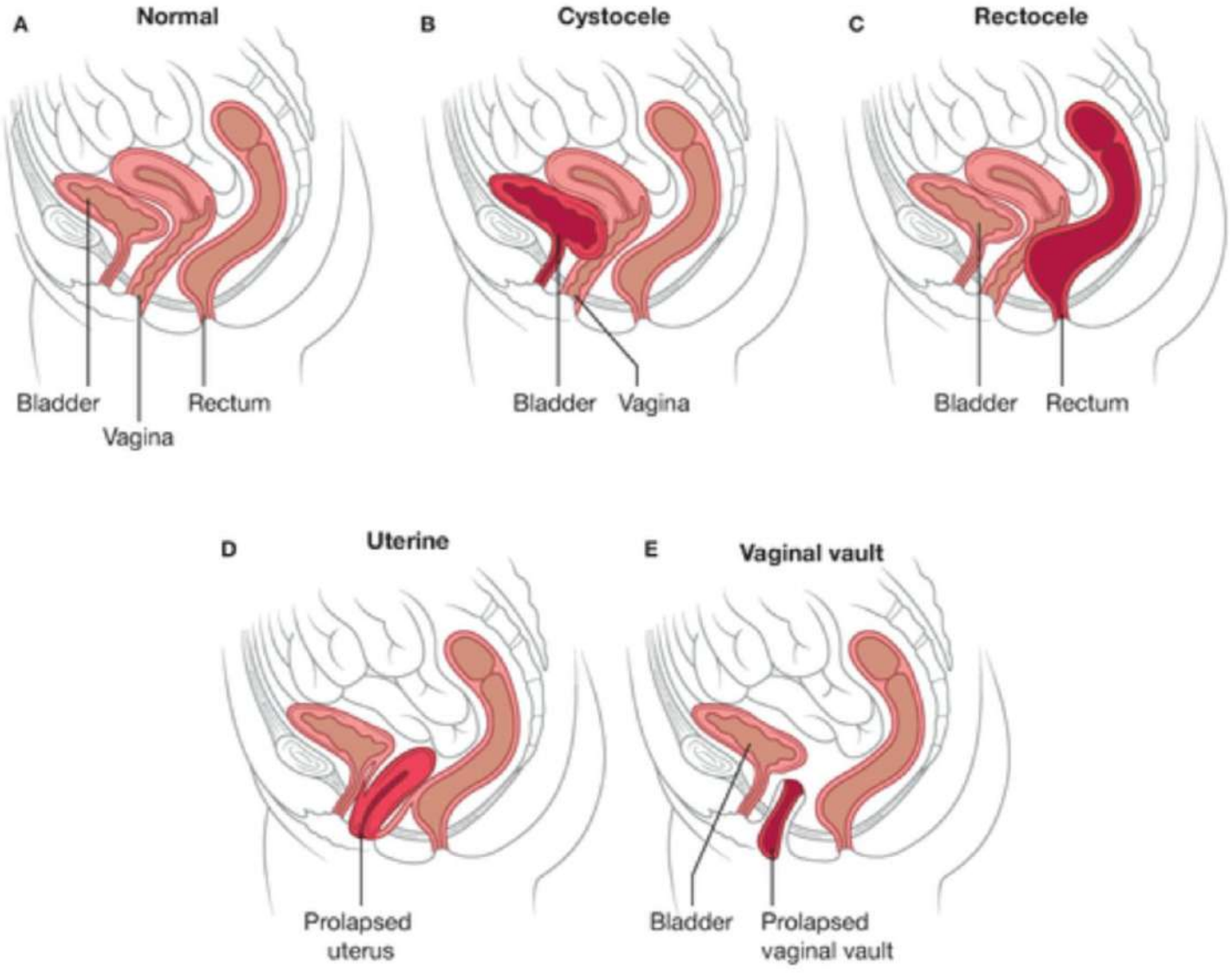

Figure 10.11 (**A**) Anterior vaginal wall prolapse. (**B**) Cystocele with Anterior vaginal wall prolapse. (**C**) Rectocele with Posterior vaginal wall prolapse. (**D**) Uterine prolapse. (**E**) Vaginal vault prolapse.

The uterus can prolapse (**Figure 10.11C**) and, in women who have undergone hysterectomy, vaginal vault prolapse may be seen (**Figure 10.11D**). The Pelvic Organ Prolapse Quantification system is recommended for clinicians dealing with patients with prolapse, as it uses a uniform characterization and recording method.

For women with symptoms of pressure or vaginal bulge only, there is rarely a need to arrange any investigations, other than those relating to anaesthetic preassessment (see **Chapter 17**). In view of the complex relationship between prolapse and bladder or bowel function, if patients have additional indirect symptoms, then it is prudent to arrange relevant investigations. Such patients should be reviewed with the completed investigations in a multidisciplinary team meeting, including a gynaecologist, a colorectal surgeon, a continence nurse and a physiotherapist.

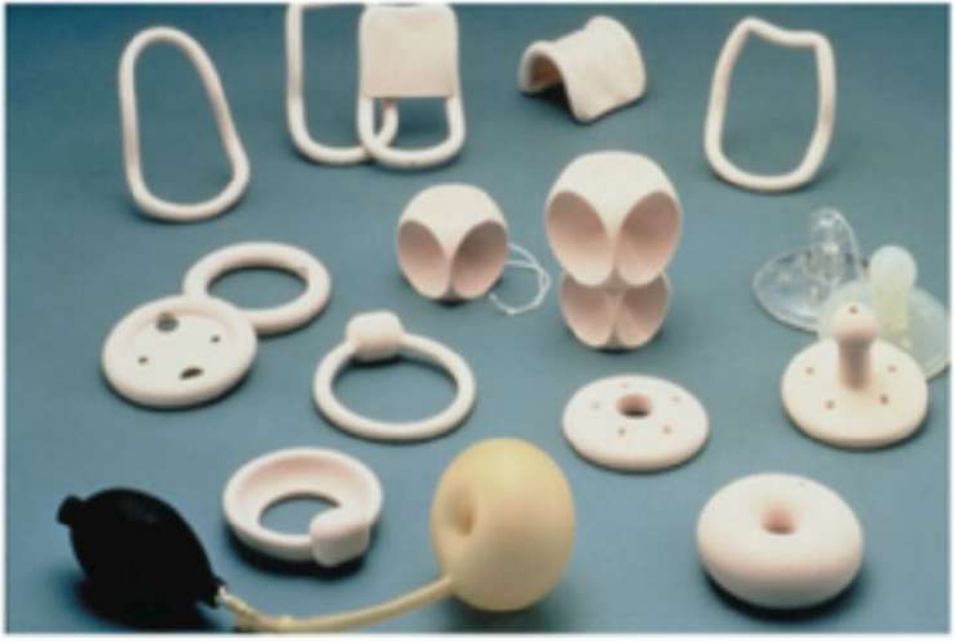

Figure 10.12 Various types of vaginal pessaries.

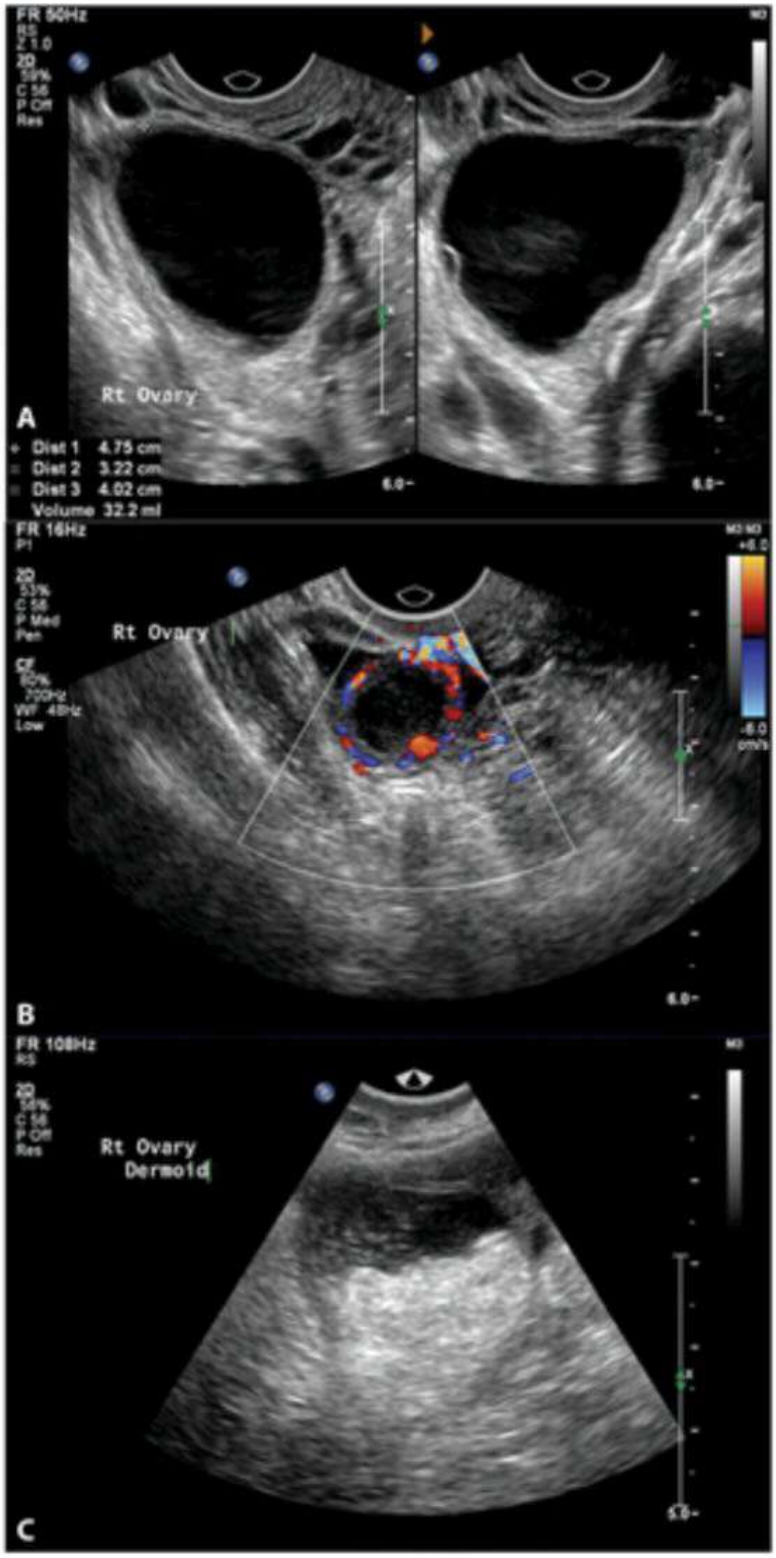

Figure 11.1 Transvaginal ultrasound scan. (**A**) Simple ovarian cyst. (**B**) Corpus luteal cyst. (**C**) Dermoid cyst.

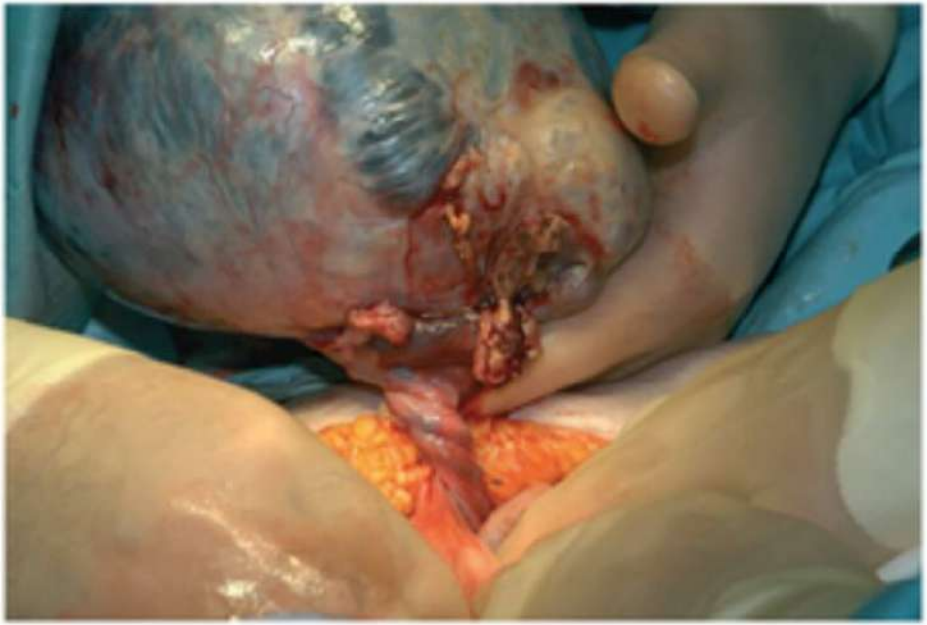

Figure 11.2 Torsion of a dermoid cyst at laparotomy.

