Second edition

100 Cases in Obstetrics and Gynaecology

Cecilia Bottomley and Janice Rymer
Series editor: Janice Rymer

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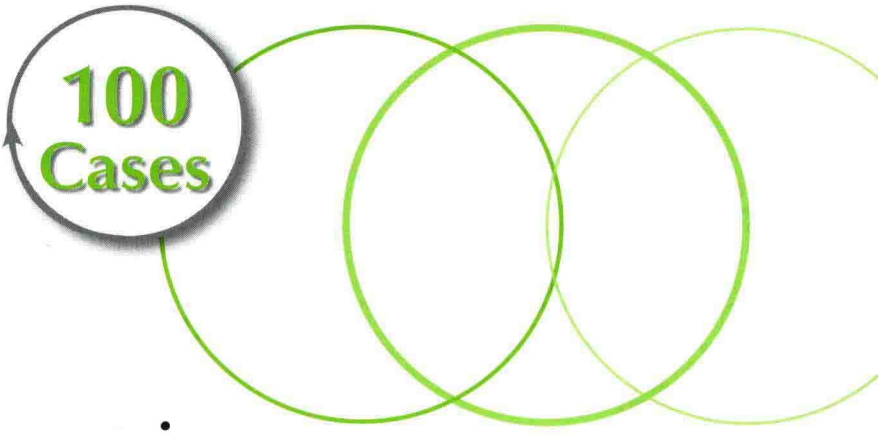

in Obstetrics and Gynaecology

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Summary: "PREFACE Learning in medicine has gradually moved away from an apprentice system to a more structured course format. Advances have been made with the use of simulated cases, problem-based learning and electronic learning resources; however, this has led to a separation of the learning environment from the clinical art of real medicine. This book aims to redress the balance with entirely clinical cases, highlighting the history and examination features with salient investigations. This allows the reader to place themselves in the position of the practising doctor encountering these scenarios in the everyday clinical setting. Obstetrics and gynaecology involves the same clinical reasoning as other specialties covered in this series, but several points should be highlighted. First most patients seen in obstetrics and gynaecology are generally fit and healthy. As such they will withstand cardiovascular insults such as haemorrhage very effectively by increasing cardiac output. Signs of tachycardia and hypovolaemia may be late and signify severe compromise. Second, there are many physiological changes in pregnancy and normal ranges therefore alter. Where indicated, normal values for pregnant and non-pregnant women have been included. Finally, many abnormalities in obstetrics and gynaecology are picked up during 'routine' care. This book therefore differs from those of Clinical Medicine and Surgery in that women do not always 'present' with a problem, but one may be detected through, for example, routine antenatal care or during a cervical smear investigation. The cases are grouped into broad categories with random ordering of cases within each category to mimic the way cases present in clinical practice"--Provided by publisher.
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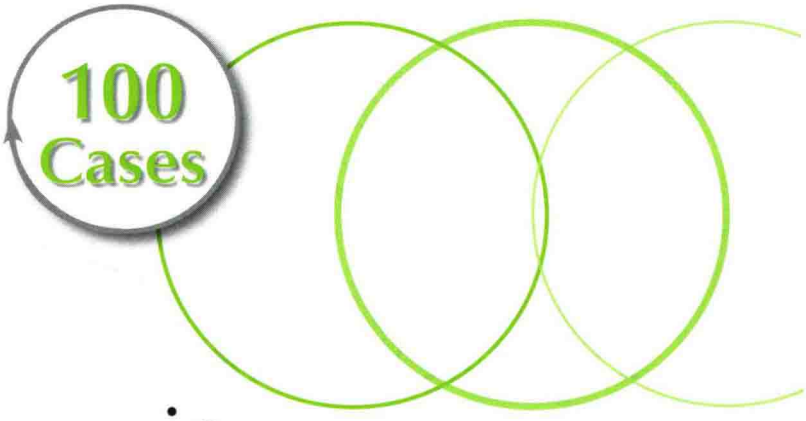

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PREFACE TO SECOND EDITION

Following the success of the first edition of this book and the popularity of the 100 Cases Series, in this second edition we have revised many of the cases to reflect the most up-to-date practice, while retaining the cases reported to be most useful. Both authors are teachers and examiners in undergraduate and postgraduate obstetrics and gynaecology with pertinent knowledge of what is expected of medical students and junior doctors in the field.

