EXCELLENCE MATTERS

INTRODUCTION TO PELVIC OBSTETRIC AND GYNAECOLOGICAL PHYSIOTHERAPY

An Educational Resource

Published by Pelvic, Obstetric and Gynaecological Physiotherapy
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Contents

Introduction

It is acknowledged that physiotherapists may become involved in the management of pelvic, obstetric and gynaecological patients. These clinicians will have differing levels of expertise, diverse skills and varying access to learning support. This aim of this handbook is to guide the learning of physiotherapists to extend their knowledge and skills within this speciality.

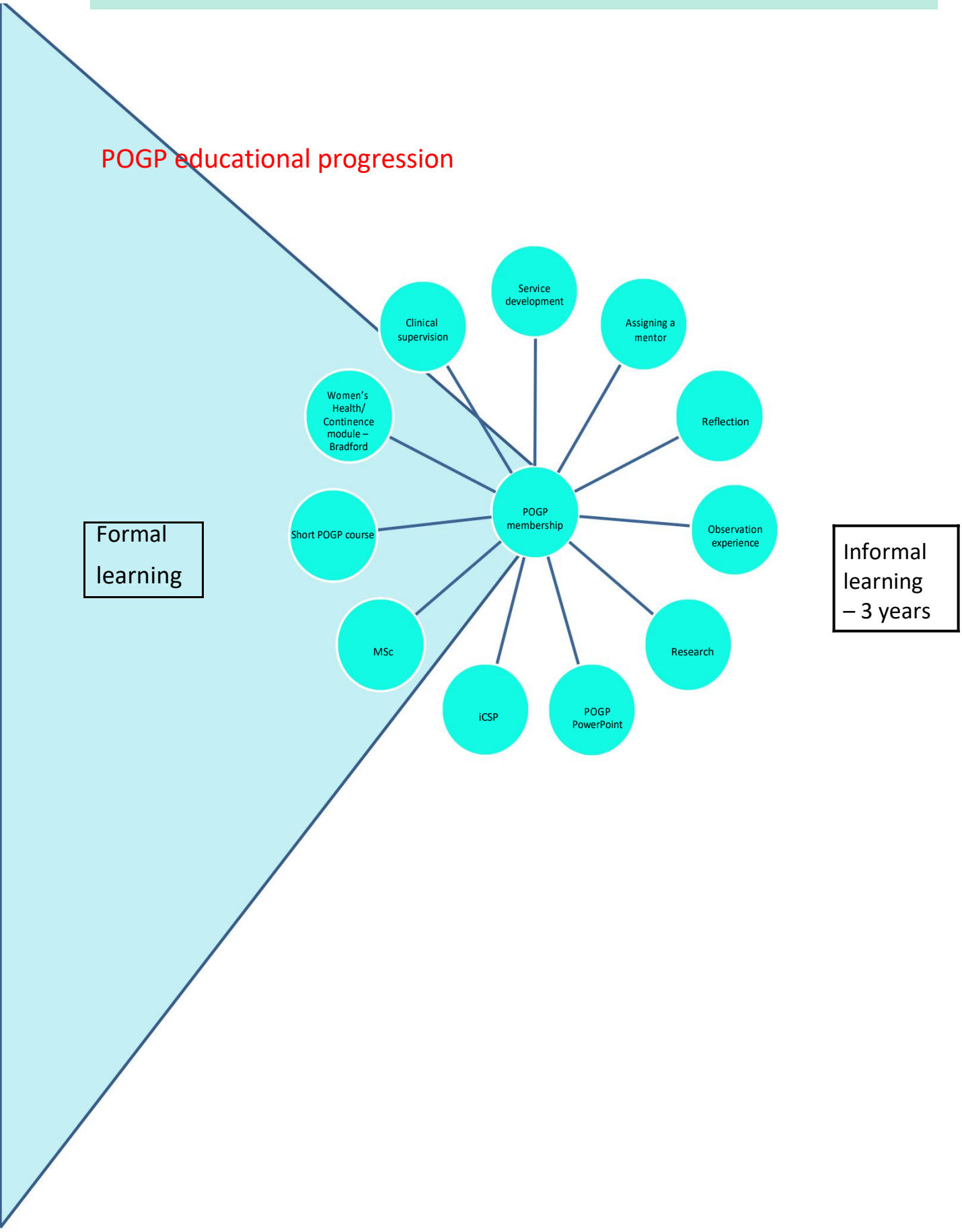
This manual covers all aspects of the expanding role of the physiotherapist within this specialist area. You can select the areas that are relevant to your current practise.

The handbook is divided into subspecialisms that may be within your scope of practice. Each section: identifies potential learning objectives; provides references to relevant research material and patient information booklets; and contains details of relevant courses.

As an affiliate member of POGP, we hope that you find this resource valuable in validating your continuing professional development, and that you will become a full member. There are four ways to achieve membership: pogp.csp.org.uk/content/pogp-membership

Suggested POGP education routes

POGP educational progression



Formal learning

Informal learning – 3 years

Core skills framework

1. Understand normal posture and muscle function.

2. Consider the application of general exercise physiology to the pelvic floor muscles.

3. Consider evidence-based exercise in relation to methods such as: core stability; musculoskeletal techniques; Pilates; and hydrotherapy.

4. Understand the role of the multidisciplinary team in your specific area.

5. Demonstrate an understanding of cultural, social, ethnic and gender identity, sexual orientation, and religious beliefs. Adapt your professional interaction to facilitate care.

6. Demonstrate appropriate skills in communication in a variety of environments, using interpreting services and chaperoning as required. Pay particular attention to gaining informed, valid consent and demonstrating shared decision-making.

7. Demonstrate professional behavioural skills, such as empathy and sensitivity, especially where problems may be related to bereavement, or be of a personal, social or intimate nature. Know whom you should refer patients to if further expertise is required.

8. Apply skills in accurate record-keeping and maintaining confidentiality.

9. Understand the role of the physiotherapist in preventative care.

Suggested learning resources

Websites

pogp.csp.org.uk

www.nice.org.uk

www.rcog.org.uk

Reading

Journal of Pelvic, Obstetric and Gynaecological Physiotherapy

Royal College of Obstetricians and Gynaecologists (RCOG) guidelines

Chartered Society of Physiotherapy information papers:

- *Pelvic Floor Examination – CSP Expectations* (PD092, 2012)
- *Chaperoning and Related Issues* (PD104 ERUS-IP 24, 2013)
- *Consent and Physiotherapy Practice* (PD078, 2016)

Academic courses

University of Bradford Postgraduate Certificates:

- Physiotherapy in Women's Health
- Continence for Physiotherapists

Obstetrics

Obstetrics is the field of medicine that deals with pregnancy, delivery of the baby and the first 6 months after delivery. The role of the physiotherapist may vary considerably in obstetrics from face-to-face contact to triage, parentcraft classes, and hydrotherapy in inpatient and outpatient environments.