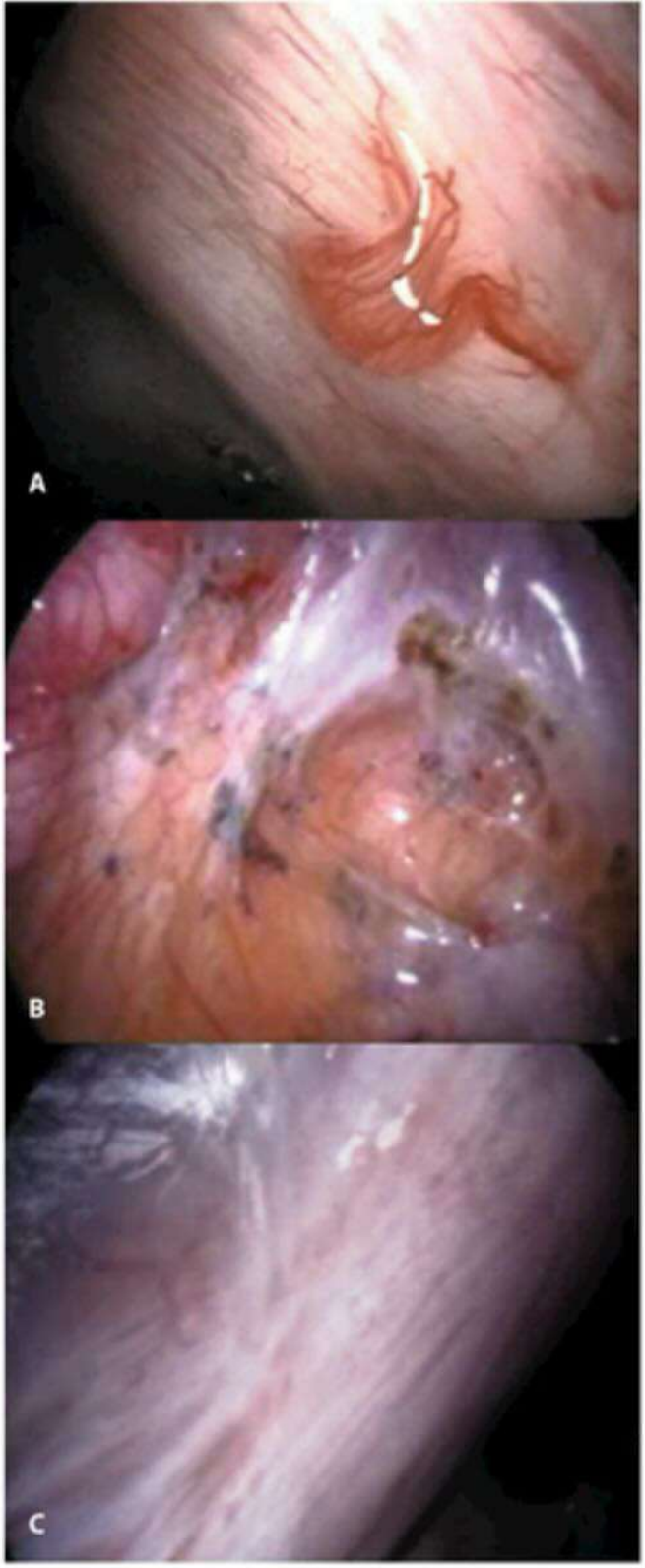

Figure 11.3 Laparoscopic view of endometriosis. (**A**) Red lesions on peritoneum. (**B**) Black 'matchstick' lesions. (**C**) White, fibrous lesion.

12 Benign conditions of the uterus, cervix and endometrium

DOI: 10.1201/9781003218036-12

T JUSTIN CLARK

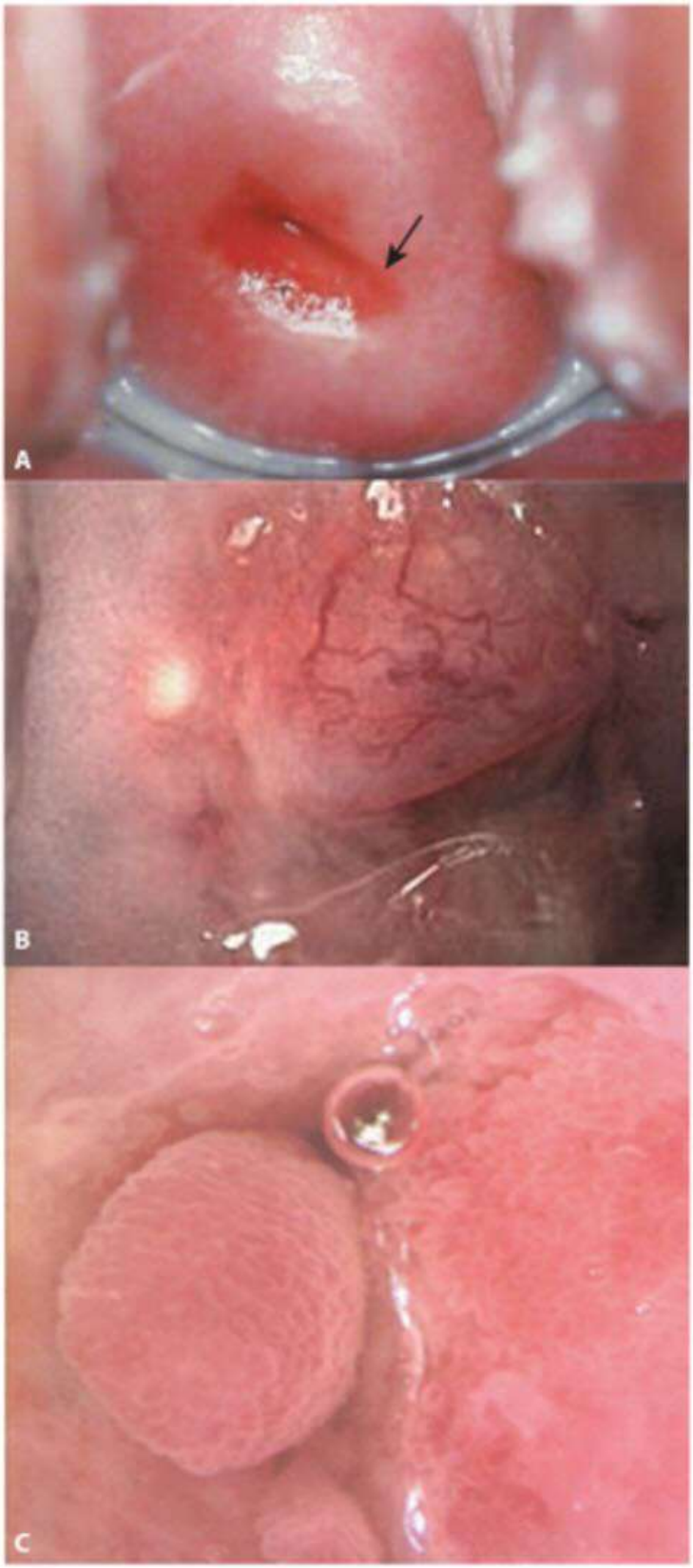

Figure 12.1 Benign changes in the cervix. (**A**) Cervical ectropion. (**B**) Nabothian follicle. (**C**) Cervical polyp.

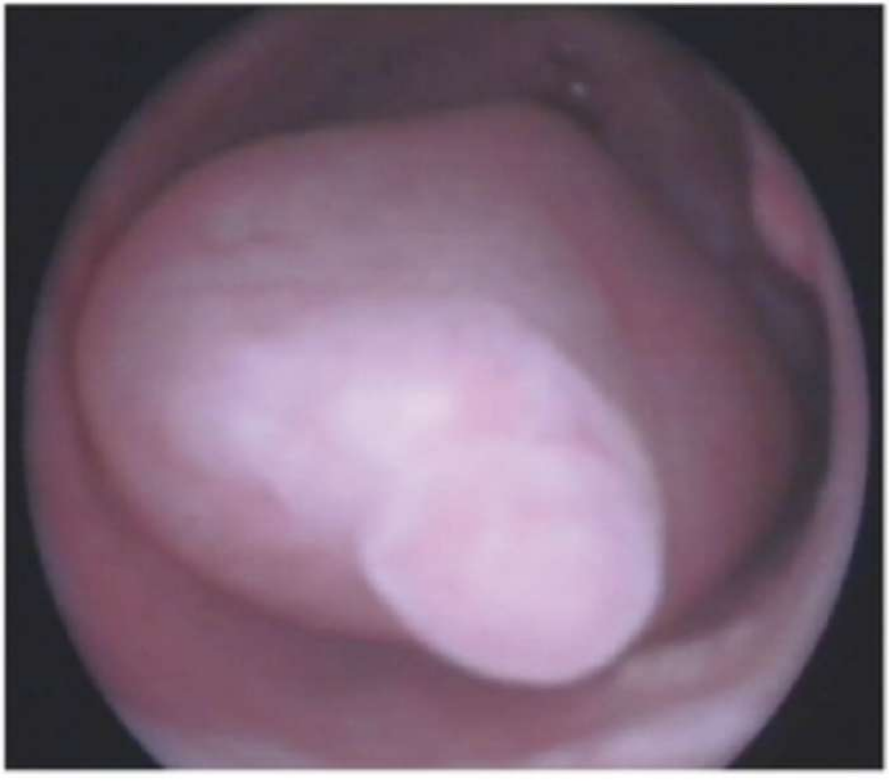

Figure 12.2 A hysteroscopic view of an endometrial polyp.

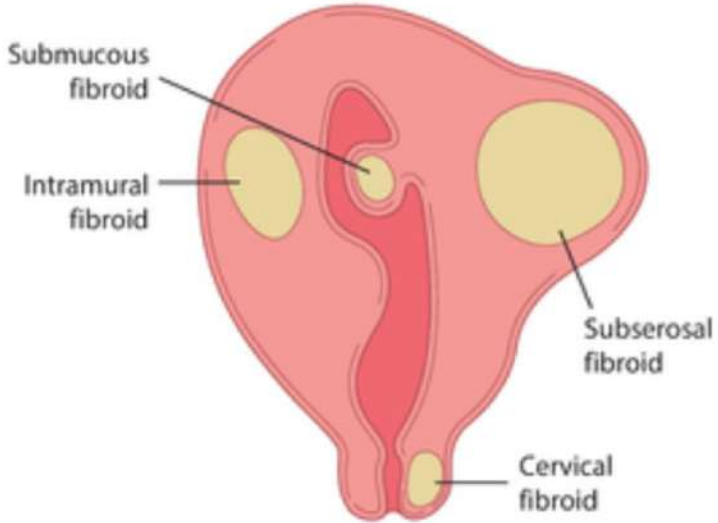

Figure 12.3 Diagram showing the typical sites of uterine fibroids.

