

FOURTH EDITION

Cases for **PACES**

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WILEY Blackwell

Cases for PACES

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Foreword

Taking the MRCP PACES exam is a defining moment in most physicians' training life. PACES is undoubtedly a high-stakes exam both from the perspective of the implications for progression of training but also for the way an individual's knowledge and skills are placed under the spotlight. All physicians will have strong memories of their PACES experience; both good and bad. It is a stern test, but once completed it acts as a stamp of quality that is indelible and widely recognized. Getting through the exam successfully requires hard work, dedication and a pragmatic approach given the competing pressures of both clinical and home life.

This book can't replace hard work and dedication, but it does provide a well-proven and effective methodology for success. Thousands of physicians have benefited from the use of its wisdom and the fact it is now in its fourth generation is testament to how useful it has been for many. This latest edition takes into account the evolving design of the exam and should lessen the fear of the unknown that some have when approaching the exam. PACES will continue to evolve as medicine itself evolves, but it is striking how much the principles of clinical diagnosis remain constant. The advice to take time to think, look and gather oneself while the hand rub dries is one such principle. These principles are not just for the exam but when used in daily clinical practice will make life simpler and less stressful for the physician and result in better outcomes for the patient.

The breadth of internal medicine is wide and this book reminds us how much we have learned (or indeed still have to learn or relearn). It reminds us how fascinating medicine is and why many of us have chosen life as a physician – and given current clinical pressures such a reminder is always helpful. For those taking the exam, you will never again have such a wide breadth of knowledge and hopefully this book will help you keep much of that accumulated wisdom for all your professional life.

I wish you all the best for the exam and hope this book eases the journey through it. I suspect it will and if you have a hard copy you will keep it to refer to for many years to come. You may even read these words again in 20 years' time (he says as he looks at the dog-eared spine of the copy of its predecessor on the office shelf!).

Prof. Andrew Goddard
Consultant Gastroenterologist, Royal Derby Hospital
Past President of the Royal College of Physicians, London

Preface

PACES (Practical Assessment of Clinical Examination Skills) was initiated in June 2001 by the Royal College of Physicians as the final stage of the MRCP examination. The initial examination consisted of five stations in a carousel: Station 1: Respiratory/Abdominal (10 minutes each), Station 2: History Taking (20 minutes), Station 3: Cardiology/Neurology (10 minutes each), Station 4: Communication Skills and Ethics (20 minutes) and Station 5: Short Cases (Skin, Locomotor, Eyes and Endocrine: 5 minutes each). The format was refined in October 2009 by restructuring Station 5 into two 10-minute 'Brief Clinical Consultations'.

The PACES exam had a further major update introduced from Autumn 2023 that was badged PACES23. Many aspects of the exam remain the same as the old format and the standard required to pass PACES23 is also unchanged. There will still be a five-station carousel, with each station lasting 20 minutes and 5-minute intervals in between. Candidates will continue to be examined by two examiners, who will have calibrated the case and agreed the pass threshold before assessing and marking each candidate independently.

The assessment of seven key skills is also retained in PACES23:

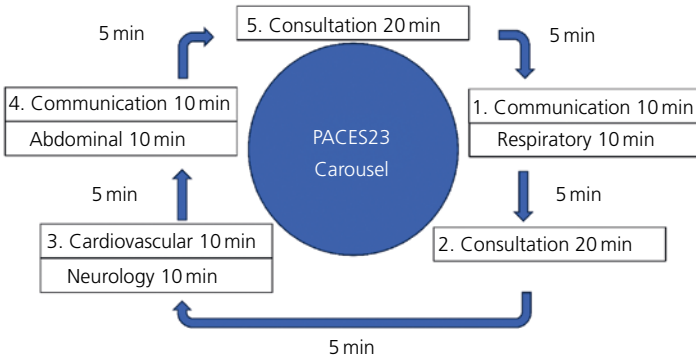
- A. Physical Examination
- B. Identifying Clinical Signs
- C. Communication
- D. Differential Diagnosis
- E. Clinical Judgement
- F. Managing Patient Concerns
- G. Maintaining Patient Welfare

Candidates must achieve a pass in all seven key skills and reach a total mark above a set threshold to pass.