Learning objectives:

1. Understand normal posture and muscle function.
2. Investigate the physiological and physical changes that occur during pregnancy, delivery and the year following childbirth.
3. Investigate the obstetric issues that contribute to musculoskeletal dysfunction.
4. Consider the evidence base for different exercise and treatment methods for obstetrics patients, such as Pilates, acupuncture and hydrotherapy.
5. Be aware of red flags that may affect patient care (e.g. pre-eclampsia and placenta praevia).
6. Select appropriate assessment and examination techniques for the musculoskeletal and continence systems, including outcome measures, and apply your clinical reasoning skills to direct intervention.
7. Develop and adapt therapeutic management skills for use with obstetrics patients, including appropriate musculoskeletal techniques.
8. Develop insight into the effects of obesity in the pregnant woman on her health and that of her unborn child. How can physiotherapists be proactive in the management of pregnancy-related obesity?
9. Develop insight into the psychological needs of the obstetrics patient, including postpartum psychosis, and services that provide appropriate support, such as crisis teams, and support networks, such as Birth Reflections.

Antenatal period

- Consider the health promotion aspect of care for antenatal women, especially those with an elevated body mass index and/or a pre-existing musculoskeletal dysfunction.

- Investigate methods of education during the antenatal period, including face-to-face consultations, patient information leaflets and internet resources.

- Investigate the role of the core muscles in maintaining posture and function during the antenatal period.

- Review the factors that may contribute to pregnancy-related low back pain and pelvic girdle pain.

- Investigate common musculoskeletal conditions that are managed by physiotherapists, including carpal tunnel syndrome and rib flare.

- Explore the differential diagnosis of musculoskeletal pain, such as avascular necrosis and metastatic spinal disease, and the complications of pregnancy that influence care.

- Evaluate the ways in which physiotherapy treatment may be provided, such as telephone triage, classes and hydrotherapy.

- Investigate the role of physiotherapy in preparation for childbirth, including positioning, relaxation techniques and pain management.

- Investigate bladder and bowel management in pregnancy.

- Consider how you may develop services for antenatal people.

- Review the patient information literature available in the antenatal period.

Available learning resources

Booklets available through pogp.csp.org.uk

Fit for Pregnancy

Fit and Safe: Exercises in the Childbearing Year

Fit for Birth

Pregnancy Related Pelvic Girdle Pain for Mothers to Be and New Mothers

Pregnancy Related Pelvic Girdle Pain for Health Professionals

Pilates in Women's Health Physiotherapy

The Mitchell Method of Simple Relaxation

Aquanatal Guidelines: Guidance on Antenatal and Postnatal Exercises in Water

POGP Guidance on the Safe Use of Transcutaneous Electrical Nerve Stimulation (TENS) for Musculoskeletal Pain During Pregnancy

Pelvic Floor Muscle Exercises (for Women)

Suggested reading

Dufour S., Bernard S., Murray-Davis B. & Graham N. (2019) Establishing expert-based recommendations for the conservative management of pregnancy-related diastasis rectus abdominis: a Delphi consensus study. *Journal of Women's Health Physical Therapy* **43** (2), 73–81.

Hilde G., Gutke A., Slade S. C. & Stuge B. (2016) Physical therapy interventions for pelvic girdle pain (PGP) after pregnancy (Protocol). *Cochrane Database of Systematic Reviews*, Issue 11. Art. No.: CD012441. DOI: 10.1002/14651858.CD012441.

Delivery

- Understand the progress of normal labour, and recognise deviations from the normal and how these would need to be managed in the postnatal period.

- Identify the risks associated with delivery and how these can be prevented.

Postnatal period

- Consider appropriate advice that would benefit all women in the postnatal period, and how this should be conveyed to those who have experienced the death of a baby.

- How would this information need to be modified for people who have experienced a complicated delivery?

- Recognise pelvic muscle trauma and postpartum bladder and bowel dysfunction, and devise appropriate management plans.

- Review specialist/multidisciplinary team services and practice for managing bladder and bowel dysfunction after delivery, especially for third- and fourth-degree perineal tears.

- Identify the types of musculoskeletal dysfunction that can occur as a result of delivery or during the antenatal period .

- Investigate the methods by which you may manage people with musculoskeletal dysfunction in the postnatal period such as diastasis rectus abdominis and coccydynia.

Suggested reading (continued)

National Institute for Health and Care Excellence (NICE) (2015) *Postnatal Care up to 8 Weeks after Birth.* (CG37.) [WWW document.] URL https://www.nice.org.uk/guidance/cg37

National Institute for Health and Care Excellence (NICE) (2019) *Antenatal Care for Uncomplicated Pregnancies.* (CG62.) [WWW document.] URL https://www.nice.org.uk/guidance/cg62

Royal College of Obstetricians and Gynaecologists (RCOG) (2015) *Pelvic Girdle Pain and Pregnancy.* (Patient information leaflet.) [WWW document.] URL https://www.rcog.org.uk/globalassets/documents/patients/patient-information-leaflets/pregnancy/pi-pelvic-girdle-pain-and-pregnancy.pdf

Royal College of Obstetricians and Gynaecologists (RCOG) (2015) *Third-and-Fourth degree Perineal Tears Management.* (Green-top Guideline No. 29.) [WWW document.] URL https://www.rcog.org.uk/globalassets/documents/guidelines/gtg-29.pdf

POGP good practice statements:

Digital Examination During Pregnancy

The use of Maternity/ Pelvic Support Belts for Perinatal Pelvic Girdle Pain

Acupuncture for Pregnancy-Related Low Back Pain and Pelvic Girdle Pain

Driving after Gynaecological Surgery and Caesarean-Section Delivery

POGP workshops

Pregnancy-Related Physiotherapy: Assessment and Management of Musculoskeletal Conditions; Lumbar Spine and Pelvis

Pregnancy-Related Physiotherapy: Assessment and Management of Musculoskeletal Conditions; Hip and Trunk

Methods of enhanced learning: suggested observations

- Antenatal clinic
- Antenatal ward
- Community midwife
- Ultrasound department
- Midwife classes
- Physiotherapy classes
- Early antenatal session
- Aquanatal class
- Full course in parentcraft
- Partner's/companion's session(s)
- Young (teenage) class
- Refresher/multiparae class
- Pre-operative preparation for Caesarean section
- Use of pelvic support belts
- Transcutaneous electrical nerve stimulation (TENS)
- Witness: normal delivery; waterbirth; repair of third-degree tear; forceps delivery; ventouse delivery; multiple delivery; suturing of perineum; and Caesarean section
- Postnatal ward
- Postnatal group
- Assessment and treatment of pregnancy-related problems: perineal oedema; bruising; haematoma; third- or fourth-degree tears; haemorrhoids; wound infection; delayed healing; urinary; defecation problems; carpal tunnel syndrome; low back and pelvic girdle pain; coccygeal pain; and diastasis rectus abdominis

Urology, gynaecology and colorectal services

The fields of paediatric continence, urology, gynaecology, urogynaecology and colorectal physiotherapy are often interlinked.

Learning objectives:

1. Understand normal bladder and bowel function, and how this is maintained in the healthy adult.
2. Identify the factors that may contribute to urological, gynaecological and/or colorectal dysfunction.
3. Investigate the physiological and physical dysfunctions of the urological, gynaecological and colorectal systems, including incontinence, sexual function, pain and pelvic organ prolapse.
4. Understand the physiology and muscle function of the pelvic floor and associated structures.
5. Assess relevant subjective and objective information.
6. Investigate evidence-based practice of how pelvic floor dysfunction is managed conservatively, including exercise, lifestyle advice, group therapy, devices and electrotherapy/ biofeedback.
7. Investigate medical and surgical management of pelvic floor dysfunction.
8. Investigate the role of the physiotherapist when a patient is admitted for surgical management of urological, gynaecology and colorectal problems.
9. Investigate the role of the physiotherapist following reconstructive surgery.