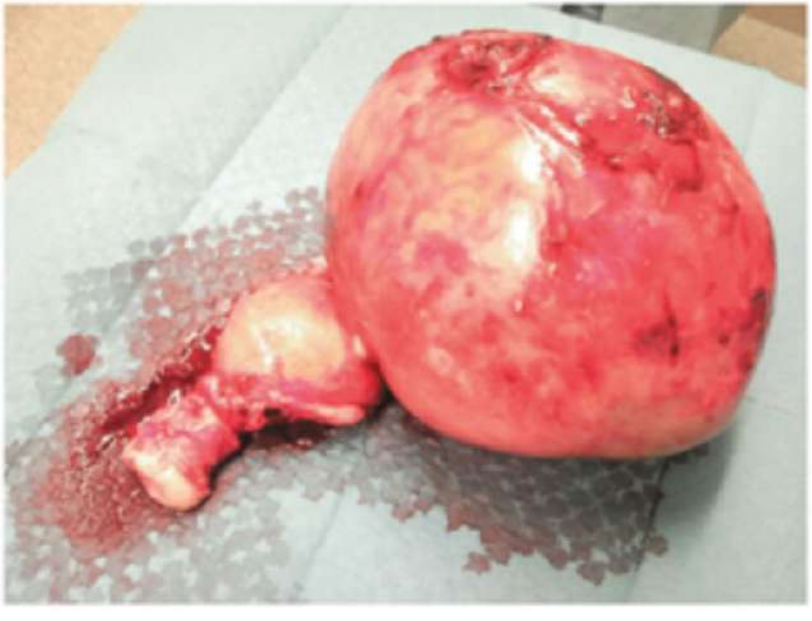

Figure 12.4 Pedunculated, subserosal fibroid on a hysterectomy specimen.

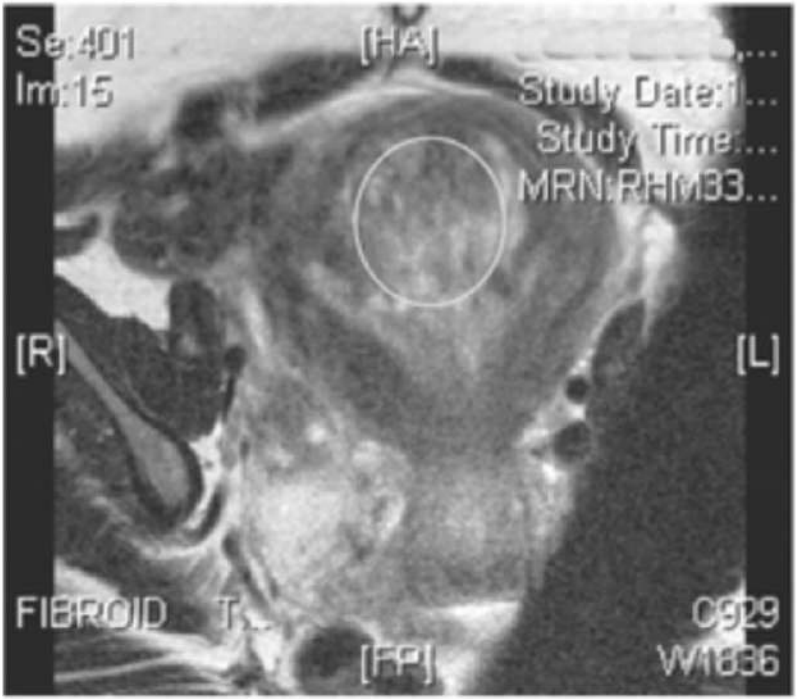

Figure 12.5 Magnetic resonance imaging of an enlarged fibroid uterus.

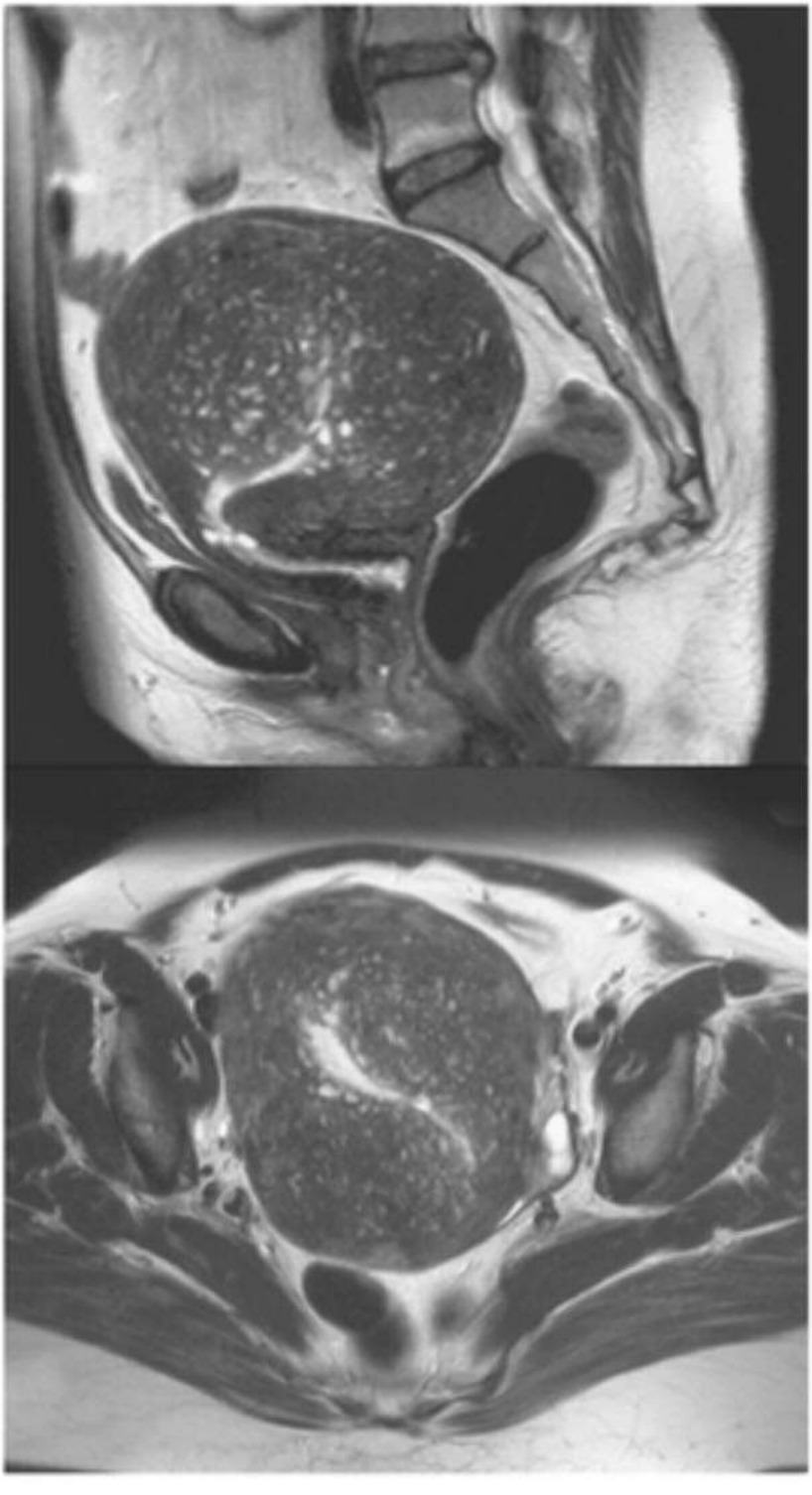

Figure 12.6 MRI showing adenomyosis - note the bright reflections of the central endometrium and flecks of ectopic endometrium in the underlying myometrium.

13 Benign conditions of the vulva and vagina, psychosexual disorders and female genital mutilation

DOI: 10.1201/9781003218036-13

LEILA CG FRODSHAM

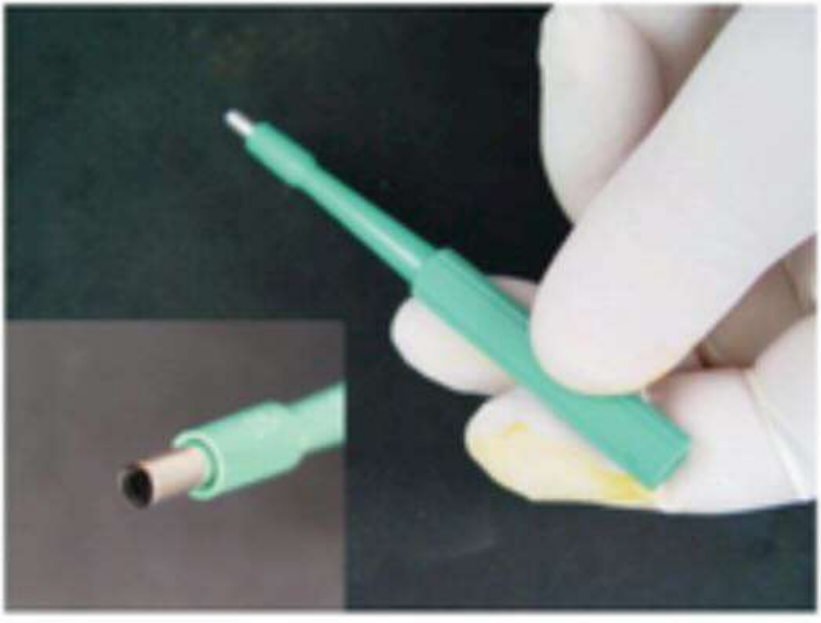

Figure 13.1 Keyes punch biopsy.

Figure 13.2 Lichen sclerosus.

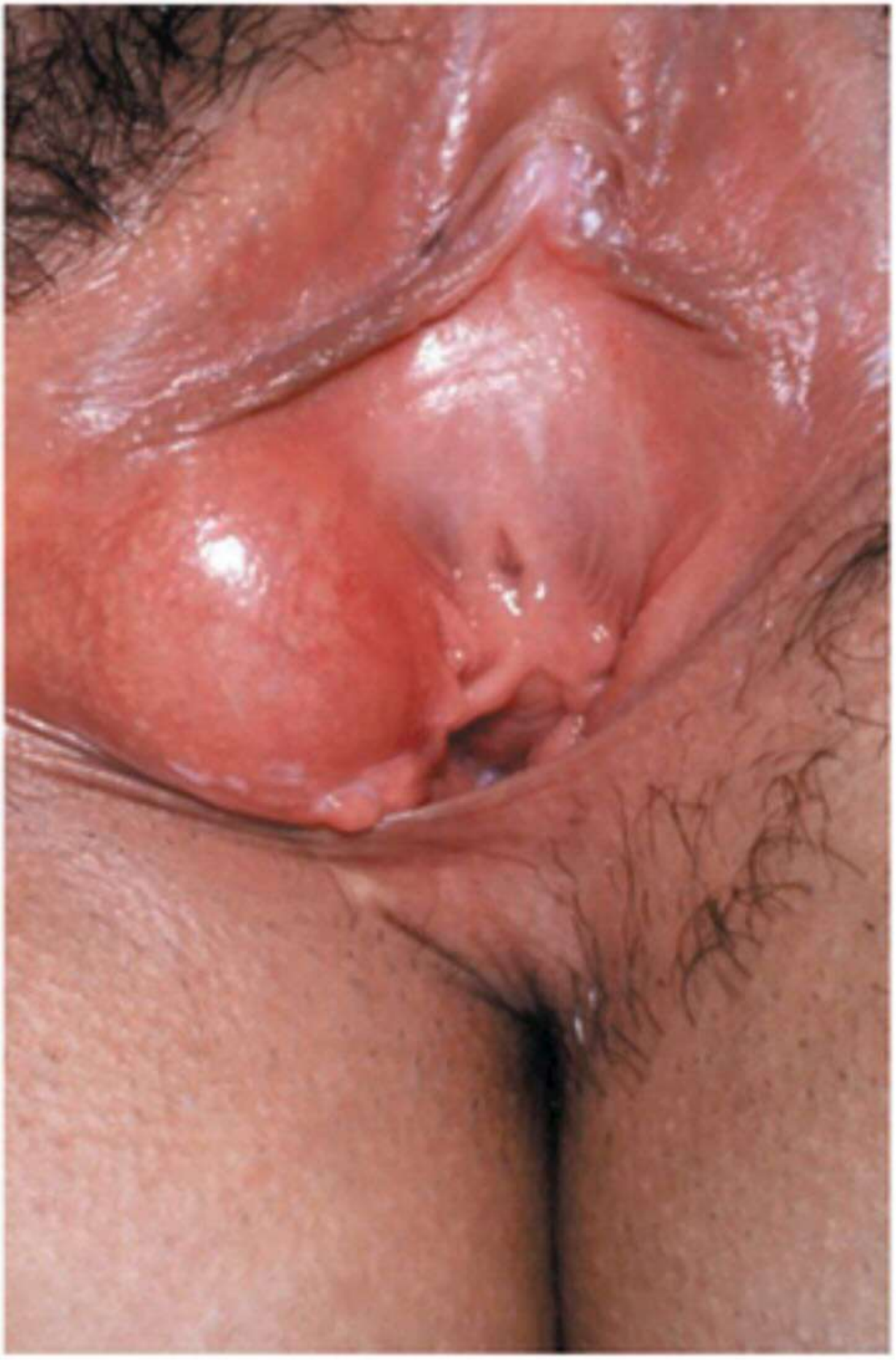

Figure 13.3 Bartholin's cyst.