This series remains unique in its stimulating questions regarding real clinical scenarios. The questions are highly relevant to everyday obstetrics and gynaecology and most are derived from real cases.

In this edition we have incorporated the newer medical developments in gynaecology, such as hysteroscopic sterilization by tubal cannulation, focused MRI for fibroids and insertion of the balloon catheter for a Bartholin's cyst. Additionally we have included cases with sometimes controversial ethical dimensions, such as maternal request for a caesarean section.

Several of the new cases focus on engaging women in the informed consent process, which is increasingly important in clinical exams, whether objective structured clinical examinations (OSCEs) or practical assessment of clinical examination skills (PACES).

We have ensured that the new cases incorporate recently published national guidance from national bodies such as the National Institute for Clinical Excellence (NICE) and the Royal College of Obstetricians and Gynaecologists (RCOG) or from specialist societies such as the British Society of Colposcopy and Cervical Pathology (BSCCP).

As with the first edition, the book is written with both junior clinicians and medical students in mind. It is an ideal refresher for foundation year and senior house officer level trainees starting their obstetrics and gynaecology placements.

The cases vary in complexity to reinforce important or common subject areas. They can be read through from start to finish or, more usefully for some readers, delved into between ward rounds, on the bus or after seeing a patient with a particular presenting complaint or condition. The book should reinforce knowledge and build confidence in some areas, challenge and stimulate thought in others and should provide a useful tool for learning in the specialty of obstetrics and gynaecology.

ABBREVIATIONS

AFP	alpha-fetoprotein
APH	antepartum haemorrhage
APTT	activated partial thromboplastin time
ARM	artificial rupture of membranes
BMI	body mass index
BV	bacterial vaginosis
CIN	cervical intraepithelial neoplasia
COCP	combined oral contraceptive pill
CT	computerized tomography
CTG	cardiotocograph
CTPA	computerized tomography pulmonary angiogram
CVS	chorionic villous sampling
DCDA	dichorionic diamniotic
DIC	disseminated intravascular coagulopathy
DUB	dysfunctional uterine bleeding
EAS	external anal sphincter
ECG	electrocardiogram
EIA	enzyme immunoassay
ERPC	evacuation of retained products of conception
FBS	fetal blood sampling
FSH	follicle-stimulating hormone
FTA-abs	treponemal antibody-absorbed (test)
GBS	group B streptococcus
GDM	gestational diabetes mellitus
GP	general practitioner
Hb	haemoglobin
hCG	human chorionic gonadotrophin
HELLP	haemolysis, elevated liver enzymes and low platelets
HIV	human immunodeficiency virus
HRT	hormone-replacement therapy
IAS	internal anal sphincter
Ig	immunoglobulin
INR	international normalized ratio
IUCD	intrauterine contraceptive device
IUS	intrauterine system
IVF	*in vitro* fertilization
LH	luteinizing hormone
LLETZ	large-loop excision of the transformation zone
LMP	last menstrual period date
MCH	mean cell haemoglobin
MoM	multiples of the median
MRI	magnetic resonance imaging
NT	nuchal translucency
OAB	overactive bladder syndrome
OC	obstetric cholestasis
PCA	patient-controlled analgesia

PCOS	polycystic ovarian syndrome
PE	pulmonary embolism
PIH	pregnancy-induced hypertension
PMB	postmenopausal bleeding
PMS	premenstrual syndrome
POP	progesterone only pill
PPH	postpartum haemorrhage
PUL	pregnancy of unknown location
RDS	respiratory distress syndrome
SLE	systemic lupus erythematosus
SPD	symphysiopelvic dysfunction
STI	sexually transmitted infection
TCRF	transcervical resection of a fibroid
TEDS	thromboembolic stocking
TIBC	total iron-binding capacity
TPN	total parenteral nutrition
TSH	thyroid-stimulating hormone
T_3	tri-iodothyronine
T_4	thyroxine
UTI	urinary tract infection
VBAC	vaginal birth after caesarean
VDRL	venereal disease research laboratory (test)
VTE	venous thromboembolism
WHO	World Health Organization