Paediatric continence

- Identify factors that may contribute to childhood incontinence.
- Identify common paediatric bladder and bowel dysfunctions.
- Consider the health promotion aspect of the care of children with long-term conditions that affect bladder dysfunction (e.g. cystic fibrosis).
- Evaluate methods of treating children with pelvic floor dysfunction; for example, dietary advice, defecation dynamics and pelvic floor exercises.
- Consider the role of patient information, and social media that may be appropriate for managing Generation Z.
- Investigate the value of using medication in childhood incontinence.
- Explore the non-conservative management of paediatric incontinence.

Urinary continence

- Review the physiology, anatomy and function of the urogenital system.
- Identify factors that may contribute to urinary incontinence and erectile dysfunction.
- Identify the common urinary dysfunctions; for example, stress incontinence, overactive bladder and voiding dysfunction.
- Consider the health promotion aspect of obstetric care, prostatitis and long-term conditions that affect bladder function.
- Investigate the role of the pelvic floor and abdominal muscles in maintaining intra-abdominal pressure, posture and pelvic floor function.
- Demonstrate an understanding of muscle function, and its effect on symptoms.
- Review the evidence-based practice of pelvic floor muscle training, including biofeedback and electrotherapy.

Suggested reading: paediatric

National Institute for Health and Care Excellence (NICE) (2014) *Bedwetting in Children and Young People.* (QS70.) [WWW document.] URL https://www.nice.org.uk/guidance/qs70/resources/bedwetting-in-children-and-young-people-pdf-2098841389765

National Institute for Health and Care Excellence (NICE) (2014) *Constipation in Children and Young People*. (QS62.) [WWW document.] URL https://www.nice.org.uk/guidance/qs62/resources/constipation-in-children-and-young-people-pdf-2098784282821

Resources

www.eric.org.uk (children's bowel and bladder charity)

www.squeezyapp.com (apps supporting women, men and those with cystic fibrosis with pelvic floor muscle exercise programmes)

Suggested reading: adult

National Institute for Health and Care Excellence (NICE) documents:

Urinary Incontinence and Pelvic Organ Prolapse in Women: Management (NG123, 2019)
Faecal Incontinence in Adults: Management (CG49, 2007)
Constipation (CKS, 2019)
Constipation Overview (NICE Pathway, 2019)
Menopause: Diagnosis and Management (NG23, 2015)

Bø K., Berghmans B., Morkved S. & Van Kampen M. (2015) *Evidence-Based Physical Therapy for the Pelvic Floor: Bridging Science and Clinical Practice*, 2nd edn. Churchill Livingstone, Edinburgh.

Bø K., Frawley H. C., Haylen B. T.., *et al.* (2017) An International Urogynecological Association (IUGA)/International Continence Society (ICS) joint report on the terminology for the conservative and nonpharmacological management of female pelvic floor dysfunction. *Neurology and Urodynamics* **36** (2), 221–244.

- Evaluate methods of educating people with bladder dysfunction, including face-to-face interactions, group therapy, patient information leaflets and internet resources.
- Review the patient information literature available to people with incontinence.
- Investigate the value of using medication and devices in urinary incontinence.
- Investigate the surgical management of urinary incontinence.
- Identify appropriate advice and exercises to be given to people in the pre- and postoperative periods.

Menopause

- Identify the biochemical and metabolic changes that occur in the perimenopause, menopause and postmenopausal period.
- Identify how health education can assist menopausal women.
- Investigate the beneficial effects of exercise, and the types of exercise recommended for menopausal women.
- Investigate the beneficial effects of acupuncture for menopausal women.
- Investigate the use of medication in managing menopausal symptoms.

Pelvic organ prolapse

- Identify factors that may contribute to individuals developing pelvic organ prolapse.
- Identify the types and classifications of pelvic organ prolapse.
- Investigate the symptoms of pelvic organ prolapse that are related to function.
- Consider health promotion and lifestyle advice; for example, with regard to constipation, heavy lifting and a caring role.

Suggested reading: adult (continued)

Doggweiler R., Whitmore K. E., Meijlink J. M., *et al.* (2017) A standard for terminology in chronic pelvic pain syndromes: a report from the chronic pelvic pain working group of the International Continence Society. *Neurology and Urodynamics* **36** (4), 984–1008.

Engeler D., Baranowski A. P., Borovicka J., *et al.* (2014) *Guidelines on Chronic Pelvic Pain.* [WWW document.] URL https://uroweb.org/wp-content/uploads/26-Chronic-Pelvic-Pain_LR.pdf

Haylen B. T., de Ridder D., Freeman R. M., *et al.* (2010) An International Urogynecological Association (IUGA)/International Continence Society (ICS) joint report on the terminology for female pelvic floor dysfunction. *Neurology and Urodynamics* **29** (1), 4–20.

Haylen B. T., Maher C. F., Barber M. D., *et al.* (2016) An International Urogynecological Association (IUGA)/International Continence Society (ICS) joint report on the terminology for female pelvic organ prolapse (POP). *International Urogynecology Journal* **27** (2), 165–194.

Rana N., Drake M. J., Rinko R., Dawson M. & Whitmore K. E. (2018) The fundamentals of chronic pelvic pain assessment based on International Continence Society recommendations. *Neurology and Urodynamics* **37** (S6), S32–S38.

Sultan A. H., Monga A., Lee J., *et al.* (2017) An International Urogynecological Association (IUGA)/International Continence Society (ICS) joint report on the terminology for female anorectal dysfunction. *International Urogynecology Journal* **28** (1), 5–31.

- Investigate the role of the pelvic floor and abdominal muscles in managing the symptoms of pelvic organ prolapse.
- Prescribe pelvic floor muscle exercises relevant to pelvic organ prolapse treatment.
- Evaluate methods of educating people with pelvic organ prolapse, including face-to-face interactions, group therapy, patient information leaflets and internet resources.
- Review the patient information literature available for pelvic organ prolapse.
- Investigate the value of using pessaries and medication in pelvic organ prolapse.
- Review the investigations and surgical management relevant to pelvic organ prolapse.
- Identify appropriate advice and exercises to be given in the pre- and post-operative periods.

Bowel continence

- Identify the anatomy and physiology of normal bowel function, including storage and defecation.
- Consider the health promotion of bowel function.
- Identify common forms of bowel dysfunction.
- Investigate the reasons and contributing factors for altered bowel function; for example, urgency, slow transit, constipation and irritable bowel syndrome.
- Evaluate subjective and objective assessments of pelvic floor function, including investigations and the validity of outcome measures.
- Investigate the methods of facilitating pelvic floor muscle function, including techniques such as biofeedback.
- Evaluate methods of educating patients with bowel dysfunction, including face-to-face interactions, group therapy, patient information leaflets and internet resources.