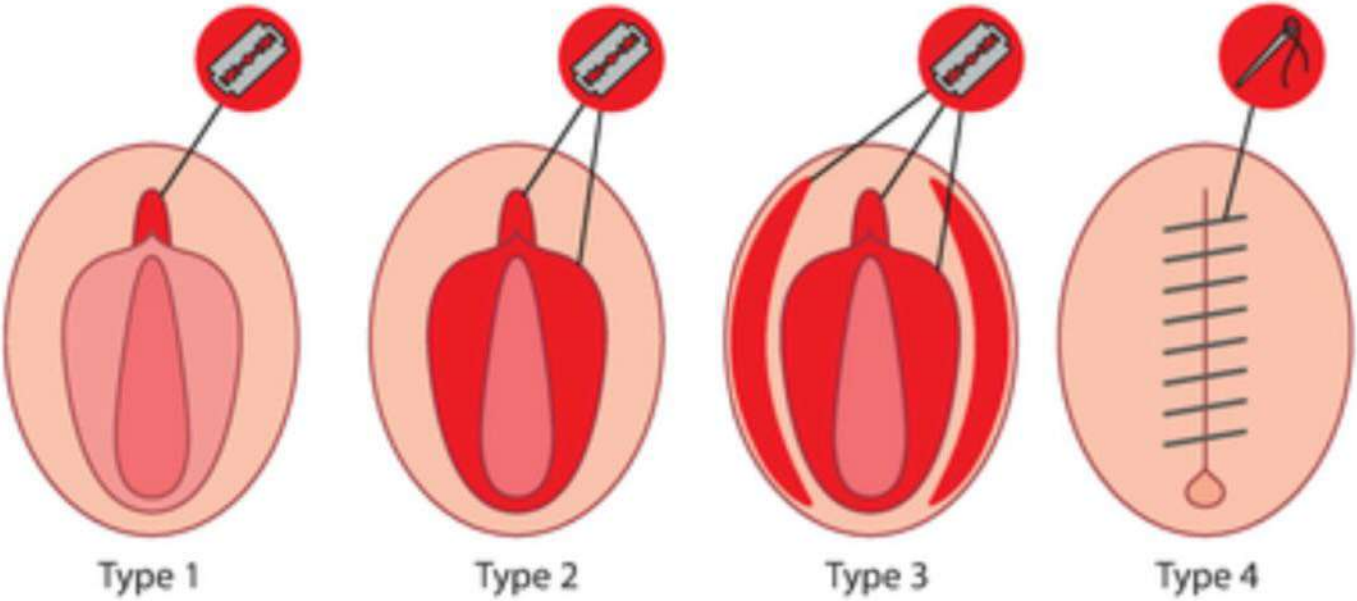

Figure 13.4 Types of female genital mutilation.

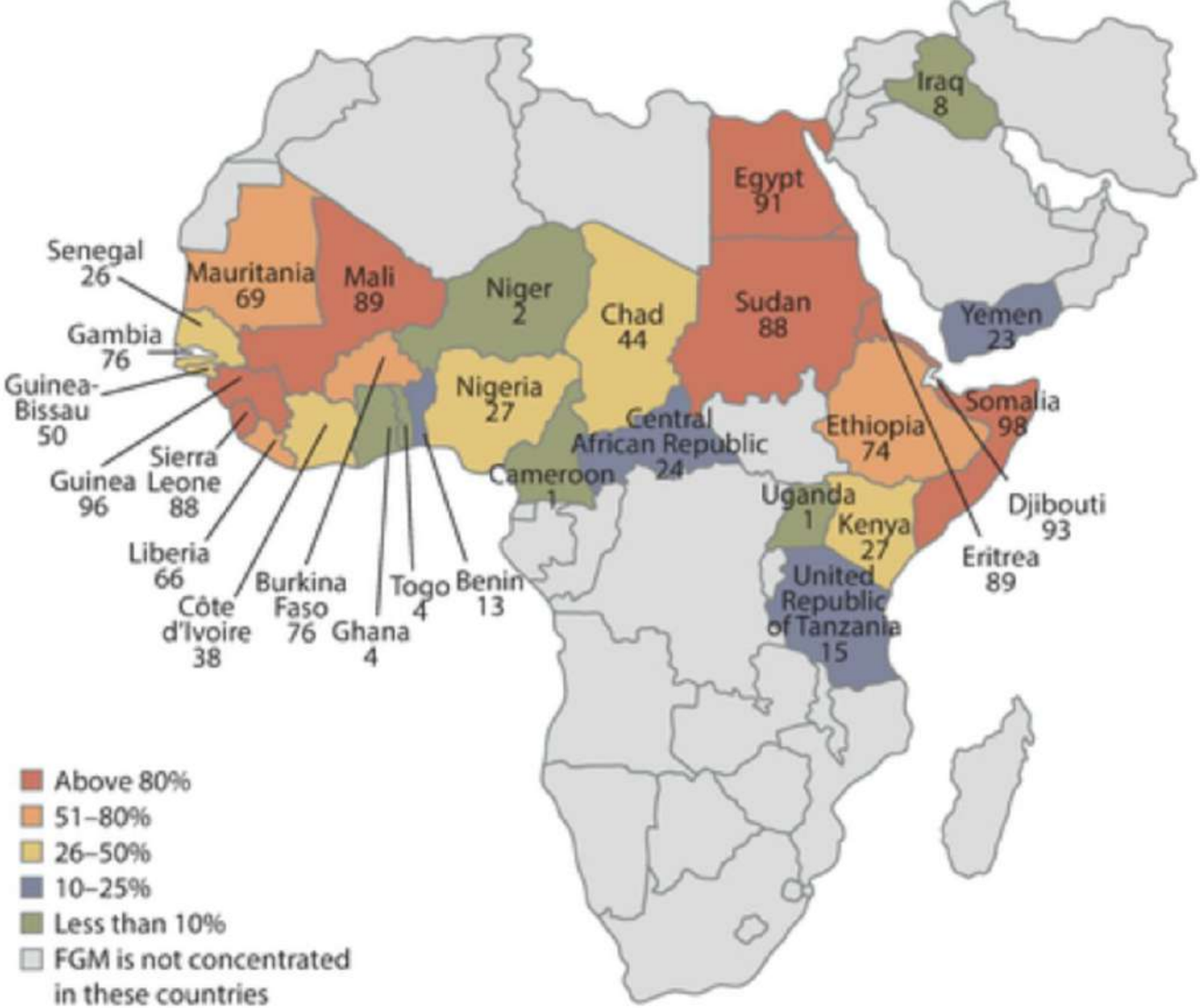

Figure 13.5 Geographical distribution of female genital mutilation. (Adapted from UNICEF 2013 data.)

14 Malignant disease of the ovary

DOI: 10.1201/9781003218036-14

EMMA J CROSBIE

STAGING

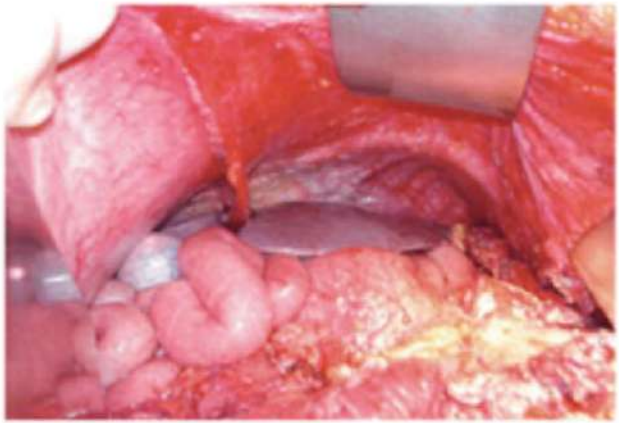

Figure 14.1 Advanced ovarian cancer illustrating diaphragmatic peritoneal disease.

15 Malignant disease of the uterus

DOI: 10.1201/9781003218036-15

EMMA J CROSBIE

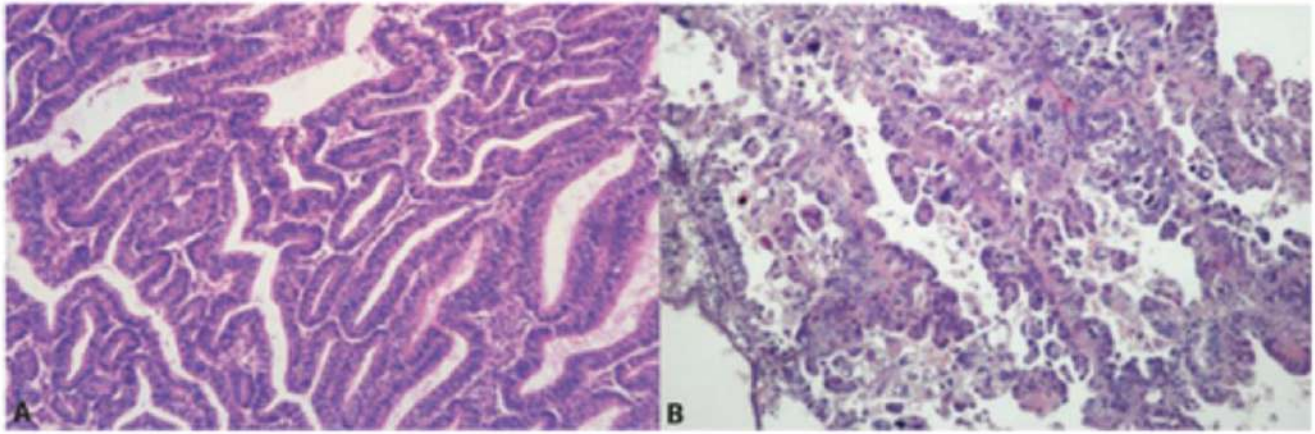

Figure 15.1 Histological comparison of endometrioid adenocarcinoma (**A**) and serous adenocarcinoma (**B**) of the endometrium.

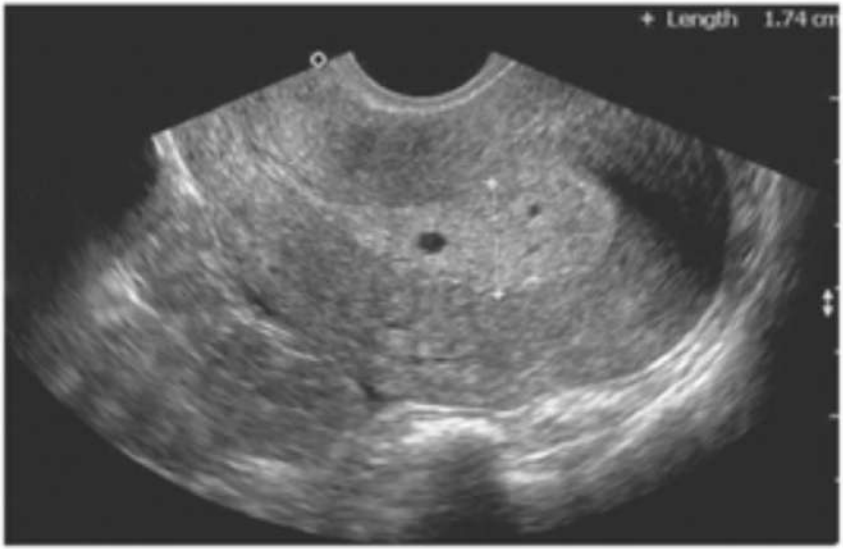

Figure 15.2 Transvaginal ultrasound scan of the uterus showing thickened endometrium. gene) enables the molecular classification of tumours. MMR-deficient tumours are a feature of Lynch syndrome-associated endometrial cancer and prompt genetic counselling. Diagnosing Lynch syndrome enables a woman to protect themselves and their family members from future cancers through colonoscopic surveillance and aspirin chemoprevention.