The four clinical encounters assessing Respiratory, Abdominal, Cardiovascular and Neurological systems, each in 10 minutes, with 6 minutes to examine and 4 minutes to interact with examiners, also remain the same. However, Station 2 – History Taking without physical examination was thought to be unrepresentative of current clinical practice and has been removed; Station 4 – Communication was believed to be too long, with examiner interaction of little value in assessing the candidate; and Station 5 – Brief Clinical Consultations was too short, although this station provided the best integrated assessment of all seven key skills that emulated real-life clinical practice. Stations 4 and 5 have now been redesigned, with more emphasis on the clinical consultation:

Old MRCP PACES		New PACES23
Station 2 – 20-min History Taking	→	Removed
Station 4 – 20-min Communication	→	2 × 10-min Communication encounter without examiner interaction
Station 5 – 2 × 10-min Brief Clinical Consultation	→	2 × 20-min Consultations: 15 minutes history and examination and 5 minutes examiner interaction

The five-station carousel has also been redesigned to accommodate these changes, with the two Communication encounters preceding the Respiratory encounter in Station 1 and Abdominal encounter in Station 4, two Consultation encounters (Station 2 and 5) and the Cardiovascular and Neurology encounters in Station 3 remaining unchanged:



Cases for PACES Fourth Edition prepares candidates for the current PACES23 examination. It mimics the new examination format and is designed for use in an interactive way. This fourth edition has a completely revised text that has been informed by recent successful candidate feedback. It has useful advice for the day of the exam and provides updated information on clinical, ethical and medicolegal issues. There are plenty of new scenarios and mock questions for candidates to practise themselves. The two Consultation stations, which assess all seven key skills in an integrated way that most closely reflects day-to-day practice, account for two-fifths of the exam marks and receive particular attention in this new edition.

Avoid further factual cramming at this stage – you know enough! Go and see medical patients on a busy acute medicine unit or outpatient department. This has always been the best way to prepare for PACES and will be particularly beneficial for the new Consultation stations. This book will assist you in self-directed ward revision in preparation for PACES23. Each section has clinical mark sheets guiding which of the seven skills are being assessed and what you need to demonstrate to pass; this should enable groups of candidates to practise ‘under examination conditions’ at the bedside.

Common cases that regularly appear in the exam, rather than rarities, have been deliberately chosen. We assume candidates who are well practised will be fluent in the examination techniques needed to elicit the various clinical signs. However, in this new edition we provide extra guidance on how to efficiently examine each system to identify and interpret those all-important clinical signs within the allotted time.

We provide discussion topics that a candidate could be expected to comment on at the end of the case during the 4 or 5 minutes of examiner interaction. Remember that the examiners are specifically assessing your knowledge of the differential diagnosis and organized clinical judgement and management, while addressing the patient’s concerns and maintaining patient welfare throughout this interaction.

The detail in this book is not exhaustive but rather what is reasonably needed to pass and be a competent and safe Specialty Registrar practising medicine with minimal supervision. There is space to make further notes if you wish. The aim of this book is to put the information that is frequently tested in the clinical PACES23 examination in a succinct, exam-style format that will enable capable candidates to practise and pass with ease on the day.

We wish you the best of luck.

Stephen Hoole
Andrew Fry
Rachel Davies

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We acknowledge the help of Dr Daniel Hodson in the first and second editions, Dr William Brown for his assistance in updating the neurology station and Dr Peter Scanlon for his advice on the retinopathy cases. We thank the doctors who taught us for our own PACES examination, and above all the patients who allow us to refine our examination techniques and teach the next generation of MRCP PACES candidates.