Resources

www.imsociety.org/imsimpart_register.php (IMPACT online training)

thebms.org.uk (British Menopause Society)

POGP workshops

Pelvic Health Physiotherapy: Female Urinary Dysfunction

Pelvic Health Physiotherapy: Male Lower Urinary Tract Symptoms – Advancing Your Practice

Pelvic Health Physiotherapy: Pelvic Organ Prolapse – Advancing Your Practice

Pelvic Health Physiotherapy: Pelvic Organ Prolapse – Advancing Your Practice

Pelvic Health Physiotherapy: Lower Bowel Dysfunction

Pelvic Health Physiotherapy: Managing Complex Female Pelvic Pain and Pelvic Floor Muscle Dysfunction – Advancing Your Practice

Booklets available through pogp.csp.org.uk

Fit Following Surgery: Advice and Exercise Following Major Gynaecological Surgery

Pilates in Women's Health Physiotherapy

Pelvic Floor Muscle Exercises and Advice for Men

Pelvic Floor Muscle Exercises – A Guide for Women

Promoting Continence with Physiotherapy

Pelvic Organ Prolapse: A Guide for Women

Improving Your Bowel Function

ACPWH Statement Re: ES for Women with Recent Abnormal Cervical Cytology (2012)

- Review the patient information literature available to patients with bowel incontinence.
- Investigate the use of devices and medication in the treatment of bowel incontinence.
- Investigate the role of surgical management in the treatment of bowel dysfunction.
- Investigate the role of the multidisciplinary team in managing bowel incontinence.

Chronic pelvic pain

- Identify factors that may contribute to chronic pelvic pain (CPP), including endometriosis, irritable bowel syndrome and pudendal nerve neuropathy.
- Define chronic pelvic pain, and common terminologies associated with this diagnosis (e.g. vaginismus and vulvodynia).
- Demonstrate effective communication with and identification of the problems of patients experiencing chronic pain.
- Reflect on approaches to chronic pain management (e.g. cognitive behavioural therapy, mobility and exercise).
- Investigate methods of managing CPP (e.g. neurostimulation, medication and injection therapy).
- Investigate the surgical management of CPP.

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Facebook
POGP Members Area (closed group)

Methods of enhanced learning: suggested observations

Inpatients

- Observation in theatre: total abdominal hysterectomy; vaginal hysterectomy; pelvic floor repair; urethral sling procedure; fistula repair; transurethral resection of the prostate; and laser vaporesection
- Pre-operative/pre-admission session
- Postoperative care

Outpatients

- Urology/gynaecology clinic
- Urodynamics
- Continence adviser
- Nurse specialist
- Vulvodynia clinic
- Specialist paediatric continence services
- Bladder retraining
- Vaginal examination
- Anorectal examination
- Treatment modalities including: lifestyle advice; pelvic floor muscle exercises; posture re-education; biofeedback; neuromuscular stimulation; manual therapy; and devices (e.g. cones and Contiform vaginal pessaries)
- Group therapy
- Pessary clinic
- Multidisciplinary team meetings (both local and cross-trust)

Appendix 1: Obstetric abbreviations

AID artificial insemination with donor's semen
AIH artificial insemination with husband's semen
AN antenatal
ANC antenatal clinic
APH antepartum haemorrhage
ARM artificial rupture of membranes
BBA born before arrival (at hospital)
BKFO bent knee fall-out
Ceph cephalic
CCT continuous cord traction
CPD cephalopelvic disproportion
CTG cardiotocograph
DRAM/RAD/DRA divarication rectus abdominis
EAS external anal sphincter
ECV external cephalic version
EDD expected date of delivery
EL.LSCS elective lower segment Caesarean section
EM.LSCS emergency lower segment Caesarean section
ERPC evacuation of retained products of conception
EPAU early pregnancy assessment unit
FD forceps delivery
FHH(R) foetal heart heard (regular)
FM foetal movement
GA general anaesthetic
GIFT gamete intrafallopian transfer
G gravida (number of pregnancies)
IAS internal anal sphincter
IDDM insulin-dependent diabetes mellitus
IOL induction of labour
IUCD intrauterine contraceptive device
IUD intrauterine death
IUGR intrauterine growth retardation
IVF *in vitro* fertilisation
KRFD Kielland rotational forceps delivery
LBW low birth weight
MROP manual removal of placenta
NBFD Neville–Barnes (Barnes–Neville) forceps delivery
N(V)D normal (vaginal) delivery
NE not engaged
NICU neonatal intensive care unit
NND neonatal death
NNU neonatal unit
NICU neonatal intensive care unit
OA occiput anterior
OASIS obstetric anal sphincter exercises
OP occiput posterior
P parity (number of live births over 20–40 weeks)
PGP pregnancy-related pelvic girdle pain
PIH pregnancy-induced hypertension
PN postnatal
POP persistent occipiut posterior
PP posterior presentation
PPH postpartum haemorrhage
Primp primiparous
PROM prolonged rupture of membranes
PAIVM passive accessory intervertebral movement
PAWS pregnancy and well-being service
PET pre-eclamptic toxaemia
PFME pelvic floor muscle exercise
SB stillbirth/stillborn
SCBU special care baby unit
SIDS sudden infant death syndrome
SPD symphysis pubis dysfunction
SRM spontaneous rupture of membranes
SVD spontaneous vertex delivery
UTI urinary tract infection
V(V)E ventouse (vacuum) extraction
VBAC vaginal birth after Caesarean

Appendix 2: Obstetric terminology

abortion (miscarriage) the expulsion from the uterus of the products of conception before week 24 of pregnancy. There are several types:

- *threatened* – the pregnant woman develops vaginal bleeding, possibly with mild uterine contractions, but the cervix remains closed; the pregnancy may continue.
- *inevitable* – uterine contractions become stronger, leading to dilation of the cervix; the pregnancy will not continue.
- *incomplete* – some of the products of conception remain in the uterus.
- *complete* – all the products of conception have been passed; the uterus is empty.
- *missed* – the dead embryo and placenta are not expelled spontaneously.

after pains painful uterine contractions occurring during the puerperium.

amenorrhea absence of menstrual flow.

amnion the tougher inner membrane enclosing the foetus *in utero*.

android pelvis a type of pelvis that has features that render it less well adapted for childbearing than the gynaecoid pelvis.

antenatal before birth, i.e. during pregnancy.

antepartum haemorrhage (APH) bleeding from or into the genital tract between week 24 of pregnancy and the birth of the baby. There are three types:

- *revealed* – bleeding that can be seen per vagina (PV).
- *concealed* – bleeding *in utero* not seen per vagina.
- *mixed* – both.

Causes of APH include:

- *placenta praevia* – part of the placenta lies in front of the foetus (this could be revealed or concealed).
- *placental abruption* – separation of the placenta, or part of the placenta, from the uterine wall (this could be revealed or concealed).
- *cervical/vaginal bleeding* – bleeding from cervix or vagina caused by a polyp or carcinoma, or post-coitus (after intercourse).

anterior fontanelle the large “soft spot” at the front of the infant skull.

antibody a protein made by the body in response to a foreign substance entering the circulation (e.g. rhesus antibodies).

anti-D immunoglobulin medication given to rhesus-negative mothers after delivery to prevent rhesus antibody formation; it confers short-term passive immunity.

Apgar score a method of evaluating the condition of the newborn infant that considers five points – heartbeat, respiration, colour, muscle tone and response to stimulus – giving a score of 0, 1 or 2 to each point at 1, 5 and 10 minutes after birth.

areola the pigmented area of the breast surrounding and including the nipple.

asphyxia a condition that occurs when the foetus fails to breathe properly at birth, although there is a heartbeat present.

attitude the relationship of the foetal limbs and head to the trunk, namely flexed or extended, flexed being normal.

augmentation acceleration or re-establishment of labour at any stage when contractions have weakened or stopped altogether (e.g. by oxytocin).

biparietal diameter the widest and, therefore, the most important diameter of the foetal skull between the two parietal eminences, usually 9.5 cm.

breech presentation a foetus with the buttocks instead of the head in the lower pole of the uterus, which means that these will emerge first at delivery; it may present as an extended or footling breech.