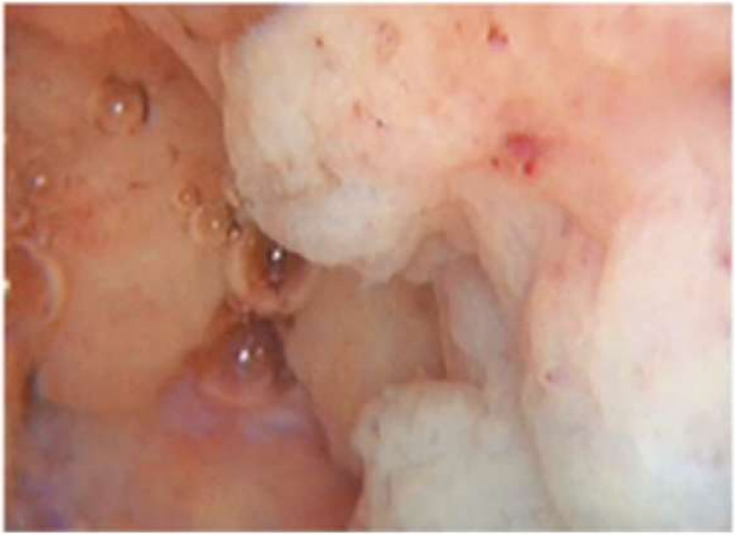

Figure 15.3 Hysteroscopic picture of endometrial carcinoma.

The extent of disease (stage) is determined by magnetic resonance imaging (MRI) scan (**Figure 15.4**),

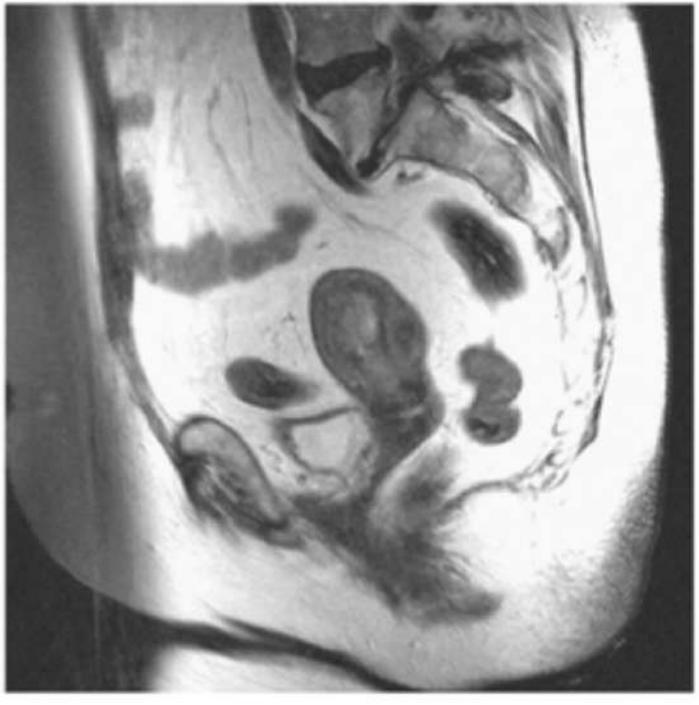

Figure 15.4 Magnetic resonance imaging of stage IB endometrial carcinoma.

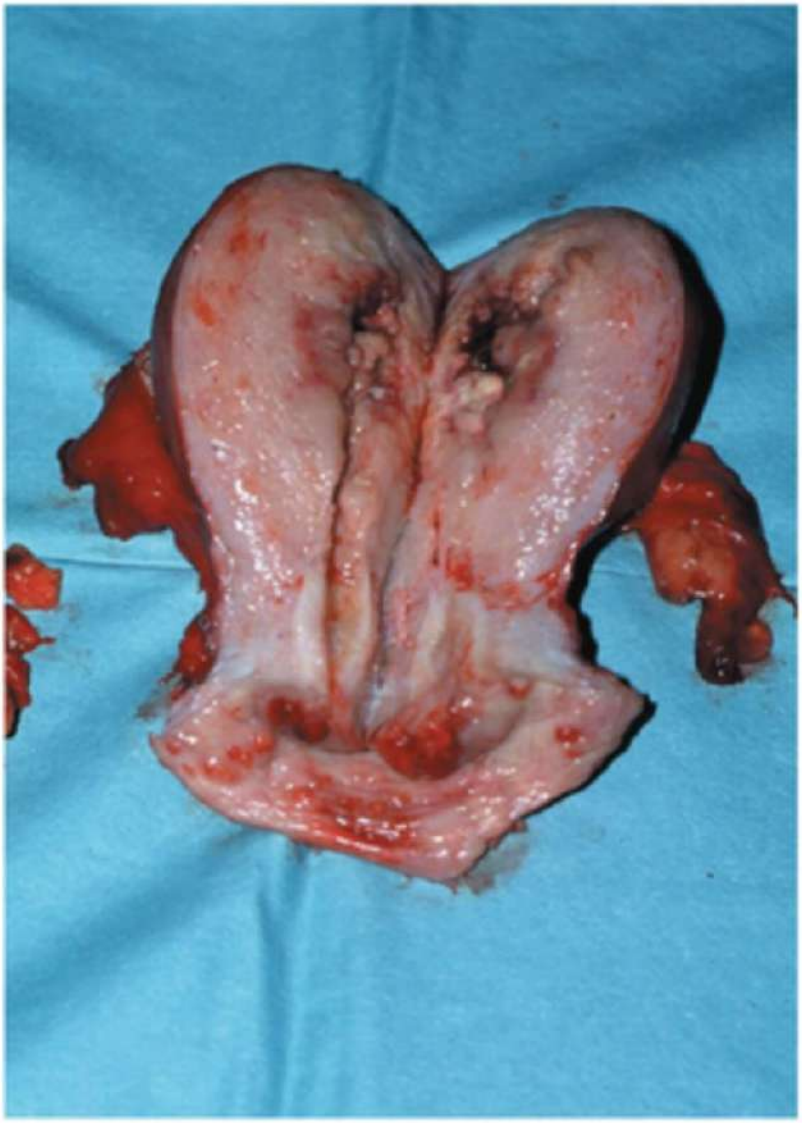

Figure 15.5 Bisected uterus, cervix, fallopian tubes and ovaries removed at hysterectomy for endometrial cancer.

16 Premalignant and malignant disease of the lower genital tract

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EMMA J CROSBIE

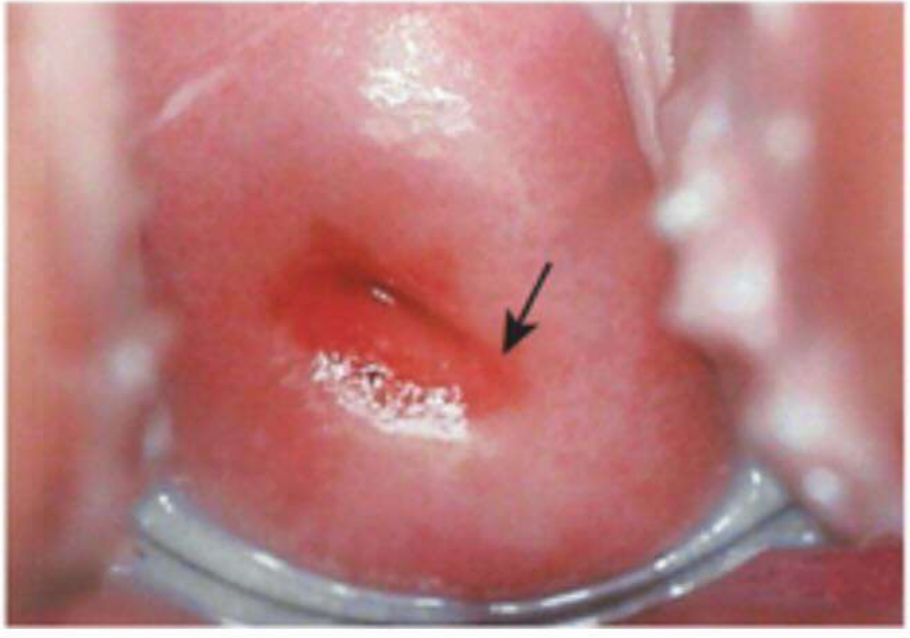


Figure 16.1 Normal cervix with transformation zone.

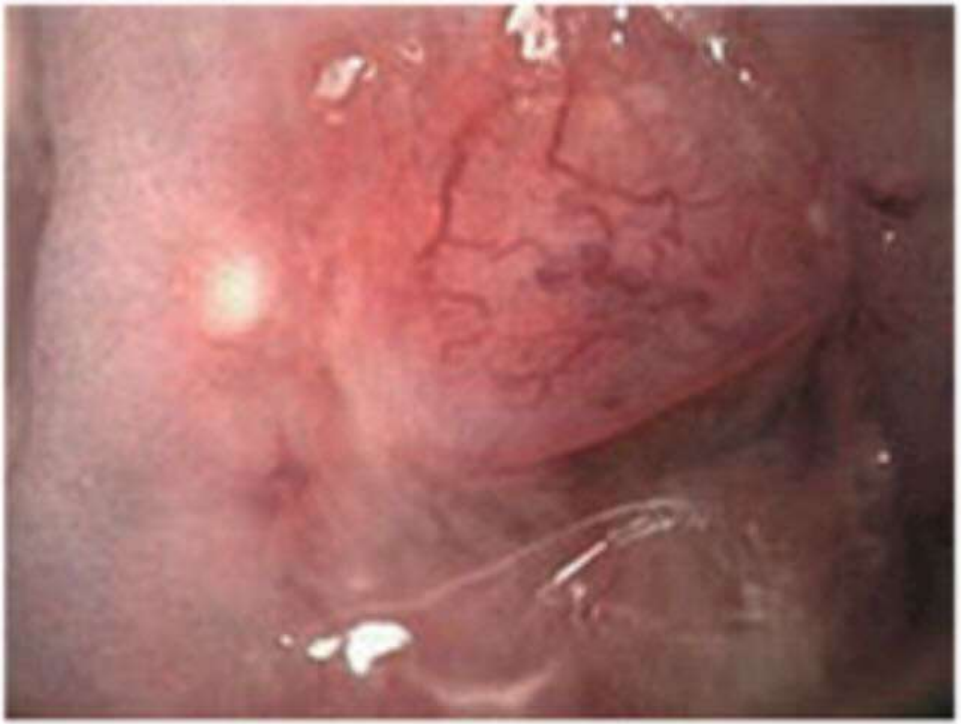


Figure 16.2 Normal cervix with Nabothian follicle.