Abbreviations

AAA	Abdominal aortic aneurysm
ABC	Airway, breathing, circulation
ABG	Arterial blood gas
ABPA	Allergic bronchopulmonary aspergillosis
ABPM	Ambulatory blood pressure monitoring
ACE	Angiotensin-converting enzyme
ACh	Acetylcholine
AChR	Acetylcholine receptor
ACR	Albumin: creatinine ratio
ACS	Acute coronary syndrome
ACTH	Adrenocorticotrophic hormone
ADLs	Activities of daily living
ADPKD	Autosomal dominant polycystic kidney disease
ADRT	Advanced decisions to refuse treatment
AF	Atrial fibrillation
AFB	Acid-fast bacillus
AFP	Alpha-fetoprotein
AICD	Automated implantable cardiac defibrillator
AIDP	Acute inflammatory demyelinating polyradiculoneuropathy
AIH	Autoimmune hepatitis
A(I)NOCA	Angina (ischaemia) non-obstructive coronary artery
AKI	Acute kidney injury
ALP	Alkaline phosphatase
AMD	Age-related macular degeneration
ANA	Anti-nuclear antibody
APS	Anti-phospholipid syndrome
AR	Aortic regurgitation
ARB	Angiotensin II receptor blocker
ARNI	Angiotensin receptor/neprilysin inhibitor
ARVD	Arrhythmogenic right ventricular dysplasia
AS	Aortic stenosis
5-ASA	5-Aminosalicylic acid
ASD	Atrial septal defect
ASOT	Anti-streptolysin O titre
ATP	Anti-tachycardia pacing
AV	Arteriovenous
AVN	Atrioventricular node
AVR	Aortic valve replacement
AVSD	Atrioventricular septal defect
AXR	Abdominal X-ray
BAV	Balloon aortic valvuloplasty
BFT	Bone function test
BIPAP	Bi-level positive airway pressure
BiV	Biventricular
BM	Boehringer Mannheim (glucose)
BMI	Body mass index
BNF	British National Formulary
BNP	Brain natriuretic peptide
BP	Blood pressure
BPA	Balloon pulmonary angioplasty

BPPV	Benign paroxysmal positional vertigo
BSO	Bilateral salpingo-oophorectomy
BT shunt	Blalock–Taussig shunt
CA	Carcinoma
CABG	Coronary artery bypass graft
CAD	Coronary artery disease
CAP	Community-acquired pneumonia
CAPD	Continuous ambulatory peritoneal dialysis
CCB	Calcium channel blocker
CCF	Congestive cardiac failure
CCP	Cyclic citrullinated peptide
CF	Cystic fibrosis
CFA	Cryptogenic fibrosing alveolitis
CFTR	Cystic fibrosis transmembrane conductance regulator
CGM	Continuous glucose monitor
CGRP	Calcitonin gene-related peptide
CIDP	Chronic inflammatory demyelinating polyneuropathy
CK	Creatine kinase
CKD	Chronic kidney disease
CLD	Chronic liver disease
CMD	Coronary microcirculatory dysfunction
CML	Chronic myeloid leukaemia
CMR	Cardiovascular magnetic resonance
CMV	Cytomegalovirus
CNS	Central nervous system
CoA	Coarctation of aorta
COPD	Chronic obstructive pulmonary disease
COMT	Catechol-o-methyl transferase
CPET	Cardiopulmonary exercise test
CRP	C-reactive protein
CRT	Cardiac resynchronization therapy
CRT-D	Cardiac resynchronization therapy defibrillator
CSF	Cerebrospinal fluid
CT	Computed tomography
CTCA	CT coronary angiography
CTEPH	Chronic thromboembolic pulmonary hypertension
CTPA	CT pulmonary angiography
CV	Cardiovascular
CVA	Cerebrovascular accident
CVID	Common variable immunodeficiency
CVS	Cardiovascular system
CXR	Chest X-ray (radiograph)
DBD	Donation after brain death
DBP	Diastolic blood pressure
DCD	Donation after cardiac death
DIOS	Distal intestinal obstruction syndrome
DIPJ	Distal interphalangeal joint
DKA	Diabetic ketoacidosis
DM	Diabetes mellitus
DM1	Dystrophia myotonica type 1
DM2	Dystrophia myotonica type 2
DMARD	Disease-modifying anti-rheumatic drug
DNA-CPR	Do not attempt cardiopulmonary resuscitation
DNAR	Do not attempt resuscitation