Caesarean hysterectomy a hysterectomy performed at the time of a Caesarean section.

caput succedaneum oedema of the presenting part formed during labour and after rupture of the membrane.

cephalohaematoma an effusion of blood beneath the periosteum of one of the bones in the skull vault, commonly the parietal bone.

cephalic pertaining to the head (e.g. cephalic presentation).

cephalopelvic disproportion a discrepancy in size between the foetal head and the mother's pelvis.

cervix the lowest part of the uterus, which inserts into the upper anterior wall of the vagina, is canal-shaped, and connects the uterine cavity and vagina.

chorion the outer of the two membranes enclosing the foetus in the uterus; it is continuous with the placenta.

colostrum a highly nutritious cloudy fluid secreted by the breasts prior to lactation.

conception fusion of the male and female gametes.

cord, umbilical the structure connecting foetus and placenta *in utero* that carries the blood vessels (one vein and two arteries).

corpus luteum the yellowish mass of cells in the ovary that proliferates and secretes oestrogen and progesterone.

crowning the point during delivery when the biparietal and suboccipitobregmatic diameters emerge; extension of the head then begins.

decidua the specialised endometrium of pregnancy.

deep transverse arrest stoppage of the foetal head with the sagittal suture in the transverse diameter of the outlet of the pelvis; this is usually associated with prominent ischial spines.

denominator a fixed point on the foetus (e.g. the occiput) that is compared to a fixed point on the maternal pelvis to indicate the position of the foetus *in utero* (e.g. the right occiput anterior).

descent the downward movement of the foetus through the birth canal during labour.

dilation or dilatation the opening of the external os of the cervix.

divarication rectus abdominis separation or diastasis of the two rectus abdominis muscles.

Döderlein's bacillus an organism (also known as lactobacillus) that normally inhabits the vagina and produces lactic acid from the breakdown of glycogen; this creates an acid medium in the vagina that is bactericidal.

dystocia difficult or abnormal labour.

ectopic pregnancy a pregnancy occurring outside the uterus (e.g. in the fallopian tubes or abdominal cavity).

effacement or taking up of the cervix shortening of the cervix as it is drawn up into the lower uterine segment as labour begins; this should not to be confused with dilation of the cervix.

embryo the fertilised ovum for the first 8 weeks of intrauterine life; after this time, it is termed a foetus.

endometrium the lining mucosa of the uterine cavity.

engagement of the head when the widest diameter of the foetal skull (i.e. the biparietal diameter) has passed through the brim of the pelvis.

engorgement a painful condition in which the breasts are overdistended with milk.

Entonox ("gas and air") a mixture of 50% nitrous oxide and 50% oxygen that is used as an inhalational analgesic in labour.

epidural space the space outside the dura mater of the spinal cord, and the location for regional analgesia in labour, especially in the first stage, i.e. epidural block.

episiotomy an incision made in the perineum to aid delivery.

face presentation the head is presenting, but in a completely extended state instead of a normal one (e.g. complete flexion).

flexion a bending movement, and the normal attitude for the foetus *in utero*.

foetus the unborn child *in utero* from 8 weeks of pregnancy until birth.

forceps the obstetric forceps that assist delivery of the baby in the second stage of labour; types in common use include Neville–Barnes (Barnes–Neville), Wrigley and Kielland for rotation of the occiput before delivery.

forewaters the bag of membranes and liquor lying in front of the presenting part *in utero*.

gestation the length of pregnancy; in humans, approximately 9 months, or 280 days.

gonad a sex gland; namely, the ovary or testis.

gonadotrophin a substance that acts on a gonad (e.g. chorionic gonadotrophin).

gravid pregnant; a primigravida is a woman who is pregnant for the first time.

gravida the number of times a woman has been pregnant

Guthrie test a blood test carried out on days 7–8 of life to detect phenylketonuria.

gynaecoid pelvis typical female pelvis that is suitable for childbearing.

hyperemesis gravidarum excessive vomiting in pregnancy.

hypertonic too much tone (e.g. the uterine muscle during a strong contraction).

hypotonic too little tone (e.g. the uterine muscle during a weak contraction).

implantation the embedding of the ovum (after fertilisation) in the endometrium of the uterus, now known as decidua.

infertility inability to conceive children; there are two types:

- *primary* – in a couple who have never achieved a pregnancy.
- *secondary* – in a couple who have previously achieved at least one pregnancy.

involution the return of any organ or system, especially the uterus, to normal after pregnancy.

ketonuria a condition in which fats metabolised as ketones (acetone) are excreted in the urine, indicating acidosis.

kernicterus staining of the basal ganglia of the brain with the toxic form of bilirubin (e.g. in rhesus incompatibility).

labour the expulsion of the products of conception from the uterus. There are three phases:

- *first stage* – from the outset of true labour to the full dilation of the cervix.
- *second stage* – from full dilation of the cervix to the complete expulsion of the baby.
- *third stage* – separation and expulsion of the placenta and membranes.

lactation secretion of milk by the breasts.

lanugo the fine downy hair on the body of the foetus *in utero*; this is seen on babies born prematurely.

levator ani the large muscle forming the major part of the pelvic floor.

lie the relationship of the long axis of the foetus (i.e. the spine) to the long axis of the uterus, normally longitudinal.

live birth an infant that has breathed or had a heartbeat after delivery.

liquor amnii the amniotic fluid surrounding the foetus *in utero*.

lithotomy position a position in which the woman lies supine with her thighs abducted and flexed to approximately 90° at both the hip and knee; this position is maintained by supports attached to the birthing bed.

lochia the discharge from the uterus after childbirth.

lower segment the thinner lower part of the uterus at term, which has developed from the isthmus of the non-pregnant uterus; passive in labour.

malpresentation an abnormal or unfavourable presentation of the foetus instead of the normal vertex presentation (e.g. a breech or face presentation).

malposition an unfavourable position during the presentation (e.g. an occipitoposterior position of the vertex).

mastitis inflammation of the breast.

McRoberts manoeuvre named after William A. McRoberts Jr, this manoeuvre is employed in cases of shoulder dystocia during childbirth, and involves hyperflexing the mother's legs tightly to her abdomen; it is effective because of the increased mobility at the sacroiliac joint during pregnancy, which allows rotation of the pelvis and facilitates the release of the foetal shoulder.

mechanism of labour the series of passive movements that the foetus undergoes on its passage through the birth canal.

meconium the dark green viscid substance present in the bowel of the new-born infant.

membranes the chorion and the amnion.

mentum the chin.

mortality death; for example:

- *maternal mortality* – deaths of mothers as a result of childbirth.
- *infant mortality* – deaths of babies in the first year of life.
- *neonatal mortality* – deaths of babies in the first month of life.
- *perinatal mortality* – stillbirths and deaths of babies in the first week of life.

mortality rate the number of deaths per thousand.

moulding alteration of the shape of the foetal skull in labour in order to accommodate it to the rigid bony pelvis; the presenting diameter becomes shorter, and the one at right angles to it become longer.

multipara a woman who has given birth to a live child after each of at least two pregnancies (plural: multiparae).

multiple pregnancy more than one foetus (e.g. twins or triplets).

myometrium a uterine muscle.

naevus a birthmark.

obstetric cholestasis a multifactorial condition of pregnancy characterised by pruritus in the absence of a skin rash and abnormal liver function tests, neither of which has an alternative cause and both of which resolve after birth.