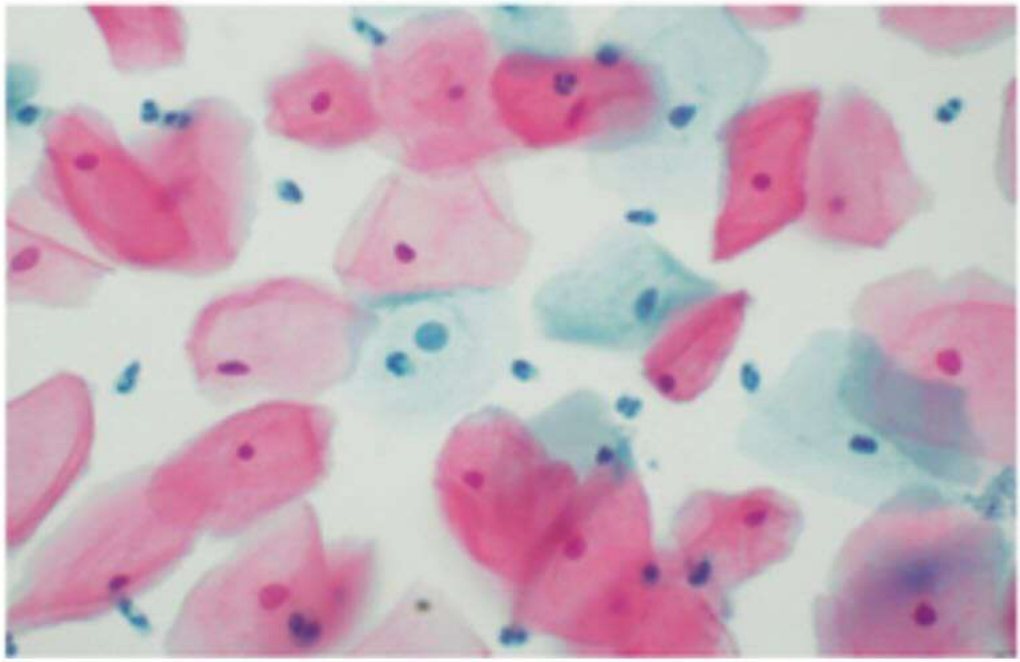


Figure 16.3 Liquid-based cytology - normal cytology.

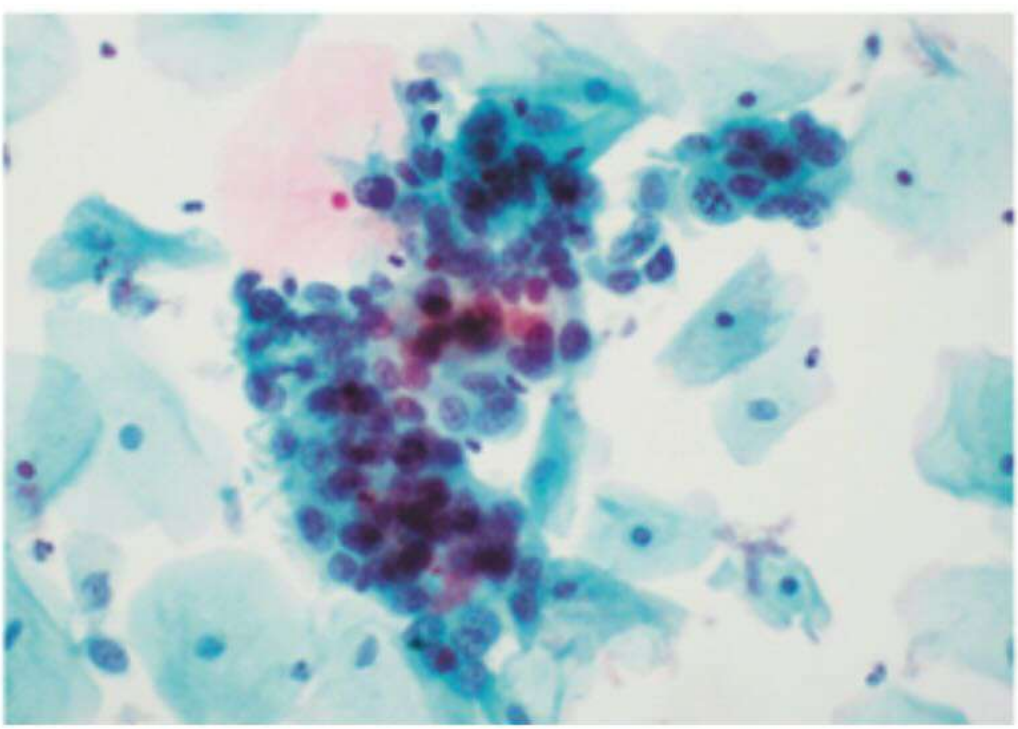


Figure 16.4 Liquid-based cytology - severe dyskaryosis.

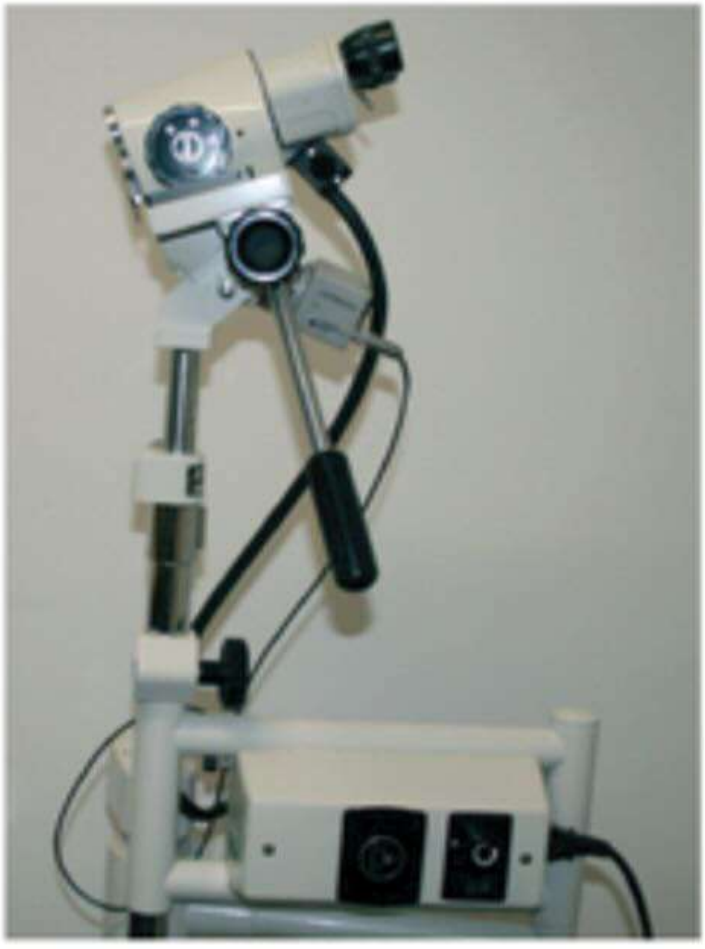


Figure 16.5 Colposcope.

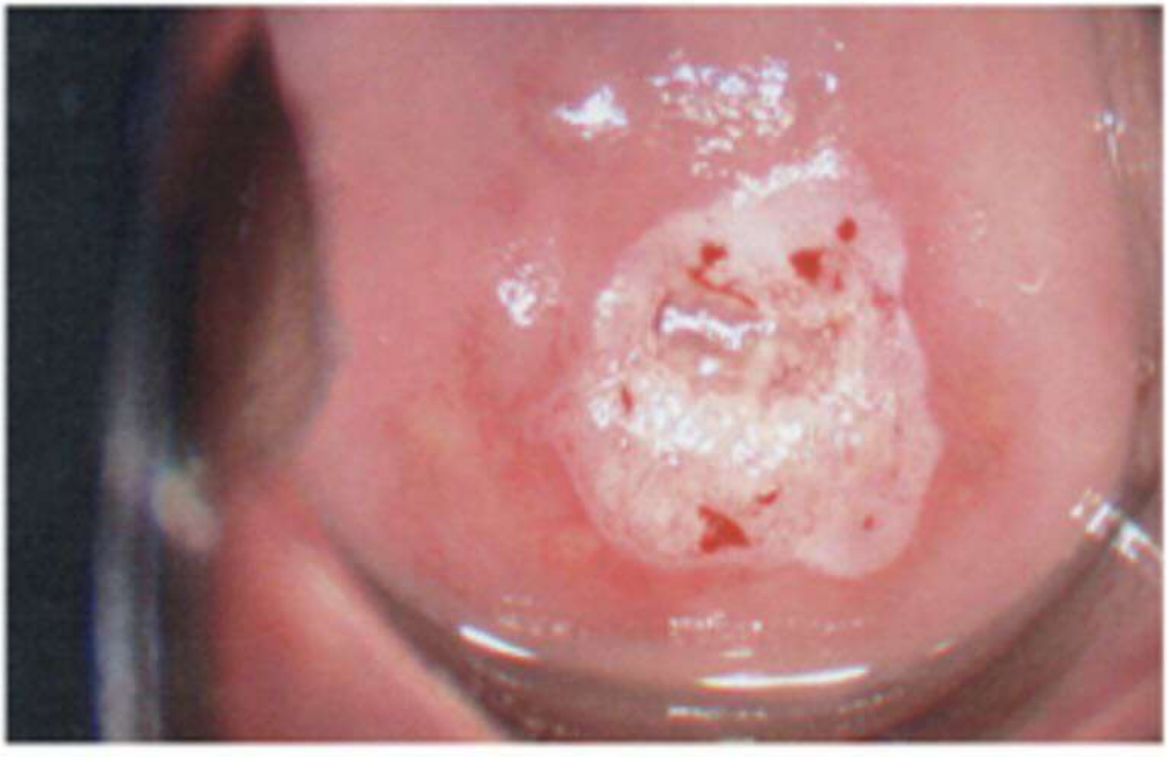


Figure 16.6 Cervix showing acetowhite lesion.

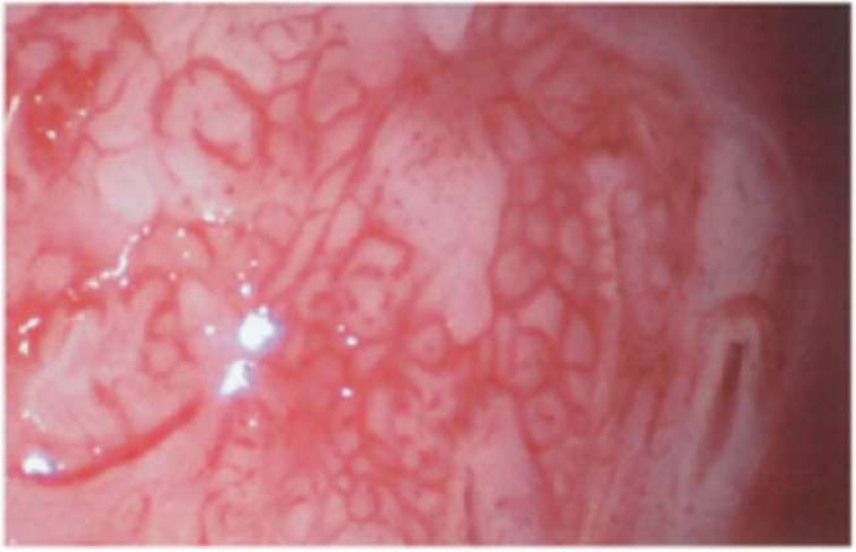


Figure 16.7 Cervix with cervical intraepithelial neoplasia and new vessels.