CONTENTS

Section 1
GENERAL GYNAECOLOGY

CASE 1: INTERMENSTRUAL BLEEDING

History

A 48-year-old woman presents with intermenstrual bleeding for 2 months. Episodes of bleeding occur any time in the cycle. This is usually fresh red blood and much lighter than a normal period. It can last for 1–6 days. There is no associated pain. She has no hot flushes or night sweats. She is sexually active and has not noticed vaginal dryness.

She has three children and has used the progesterone only pill for contraception for 5 years.

Her last smear test was 2 years ago and all smears have been normal. She takes no medication and has no other relevant medical history.

Examination

The abdominal examination is unremarkable. Speculum examination shows a slightly atrophic-looking vagina and cervix but there are no apparent cervical lesions and there is no current bleeding.

On bimanual examination the uterus is non-tender and of normal size, axial and mobile. There are no palpable adnexal masses.

INVESTIGATIONS

		Normal range
Haemoglobin	12.7 g/dL	11.7–15.7 g/dL
White cell count	4.5×10^9/L	$3.5–11 \times 10^9$/L
Platelets	401×10^9/L	$150–440 \times 10^9$/L

Transvaginal ultrasound scan and hydrosonography are shown in Fig. 1.1.

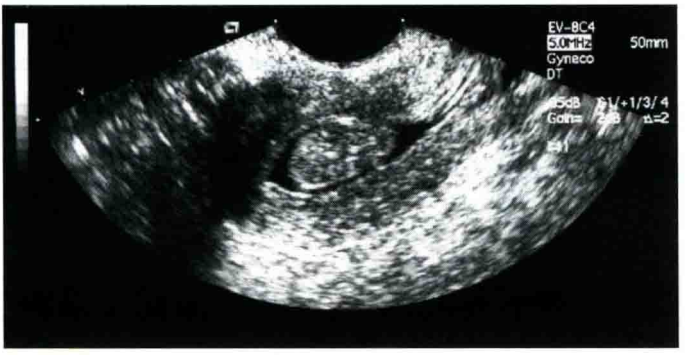

Figure 1.1 Transvaginal ultrasound image showing midsagittal view of the uterine cavity after installation of saline (hydrosonography).

Questions

- What is the diagnosis and differential diagnosis?
- How would you further investigate and manage this woman?

ANSWER 1

The diagnosis is of an endometrial polyp, shown in the ultrasound image as a mass, surrounded by the instilled fluid, within the endometrial cavity (Fig. 1.1). These can occur in women of any age, although they are more common in older women and may be asymptomatic or cause irregular bleeding or discharge. The aetiology is uncertain and the vast majority are benign. In this specific case all the differential diagnoses are effectively excluded by the history and examination.

Differential diagnosis for intermenstrual bleeding

- Cervical malignancy
- Cervical ectropion
- Endocervical polyp
- Atrophic vaginitis
- Pregnancy
- Irregular bleeding related to the contraceptive pill

Management

Any woman should be investigated if bleeding occurs between periods. In women over the age of 40 years, serious pathology, in particular endometrial carcinoma, should be excluded.

The polyp needs to be removed for two reasons:

1. to eliminate the cause of the bleeding
2. to obtain a histological report to ensure that it is not malignant.

Management involves outpatient or day case hysteroscopy, and resection of the polyp under direct vision using a diathermy loop or other resection technique (Fig. 1.2). This allows certainty that the polyp had been completely excised and also allows full inspection of the rest of the cavity to check for any other lesions or suspicious areas. In some settings, where hysteroscopic facilities are not available, a dilatation and curettage may be carried out with blind avulsion of the polyp with polyp forceps. This was the standard management in the past but is not the gold standard now, for the reasons explained.