oligohydramnios less than the normal amount of liquor amnii, i.e. 1.5 litres at term.

ophthalmia neomatorum a purulent discharge from the eyes of the new-born baby within 21 days of birth; if gonococcal, it may lead to blindness: this is a notifiable disease.

ovulation the shedding of the ripe ova from the Graafian follicle into the peritoneal cavity.

oxytocin an extract from the posterior pituitary that stimulates uterine muscle and induces a contraction.

parous having borne one child or more.

parity the condition of having borne children, or the number of children born that are over 20 weeks.

partogram a chart for recording the progress of labour.

parturition childbirth.

pelvic girdle pain the pain experienced between the posterior iliac crest and the gluteal fold, particularly in the vicinity of the sacroiliac joints; it may radiate in the posterior thigh, and can also occur in conjunction with or separately in the symphysis; the endurance capacity for standing, walking and sitting is diminished.

phenylketonuria a metabolic disease in which the infant is unable to utilise a specific amino acid, i.e. phenylalanine; if untreated, it leads to severe intellectual disability.

placenta praevia a condition in which the placenta is inserted wholly or in part into the lower segment of the uterus; it is classified by ultrasound imaging according to what is relevant clinically (e.g. if the placenta lies over the internal cervical os, it is considered a major praevia; if the leading edge of the placenta is in the lower uterine segment but not covering the cervical os, minor or partial praevia exists).

placenta accreta, increta and percreta the placenta penetrates through the decidua basalis into and then through the myometrium.

polarity the neuromuscular harmony between the upper and lower uterine segments in labour, upon which normal taking up and dilation of the cervix is dependent.

polyhydramnios an excessive amount of liquor amnii (e.g. more than 1.5 litres at term).

posterior fontanelle a small "soft spot" at back of skull.

post-maturity the period when a pregnancy has gone 2 weeks or more past the expected date of delivery, i.e. more than 42 weeks.

postpartum haemorrhage loss of blood following childbirth:

- *primary* – blood loss from the genital tract up to 24 hours after delivery of 500 millilitres or more; or less, if detrimental to the mother's condition (usually from the placental site).
- *secondary* – any bleeding from the genital tract during the puerperium, excluding the first 24 hours (usually as a result of an infection).

pre-eclampsia a disease peculiar to middle and late pregnancy that is characterised by oedema, elevated blood pressure and proteinuria; if left untreated, it may progress to fulminating eclampsia, which is characterised by the occurrence of major epileptiform convulsions.

premature birth a birth that takes place more than 3 weeks before the baby's estimated due date.

presentation the part of the foetus that occupies the lower pole of the uterus, and therefore, lies over the pelvic brim.

primipara a woman who has given birth to one live child.

prolapse of the umbilical cord a condition in which the cord escapes through the cervix after the rupture of the membranes and lies in front of the presenting part of the baby.

puerperium the period following the delivery of the baby, during which the body returns to its normal pre-pregnant state; this usually takes about 1 month.

quickening the perception of foetal movements by the mother; this usually occurs at around 18–20 and 16–18 weeks during the first pregnancy and a subsequent pregnancy, respectively.

retraction a slight permanent shortening of the muscle in the uterus during labour.

rhesus factor a blood factor present in 85% of the UK population; the remaining 15% are termed rhesus-negative.

rotation changing the position of the foetus; in normal labour, the occiput rotates anteriorly in order to be born; this movement can be assisted by Kielland forceps in the second stage of labour.

Shirodkar suture a suture placed around the cervix in week 14 of pregnancy to prevent an incompetent cervix dilating.

show the expulsion of the mucous plug as a slightly blood-stained mucous discharge in early labour.

sickle cell disease a hereditary haemoglobinopathy that may be exacerbated during pregnancy.

sinciput the brow or forehead; the area between the supraorbital ridges and the bregma.

small for dates a baby born at any stage of pregnancy who weighs less than the normal amount.

sonicaid high-frequency sound used to detect noises (e.g. that of the foetal heart).

speculum, vaginal an instrument designed for the examination of the vagina and cervix (e.g. Sims's, Cusco's and Auvard's).

stillbirth the delivery of any child who shows no sign of life after week 24 of pregnancy.

striae gravidarum the so-called "stretch marks" of pregnancy, which are seen on the abdomen and breasts; these may be a sign of pregnancy, or a previous pregnancy.

surfactant an agent secreted by the foetal lungs that reduces surface tension and allows adequate expansion of the alveoli; the absence or lack of surfactant causes respiratory distress syndrome (hyaline membrane disease) in premature babies.

syntocinon a synthetic form of oxytocin.

tears (lacerations) obstetric anal sphincter injuries; defined by the International Consultation on Incontinence, and the Royal College of Obstetricians and Gynaecologists as follows:

- *first-degree tear* – injury to the perineal skin and/or vaginal mucosa.
- *second-degree tear* – injury to the perineum involving the perineal muscles, but not involving the anal sphincter.
- *third-degree tear* – injury to the perineum involving the anal sphincter complex:
  - *grade 3a tear* – less than 50% of the external anal sphincter (EAS) thickness torn.
  - *grade 3b tear* – more than 50% of the EAS thickness torn.
  - *grade 3c tear* – both the EAS and internal anal sphincter torn.
- *fourth-degree tear* – injury to the perineum involving the anal sphincter complex (EAS and IAS) and anorectal mucosa.

thrush a monilial infection that can affect both the mother and baby; in the former, it manifests as vaginitis, and in the latter, it presents as an intestinal tract infection, particularly in the mouth.

transverse lie the foetus lies at right angles to the long axis of the uterus.

trichomonas vaginalis an organism that commonly infects the vagina.

ultrasound scan the use of high-frequency sound waves to locate, define or measure certain structures within the body (e.g. a foetus or the placenta); the conversion of the sound into light allows an image to be displayed on a television screen.

unstable lie repeated changes of foetal position.

upper segment the very muscular upper part of the uterus at term that has developed from the body of the non-pregnant uterus; this is the active part of the uterus in labour.

vernix a greasy white substance covering the foetus *in utero* after week 30 of gestation.

version changing the presentation of the foetus (usually external cephalic version), i.e. turning the baby round from a breech or shoulder presentation to a cephalic one, the hands coaxing the baby round through the abdominal wall.

vertex the area of the skull between the anterior and posterior fontanelles, and the two parietal eminences.

Appendix 3: Urology/gynaecology terminology

amenorrhoea the absence of menstruation.
apareunia the absence or impossibility of coitus
cervical carcinoma cancer of the cervix:

- *Stage 0* – cervical intraepithelial neoplasia (CIN):
  - *CIN 1* – mild dysplasia.
  - *CIN 2* – moderate dysplasia.
  - *CIN 3* – severe dysplasia and carcinoma *in situ*.
  - *metaplasia* – normal transformation of cellular tissue.
  - *dysplasia* – abnormal development or growth cells.
  - *dyskaryosis* – abnormality of the nuclei of cells.