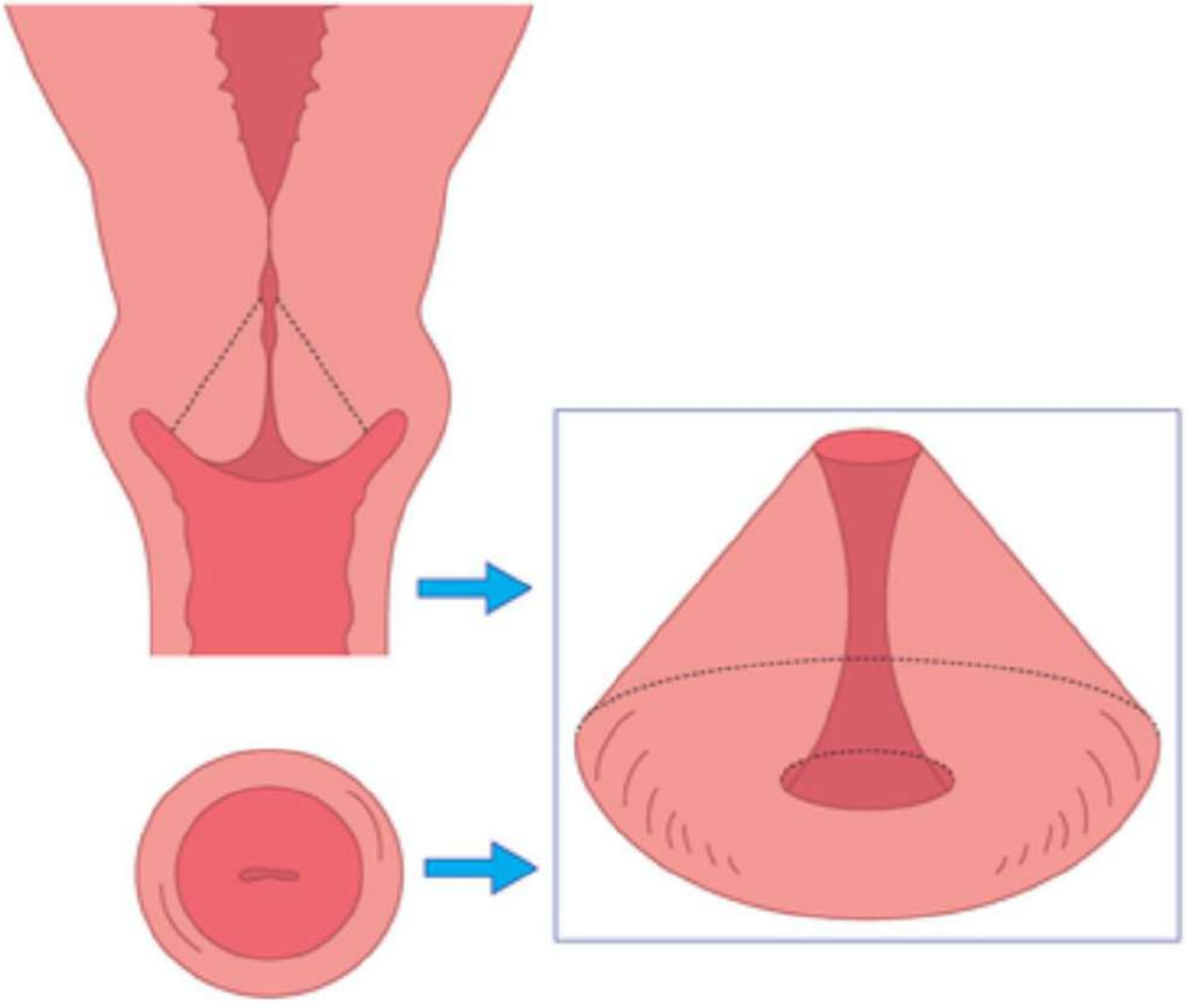


Figure 16.8 Large loop excision of the transformation zone.

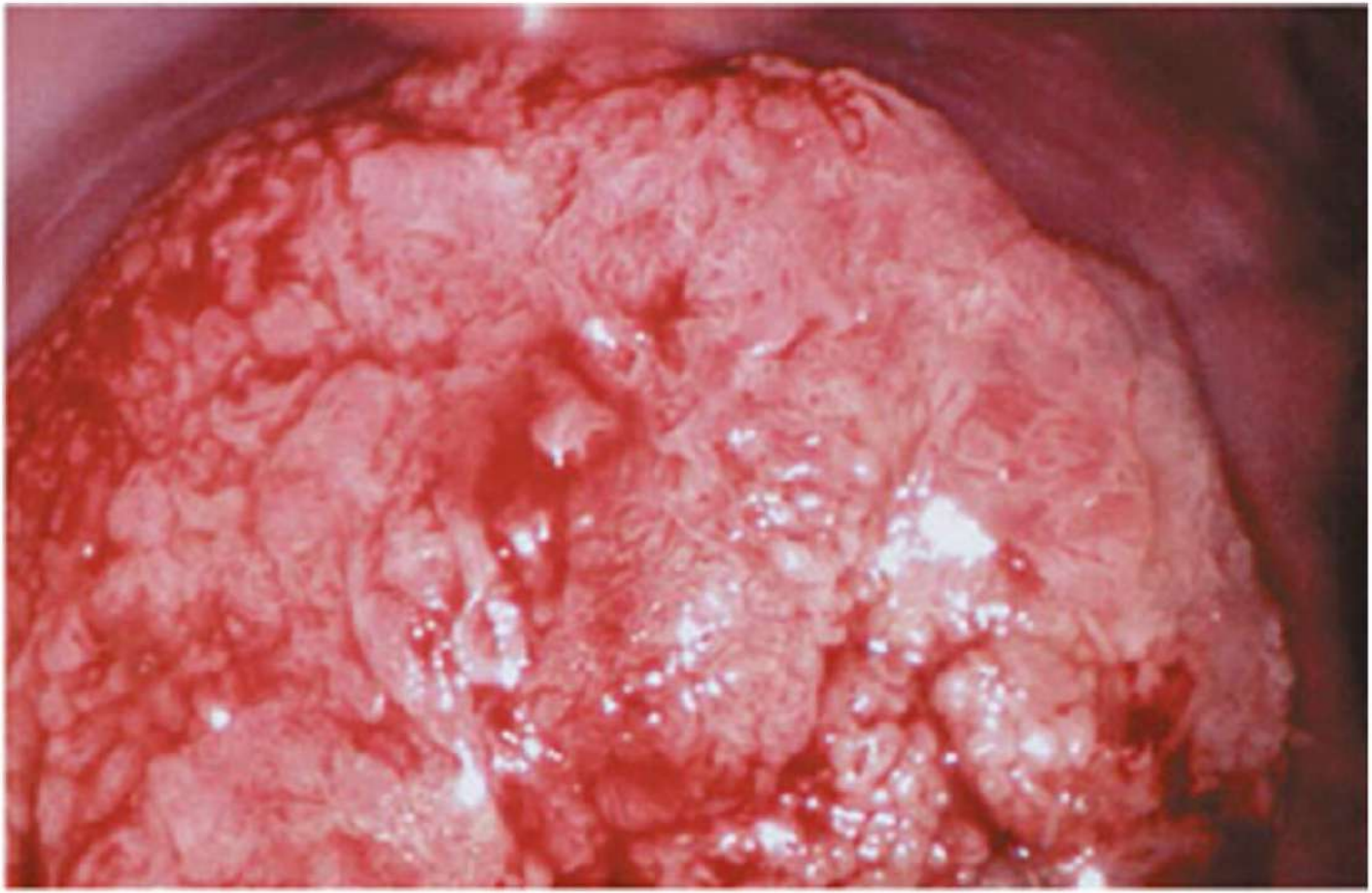


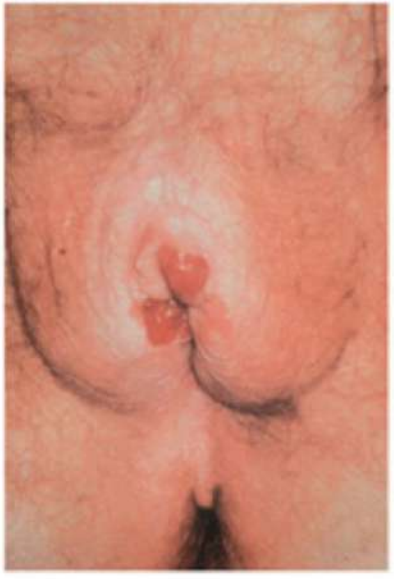
Figure 16.9 Cervical cancer.

Figure 16.10 Linear accelerator.

HIV, human immunodeficiency virus; HPV, human papillomavirus; VIN, vulval intraepithelial neoplasia.

and reluctance to be examined. Clinical assessment should include an evaluation of the patient's perform mance status and general fitness for anaesthetic.

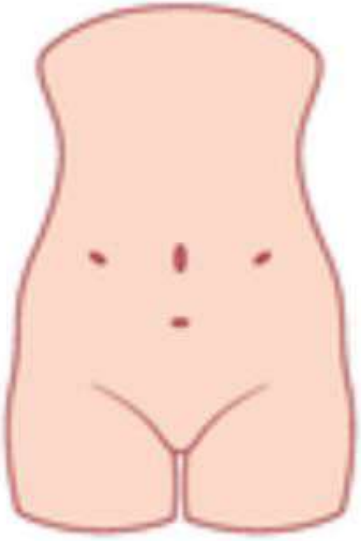
On examination, a well-demarcated raised or ulcerated lesion that is hard and craggy and bleeds on touch is highly suspicious of vulval cancer (**Figure 16.11**). There is often associated premalignant change, specifically vulval intraepithelial neoplasia in younger patients and lichen sclerosus in older patients. Examination includes an assessment of the Size of the lesion, its position on the vulva and its proximity to important midline Structures, particularly the urethra and anus. Vulval tumours spread locally and metastasize first via the inguinofemoral lymph nodes, before involving pelvic lymph nodes. It is therefore important to examine the groins for lymph node metastases, which are palpable as hard, craggy and fixed subcutaneous lymph node swellings. Haematogenous spread to the liver and lungs is a late event.



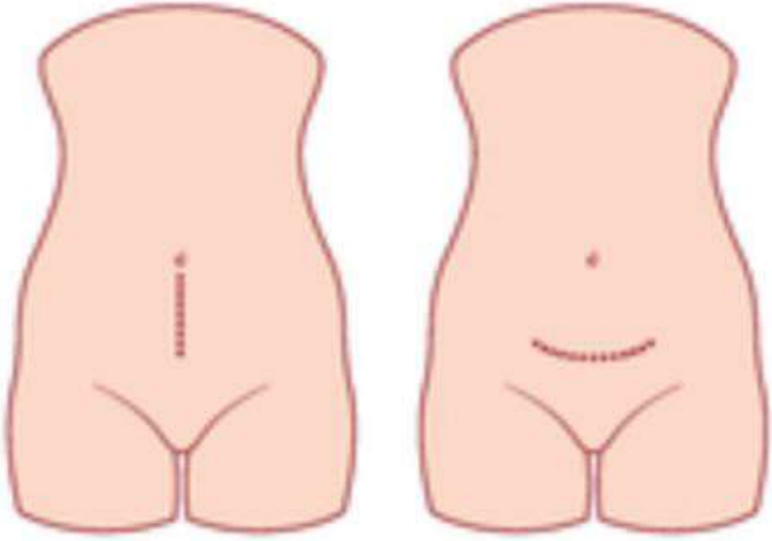
17 Gynaecological surgery and therapeutics

DOI: 10.1201/9781003218036-17

TIMOTHY HILLARD



Skin incision
in laparoscopy



Traditional skin incisions

Figure 17.4 Flexible fibre-optic hysteroscope.

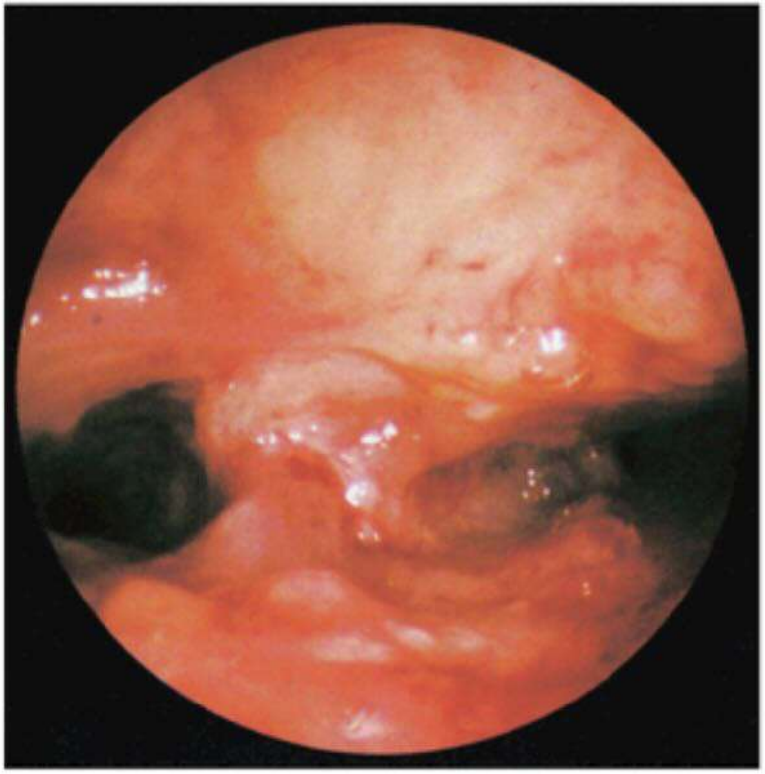


Figure 17.5 View of endometrial cavity demonstrating Asherman adhesions.