DNase	Deoxyribonucleic acid hydrolytic enzyme
DOAC	Direct oral anticoagulant
D&V	Diarrhoea and vomiting
DVLA	Driver and Vehicle Licensing Agency
DVT	Deep vein thrombosis
eGFR	Estimated glomerular filtration rate
EBUS	Endobronchial ultrasound
EBV	Epstein–Barr virus
EC	Ejection click
ECG	Electrocardiogram
ECHO	Echocardiogram
EEG	Electroencephalogram
EF	Ejection fraction
EMG	Electromyogram
EP	Electrophysiology
ERA	Endothelin receptor antagonist
ERCP	Endoscopic retrograde cholangiopancreatography
ESM	Ejection systolic murmur
ESR	Erythrocyte sedimentation rate
EtOH	Ethanol
ETT	Exercise treadmill test
EVAR	Endovascular aortic repair
FBC	Full blood count
FEV₁	Forced expiratory volume in 1 second
FFP	Fresh frozen plasma
FH	Family history
FSGS	Focal segmental glomerulosclerosis
FSH	Follicle-stimulating hormone
FSHD	Facioscapulohumeral muscular dystrophy
FTA	Fluorescent treponema antibodies
FVC	Forced vital capacity
GA	General anaesthetic
GBS	Guillain–Barré syndrome
GCS	Glasgow Coma Scale
GEP	Gastro-entero-pancreatic
GGT	Gamma-glutamyl transferase
GH	Growth hormone
GI	Gastrointestinal
GLP-1	Glucagon-like peptide-1
GMP	Good medical practice
GnRH	Gonadotropin-releasing hormone
GORD	Gastro-oesophageal reflux disease
Gp	Glycoprotein
GRACE	Global Registry of Acute Coronary Events
GTN	Glyceryl trinitrate
Hb	Haemoglobin
HBPM	Home blood pressure monitoring
HBV	Hepatitis B virus
HCC	Hepatocellular carcinoma
HCG	Human chorionic gonadotrophin
HCM	Hypertrophic cardiomyopathy
HCV	Hepatitis C virus
HDU	High-dependency unit
HF	Heart failure

HGV	Heavy goods vehicle
HIV	Human immunodeficiency virus
HLA	Human lymphocyte antigen
HOCM	Hypertrophic obstructive cardiomyopathy
HR	Heart rate
HRT	Hormone replacement therapy
HSMN	Hereditary sensory motor neuropathy
HSV	Herpes simplex virus
5-HT	5-hydroxytryptamine
IABP	Intra-aortic balloon pump
IBD	Inflammatory bowel disease
ICD	Implantable cardioverter defibrillator
IDDM	Insulin-dependent diabetes mellitus
IGF	Insulin-like growth factor
IHD	Ischaemic heart disease
ILD	Interstitial lung disease
INR	International normalized ratio
IPF	Idiopathic pulmonary fibrosis
IRMA	Intraretinal microvascular abnormalities
ITP	Immune thrombocytopenic purpura
ITU	Intensive therapy unit
IV	Intravenous
IVC	Inferior vena cava
IVDA	Intravenous drug abuse
JVP	Jugular venous pressure
K_{co}	Transfer coefficient
LA	Left atrial
LAA	Left atrial appendage
LAEO	Left atrial appendage occlusion
LACS	Lacunar anterior circulation stroke
LAD	Left axis deviation
LDH	Lactate dehydrogenase
LEMS	Lambert–Eaton myasthenic syndrome
LFT	Liver function test
LGE	Late gadolinium enhancement
LH	Luteinizing hormone
LMN	Lower motor neurone
LMWH	Low molecular weight heparin
LP	Lumbar puncture
LQTS	Long QT syndrome
LRTI	Lower respiratory tract infection
LTOT	Long-term oxygen therapy
LTR	Left to right
LV	Left ventricle
LVAD	Left ventricular assist device
LVEDP	Left ventricular end-diastolic pressure
LVEF	Left ventricular ejection fraction
LVH	Left ventricular hypertrophy
LVOT	Left ventricular outflow tract
mAb	Monoclonal antibody
MAO	Monoamine oxidase
MCPJ	Metacarpophalangeal joint
MC + S	Microscopy, culture and sensitivity
MDM	Mid-diastolic murmur