  (The terms above denote cellular changes that can be seen in the cervical epithelium when there is no invasion of deeper tissues; these conditions do not invariably progress to malignancy.)
- *Stage I* – lesion invasion, but confined to the cervix, usually the squamocolumnar junction.
- *Stage II* – the lesion extends beyond the cervix to the upper vagina and parametrium, but not the pelvic side walls.
- *Stage III* – the lesion reaches one or both pelvic side walls, and the lower third of the vagina.
- *Stage IV* – the spread of the lesion the involves the bladder and/or rectum; there may be distant metastases.

debulking a surgical procedure used for ovarian tumours that may include removal of the ovaries, uterus, cervix and omentum.
dysfunctional uterine bleeding blood loss caused by hormone imbalance.
dyspareunia difficult or painful intercourse.
ectopic pregnancy egg implantation in sites other than the uterus, usually the fallopian tube.
endometriosis a disease characterised by growth of the endometrium in places other than the lining of the uterus.
female genital mutilation female circumcision; any procedure removing part or all of the external female genitalia.
fibroids (myomata) benign tumours of the uterus.
haematometra trapped blood in the uterus (e.g. as a result of an intact hymen or cervical stenosis).
haematuria blood found in the urine on urinalysis
incontinence a lack of voluntary control over urination or defecation:

- *urinary incontinence* – involuntary loss of urine.
- *stress urinary incontinence* – involuntary leakage on effort or physical exertion, or on sneezing or coughing.
- *urgency* – involuntary loss of urine associated with urgency.
- *urge urinary incontinence* – involuntary leakage of urine accompanied by or immediately preceded by urgency.
- *mixed urinary incontinence* – involuntary leakage of urine associated with urgency, and also with exertion, effort, sneezing or coughing.
- *nocturnal enuresis* – loss of urine occurring during sleep.
- *overactive bladder* – urgency, with or without urge incontinence, usually with frequency and nocturia.

- *overflow incontinence* – incontinence associated with overdistension of the bladder.
- *detrusor overactivity* – urodynamic observation characterized by involuntary detrusor contractions during the filling phase, which may be spontaneous or provoked.

inguinal node dissection removal of lymph nodes near the vulva, usually following a vulvectomy (this procedure may be unilateral or bilateral) with drain(s) *in situ* for a few days.

interstitial cystitis chronic inflammation of the bladder giving rise to symptoms including frequency, urgency and pain in the absence of infection.

IUCD intrauterine contraceptive device (not to be confused with IUD, intrauterine death).

large loop excision of the transformation zone (LLETZ) outpatient treatment for cervical dysplasia (i.e. pre-malignant lesions) that aims to totally remove abnormal cells from the cervix; a wire loop with an electric current (diathermy) is used to shave off these cells.

menorrhagia abnormally heavy bleeding at menstruation.

metrorrhagia irregular bleeding.

nocturia the interruption of sleep one or more times because of the need to micturate

omentectomy a procedure that involves removal of the fatty tissue overlying the bowel.

pelvic node dissection in cases of suspected malignancy, pelvic and para-aortic nodes may be excised; the extent and type of the dissection depends on the kind of gynaecological malignancy being treated; enlarged nodes are also removed to facilitate sterilization of any micrometastases.

pelvic organ prolapse a condition diagnosed with symptoms and clinical examination, assisted by any relevant imaging, that involves the descent of one or more parts of the anterior vaginal wall:

- *urethrocele* – prolapse of the urethra (affects the anterior vaginal wall).
- *cystocele* – prolapse of the bladder (affects the anterior vaginal wall).
- *rectocele* – prolapse of the rectum (affects the posterior vaginal wall).
- *enterocele* – prolapse of the pouch of Douglas (affects the posterior vaginal wall).
- *uterine prolapse* – may occur to a variable degree.

pelvic inflammatory disease an infection of the female reproductive organs.

procidentia third-degree uterine prolapse.

suprapubic catheter a long-term catheter surgically inserted above the symphysis pubis.

uterine adnexa the fallopian tubes and ovaries.

uterovaginal prolapse displacement of one or more of the pelvic organs, causing a bulge into the vagina; there are several types.

urodynamics a conventional bladder test to diagnose bladder dysfunctions, including incontinence; it involves artificial bladder filling via urethral catheter, bladder pressure measurement with a second urethral catheter and abdominal pressure measurement using a rectal catheter (subtracting bladder pressure from abdominal pressure gives detrusor pressure).

vaginal vault the top of the vagina that remains after surgical removal of the cervix.

Appendix 4: Gynaecology surgery terminology and abbreviations

abdominal hysterectomy removal of the uterus via an abdominal incision.

abdominal sacral colpopexy repair of vaginal vault prolapse by attaching the vault to the presacral fascia (e.g. with surgical mesh).

anterior repair/colporrhaphy repair of the anterior vaginal wall for cystocele and/or urethrocele; performed vaginally.

Botox botulinum toxin A injected via cystoscopy for an overactive bladder that is resistant to other treatments.

bilateral/left/right salpingo-oophorectomy (BSO/LSO/RSO) a procedure that may be combined with hysterectomy that can be performed abdominally or laparoscopically.

colposcopy the use of a colposcope to examine the upper part of the vagina and cervix.

colposuspension a sling suspension operation to restore the urethrovesical angle in cases of stress incontinence; a sling, usually made of vaginal tissue, is formed to support the bladder neck, and is attached to the ileopectineal ligaments; this procedure may be performed abdominally or laparoscopically.

cone biopsy removal of a conical segment from the cervix for diagnostic purposes, or as part of the treatment of cervical cancer.

cystoscopy the use of a cystoscope to look inside the bladder.

D&C dilation and curettage.

ERPC evacuation of retained products of conception.

EUA examination under anaesthetic.

excision of Bartholin's cyst (marsupialisation) removal of a cyst from the gland at the base of the labia minora.

Fenton's procedure an operation to enlarge the vaginal introitus.

hysterectomy removal of part or all of the uterus:

- *total abdominal hysterectomy* – removal of the whole of the uterus through an abdominal incision.
- *subtotal hysterectomy* – the cervix is left in place, and only the body of the uterus is removed.
- *vaginal hysterectomy* – removal of the uterus through the vagina to treat uterine prolapse; the cardinal and uterosacral ligaments are shortened during the operation, which may be combined with another surgical repair.
- *extended hysterectomy* – removal of the uterus, ovaries, fallopian tubes and a vaginal "cuff".
- *Wertheim's operation* – removal of the uterus, ovaries, fallopian tubes, broad ligaments, the upper third of the vagina and the adjacent lymph nodes.

hysteroscopy the use of a hysteroscope to look inside the uterus.

laparoscopic sterilisation by banding the fallopian tubes via two small stab wounds.

laparoscopy examination of the pelvic contents by laparoscope via a small subumbilical incision.

laparoscopically assisted vaginal hysterectomy (LAVH) the use of a laparoscope (abdominally) to aid vaginal removal of the uterus.

myomectomy removal of fibroids.

oophorectomy removal of an ovary.

ovarian cystectomy removal of an ovarian cyst.

pelvic exenteration removal of the uterus, bladder and/or rectum with transplantation of the ureters and colostomy.

peri-urethral bulking agents a procedure for stress incontinence: collagen or another agent is injected into the peri-urethral tissues at the urethrovesical junction (i.e. the

bladder neck); the aim is to increase resistance to involuntary urine loss by narrowing the lumen of the urethra.

posterior repair (colpoperineorrhaphy) repair of an enterocele or rectocele and/or defective perineum.

sacrospinous fixation vaginal repair of vaginal vault prolapse by suturing the vault to the medial portion of the sacrospinous ligament.

salpingectomy removal of a fallopian tube.

salpingolysis removal of peritubal adhesions.

salpingo-oophorectomy the removal of a fallopian tube and ovary.

salpingostomy removal of a blocked or damaged portion of a fallopian tube to restore patency.

transcervical resection of the endometrium (TCRE) a procedure performed to treat excessive menstrual bleeding.

tubal section and ligation sterilisation by cutting and tying both fallopian tubes through a small transverse incision.

tension-free vaginal tape (TVT) a procedure performed to treat stress incontinence: a Prolene mesh tape is positioned around the midurethral area, and is drawn upwards within the abdominal cavity on each side to the abdominal skin, the mesh becoming an integral part of the abdominal skin and underlying soft tissues; the aim is to create a solid floor beneath the urethra so that a sudden rise in intra-abdominal pressure (e.g. a cough or a sneeze) will compress the urethra against the tape, occluding the urethra, and thus, preventing involuntary urine loss; unlike other procedures, tension is applied only on episodes of physical stress.

tension free vaginal tape obturator (TVTO) and transobturator tape (TOT) a procedure similar to TVT that produces a wider angle of support on the urethra; the tape exits laterally via the obturator foramen.