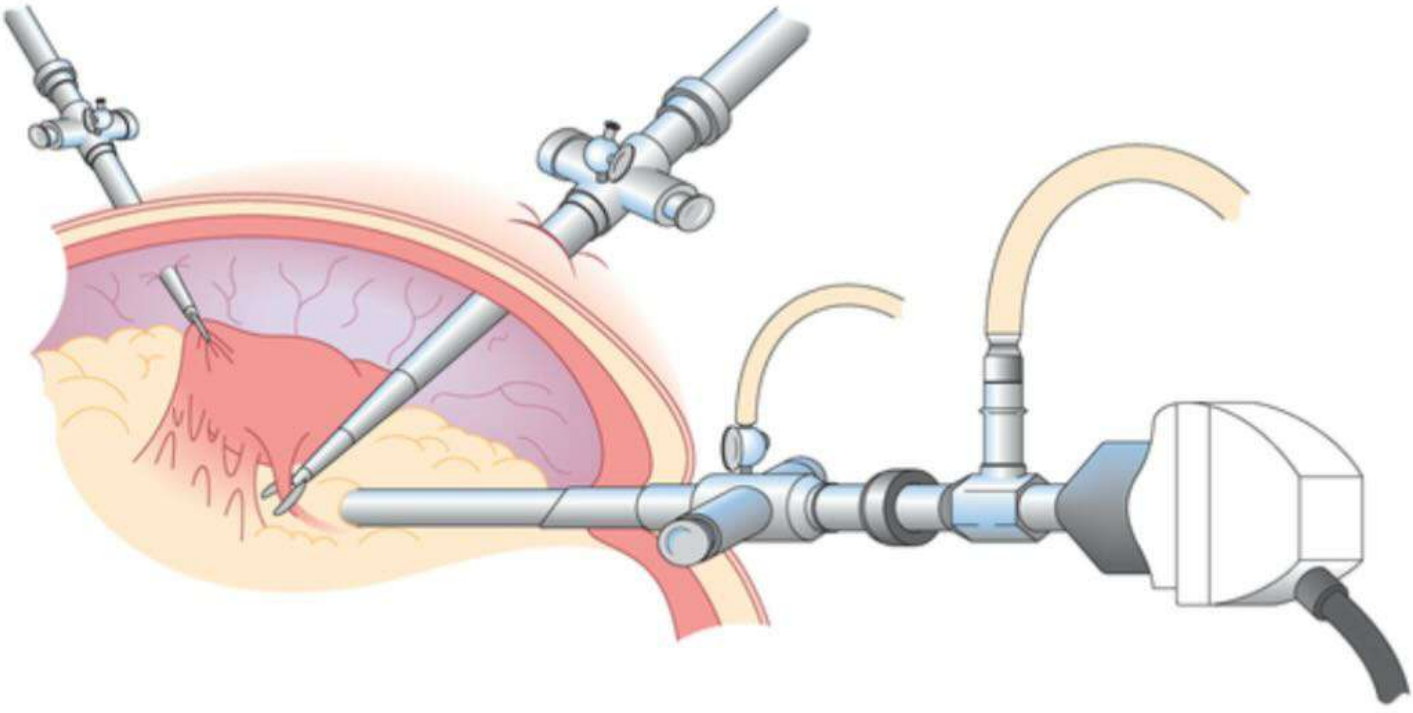


Figure 17.6 Schematic diagram showing laparoscope.

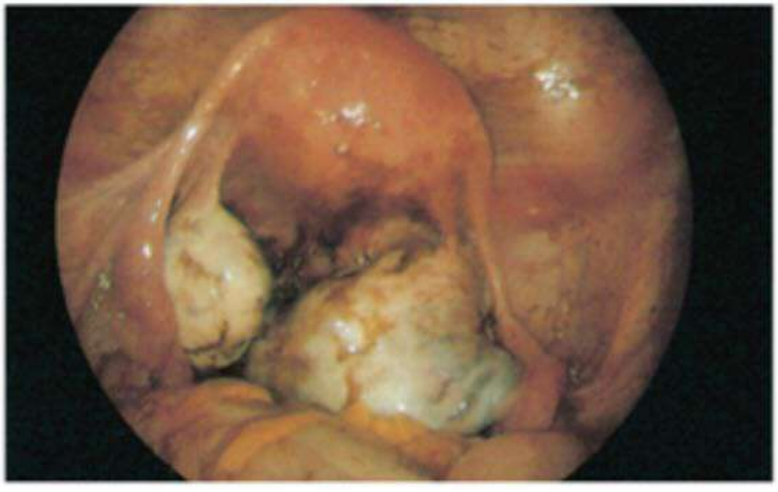


Figure 17.7 Laparoscopic view of bilateral endometriomas.

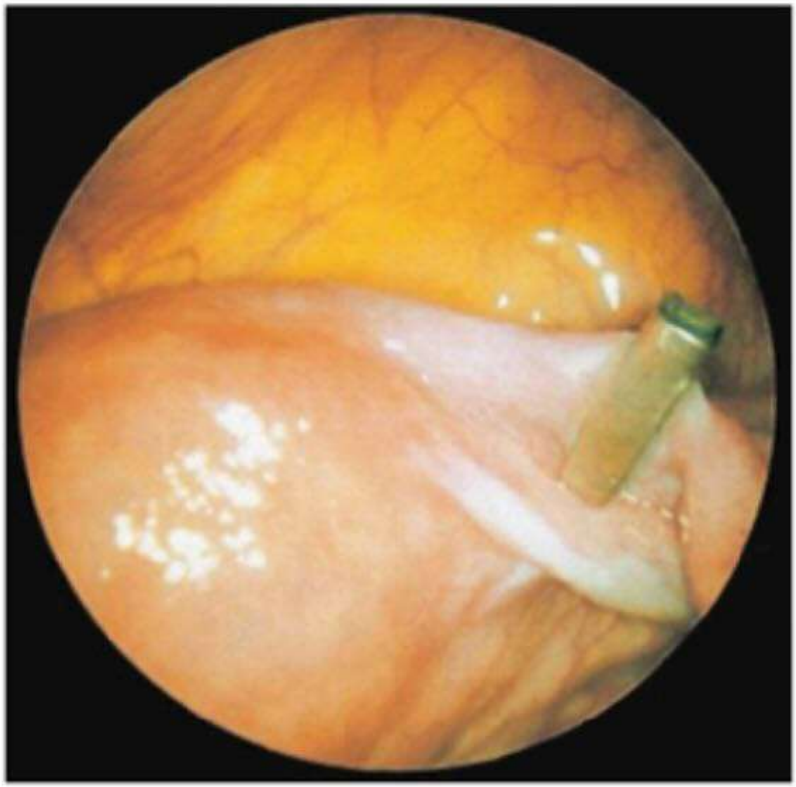


Figure 17.8 Laparoscopic view showing Filshie clip on the right fallopian tube.

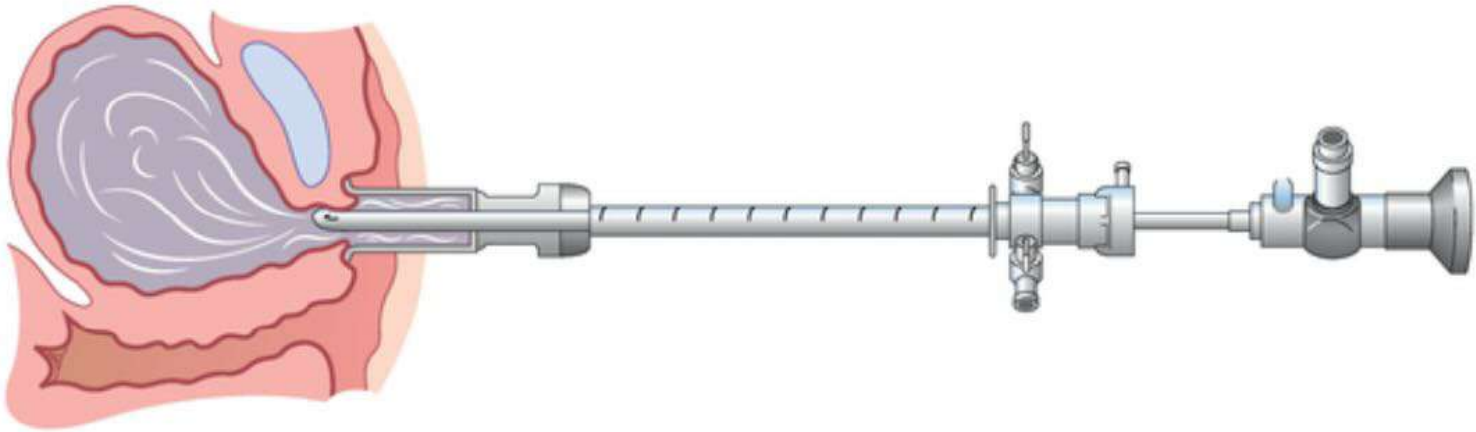


Figure 17.9 Diagram showing the cystoscopic procedure.

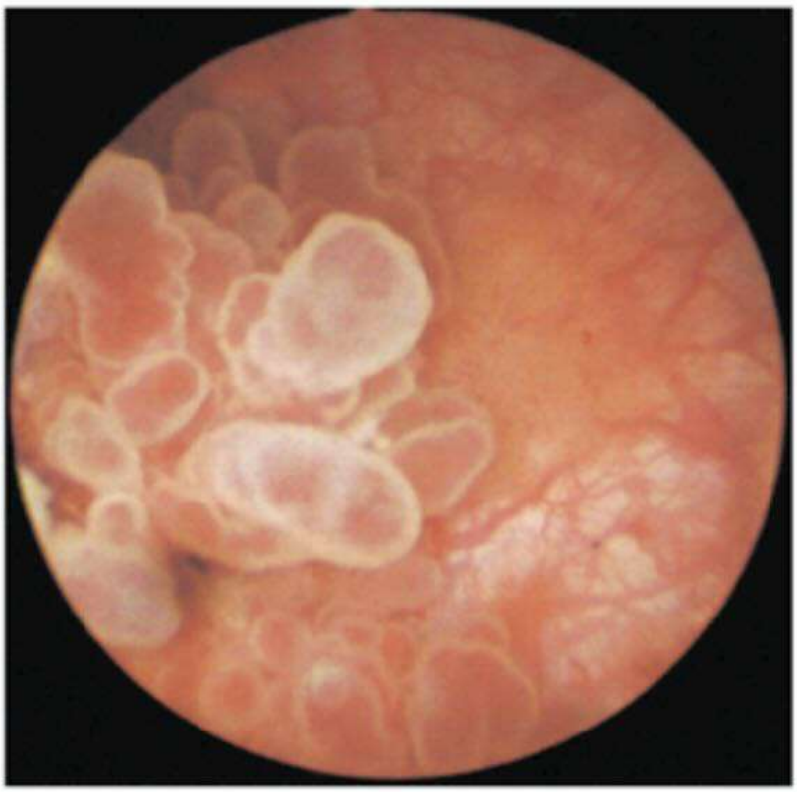


Figure 17.10 Cystoscopic view of bladder papilloma.