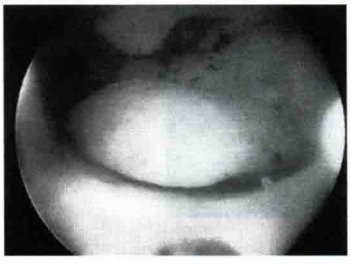

Figure 1.2 Hysteroscopic appearance of endometrial polyp prior to resection (see colour insert).

KEY POINTS

- Any woman over the age of 40 years should be investigated if bleeding occurs between the periods, to exclude serious pathology, in particular endometrial carcinoma.
- Hysteroscopy and dilatation and curettage is rarely indicated for women under the age of 40 years.

CASE 2: INFERTILITY

History

A 31-year-old woman has been trying to conceive for nearly 3 years without success. Her last period started 7 months ago and she has been having periods sporadically for about 5 years. She bleeds for 2–7 days and the periods occur with intervals of 2–9 months. There is no dysmenorrhoea but occasionally the bleeding is heavy.

She has been pregnant once in the past at the age of 19 years but that pregnancy was terminated for personal reasons. She had a laparoscopy several years ago for pelvic pain, which showed a normal pelvis.

Cervical smears have always been normal and there is no history of sexually transmitted infection.

The woman was diagnosed with irritable bowel syndrome when she was 25, after thorough investigation for other bowel conditions. She currently uses metoclopramide to increase gut motility, and antispasmodics.

Her partner is fit and well, and has two children by a previous relationship. Neither partner drinks alcohol or smokes.

INVESTIGATIONS

		Normal range
Follicle-stimulating hormone	3.1 IU/L	Day 2–5 1–11 IU/L
Luteinizing hormone	2.9 IU/L	Day 2–5 0.5–14.5 IU/L
Prolactin	1274 mu/L	90–520 mu/L
Testosterone	1.4 nmol/L	0.8–3.1 nmol/L
Thyroid-stimulating hormone	4.1 mu/L	0.5–7 mu/L
Free thyroxine	17 pmol/L	11–23 pmol/L
	Day 21 progesterone was requested but no period occurred for 3 months and therefore the test was not performed	

Questions

- What is the diagnosis and its aetiology?
- How would you further investigate and manage this couple?

ANSWER 2

The infertility is likely to be secondary to anovulation. Normal testosterone and gonadotrophins and high prolactin suggest the likely case of anovulation is hyperprolactinaemia. Hyperprolactinaemia may be physiological in breast-feeding, pregnancy and stress. The commonest causes of pathological hyperprolactinaemia are tumours and idiopathic hypersecretion, but it may also be due to drugs, hypothyroidism, ectopic prolactin secretion or chronic renal failure. In this case the metoclopramide is the cause, as it is a dopamine antagonist (dopamine usually acts via the hypothalamus to cause inhibition of prolactin secretion, and if this is interrupted, prolactin is secreted to excess). Galactorrhoea is not a common symptom of hyperprolactinaemia, occurring in less than half of affected women.

Drugs associated with hyperprolactinaemia (due to dopamine antagonist effects)

- Metoclopramide
- Phenothiazines (e.g. chlorpromazine, prochlorperazine, thioridazine)
- Reserpine
- Methyldopa
- Omeprazole, ranitidine, bendrofluazide (rare associations)

The metoclopramide should be stopped and the woman reviewed after 4–6 weeks to ensure that the periods have restarted and that the prolactin level has returned to normal. If this does not occur, then further investigation is needed to exclude other causes of hyperprolactinaemia, such as a pituitary micro- or macroadenoma. It would be advisable to carry out a day 21 progesterone level to confirm ovulatory cycles.

As with all women attempting to conceive, she should have her rubella immunity checked and should be advised to take periconceptual folic acid until 12 weeks of pregnancy to reduce the risk of neural tube defects.

If the woman fails to conceive after correction of hyperprolactinaemia, then a full fertility investigation should be planned with semen analysis and tubal patency testing (laparoscopy and dye test, hysterosalpingogram or hysterosalpingoconstrastsonography (hyCoSy)).

KEY POINTS

- A full drug history should be elicited in women with amenorrhoea or infertility.
- Galactorrhoea occurs in less than half of women with hyperprolactinaemia.
- Day 21 progesterone over 30 nmol/L is suggestive of ovulation.