VTOP/STOP vaginal/suction termination of pregnancy.

vulvectomy, simple or radical this procedure varies in extent from simple excision of skin in the vulval area to excision of the whole of the vulva and the inguinal glands.

Appendix 5: Colorectal terminology

ACE antigrade continence enema.
adenoma a glandular lesion; a precursor to colorectal cancer.
anal abscess an infected cavity filled with pus found near the anus or rectum.
anal canal the short tube at the end of the rectum through which stool leaves the body.
anal cancer a form of cancer that develops in the mucosa lining the anal canal.
anal fissure a split that occurs within the distal part of the anal lining; this usually causes severe anal pain and fresh bleeding when stools are passed.
anal fistula a small, tunnel-like structure (i.e. a tract) that develops between the back passage (i.e. the anal canal) and the skin surrounding the anus.
anal sphincters the ring of two muscles (i.e. the internal and external sphincters) surrounding the anus that controls the opening and closing of the anus, and plays a major part in maintaining control of faeces.
anastomosis the surgical joining of two ducts to allow flow.
anismus the failure of the pelvic floor to relax of during defecation.
anterior resection and total mesorectal resection (TME) the surgical removal of the rectum and all the fatty tissue around it (i.e. TME) in order to reduce the risk of recurrent local cancer; a join is made between the two ends of the bowel.
anorectal physiology tests of the strength of the muscles in the anal canal in order to establish if these are working normally; this procedure also checks the sensitivity of the rectum to small volumes of air and its response to distension.
anus the back passage; it is lined with sensitive skin, and surrounded by important muscles that control the emptying of the bowel.
banding of haemorrhoids a procedure that involves using a small instrument to put a very tight elastic band over a haemorrhoid; this band cuts off the blood supply, and the haemorrhoid should drop off, usually within 3–7 days of the banding.
barium enema a contrast medium used to examine the large intestine by X-ray.
bowel the name given to the intestines: the term “large bowel” is sometimes used to describe the colon and rectum; the term “small bowel” is often used to describe the upper part of the intestine, which includes the duodenum, jejunum and ileum.
celiac disease a condition in which the body reacts to gluten, causing an inflammatory response.
colectomy the surgical removal of all or part of the large intestine.
colitis inflammation of the colon; this may have several different causes.
colon the part of the intestine or bowel that follows the small intestine; the colon leads to the rectum and anus, and its function is to absorb water.
colonoscopy an examination of the entire length of the large bowel using a flexible fibreoptic endoscope.
colon cancer a cancer that develops from the mucosa that lines the large bowel (i.e. the colon); this type of cancer usually develops from a non-cancerous polyp, and if this is detected early, the cancer may be prevented by its removal.
colostomy a large intestine stoma.
constipation the inability to pass stools (i.e. faeces) as often as normal; sufferers may have to strain more than usual, may be unable to completely empty their bowels or pass unusually hard stools.
Crohn’s disease a condition that causes inflammation of the gastrointestinal tract (i.e. the gut); it may affect any part of the gut.

diarrhoea liquid stool.

diverticular disease small pouches projecting out of the side of the large intestine (i.e. the colon).

defecating proctogram the dynamic study of the function of the anorectum and pelvic floor.

endorectal ultrasound a procedure in which a probe is inserted into the rectum, and high-frequency sound waves are generated; the pattern of echoes made as these sound waves bounce off tissues is converted into a picture (i.e. a sonogram) on a television screen.

enhanced recovery programme for elective surgery a plan designed to reduce the length of a hospital stay by shortening the postoperative recovery period.

faecal incontinence the inability to control the passage of gas, and liquid or solid stools from the back passage; it is associated with urgency, rushing to a toilet and, at times, accidents.

fistula an abnormal connection between two internal organs.

flexible sigmoidoscopy a method of viewing the rectum and lower third of the large colon.

gallbladder disease a common condition with a wide variety of symptoms ranging from discomfort to severe pain that mainly begins after consuming food; in severe cases, the patient can suffer from jaundice, nausea and fever (the most common cause of gallbladder disease is gallstones).

haemorrhoids (piles) the swelling of the blood vessels within the anus; common symptoms include bright-red bleeding, pain, itching, swelling, and popping out (prolapse) while passing a stool (or at other times).

hemicolectomy the removal of part of the colon (i.e. the large bowel or intestine) on either the right or left side.

hernia a piece of tissue or organ that pokes through the muscles that make up the wall of the abdomen, and pushes out under the skin; this appears as a bulge in the abdomen or groin.

ileostomy the opening of the ileum (i.e. the final section of the small intestine) to the surface.

inflammatory bowel disease a group of disorders that cause the intestines to become inflamed (i.e. red and swollen).

intussusception the intervagination (i.e. telescoping) of the bowel in on itself.

laparoscopic ventral rectopexy an operation to treat internal rectal prolapse in which the rectum is fixed in its original anatomical position.

perianal abscess an acute painful swelling containing pus that occurs next to the anus

peristalsis the propulsion of food through the intestines.

piles see “haemorrhoids” above.

pilonidal disease a chronic infection of the skin in the region of the buttock crease; the condition results from a reaction to hairs embedded in the skin, commonly occurring in the cleft between the buttocks.

polyp a benign (i.e. non-cancerous) growth in the lining of the bowel.

proctectomy the surgical removal of the rectum; where there is a very low rectal or anal cancer, this may involve removal of the anus as well.

proctoscopy an examination of the lowest part of the rectum and anal canal using a very short telescope; this is usually done in the outpatient clinic.

pruritus ani itching and/or soreness around the anus; this is a common symptom that may be have a number of different causes.

rectum the last part of the large intestine; the main function of the rectum is to act as a reservoir for stools.

rectal cancer a cancer that develops in the mucosa lining the rectum.
rectal prolapse a problem that occurs when part or all of the wall of the rectum slides out of place; sometimes this protrudes out of the anus.
restorative proctocolectomy with ileoanal pouch–anal anastomosis the surgical removal of all of the colon and rectum, and the formation of a new reservoir with the small bowel, which is reattached to the anus.
rigid sigmoidoscopy a procedure in which a short and rigid tube is inserted into the rectum in order to examine the lower portion of the large intestine (or bowel).
sphincteroplasty the repair of the anal sphincter muscles.
stoma the artificial opening of the intestine to the surface.
ulcerative colitis a condition that causes inflammation in the rectum and colon; part or all of the large bowel may be involved.