MDT	Multi-disciplinary team
MEN	Multiple endocrine neoplasia
MG	Myasthenia gravis
MI	Myocardial infarction
MIBI	Myocardial perfusion (sestamibi) imaging
MLF	Medial longitudinal fasciculus
MMF	Mycophenolate mofetil
MND	Motor neurone disease
mPAP	Mean pulmonary artery pressure
MPTP	Methyl-phenyl-tetrahydropyridine
MR	Mitral regurgitation
MRA	Magnetic resonance angiography
MRCP	Magnetic resonance cholangiopancreatography
MRI	Magnetic resonance imaging
MS	Mitral stenosis
MSA	Multisystem atrophy
MTPJ	Metatarsophalangeal joint
MuSK	Muscle-specific kinase
MV	Mitral valve
MVP	Mitral valve prolapse
MVR	Mitral valve replacement
6MWD	Six-minute walk distance
NG	Nasogastric
NHSE	NHS England
NIPPV	Non-invasive positive pressure ventilation
NOAC	Non-vitamin K antagonist oral anticoagulant
NSAID	Non-steroidal anti-inflammatory drug
NSCLC	Non-small cell lung cancer
NT-proBNP	N-terminal prohormone of brain natriuretic peptide
NVD	Neovascularization of the disc
NVE	New vessels elsewhere
NYHA	New York Heart Association
OA	Osteoarthritis
OAC	Oral anticoagulant
OCP	Oral contraceptive pill
OGD	Oesophago-gastro-duodenoscopy
OS	Opening snap
Pa	Partial pressure (arterial)
PACS	Partial anterior circulation stroke
PAH	Pulmonary arterial hypertension
PBC	Primary biliary cirrhosis
PCOS	Polycystic ovary syndrome
PCR	Polymerase chain reaction
PCT	Primary Care Trust
PCWP	Pulmonary capillary wedge pressure
PD	Parkinson's disease
PDA	Patent ductus arteriosus
PDE5	Phosphodiesterase-5
PE	Pulmonary embolism
PEA	Pulmonary endarterectomy
PEFR	Peak expiratory flow rate
PEG	Percutaneous endoscopic gastrostomy
PEP	Post-exposure prophylaxis
PET	Positron emission tomography

PH	Pulmonary hypertension
PICA	Posterior inferior cerebellar artery
PIPJ	Proximal interphalangeal joint
PLA2R	Anti-phospholipase A2 receptor
PMH	Past medical history
PMR	Polymyalgia rheumatica
PPCI	Primary percutaneous coronary intervention
PPI	Proton pump inhibitor
PPMS	Primary progressive multiple sclerosis
PPRF	Paramedian pontine reticular formation
PPVI	Percutaneous pulmonary valve implantation
PR	Per rectum (rectal)
PRL	Prolactin
PRN	<i>Pro re nata</i> , when required
PS	Pulmonic stenosis
PSA	Prostate specific antigen
PSC	Primary sclerosing cholangitis
PSM	Pan-systolic murmur
PSV	Public service vehicle
PTH	Parathyroid hormone
PTHrP	Parathyroid hormone-related peptide
PUVA	Psoralen ultraviolet A
PV	<i>Per vaginum</i> (vaginal)
PVD	Peripheral vascular disease
PVR	Pulmonary vascular resistance
QoL	Quality of life
RA	Rheumatoid arthritis
RAD	Right axis deviation
RADT	Rapid antigen detection test
RAPD	Relative afferent pupillary defect
RAS	Renal artery stenosis
RAST	Radio-allergo-sorbent test
RBBB	Right bundle branch block
RCC	Right coronary cusp
RF	Risk factor
RR	Respiratory rate
RRMS	Relapsing-remitting multiple sclerosis
RTL	Right to left
RUQ	Right upper quadrant
RV	Right ventricle
RVF	Right ventricular failure
RVH	Right ventricular hypertrophy
Rx	Treatment
SAH	Subarachnoid haemorrhage
sAVR	Surgical aortic valve replacement
SBP	Systolic blood pressure
SCD	Sudden cardiac death
SCLC	Small cell lung cancer
SGLT2	Sodium-glucose co-transporter 2
SH	Social history
SIADH	Syndrome of inappropriate anti-diuretic hormone
S-ICD	Subcutaneous implantable cardiac defibrillator
SLE	Systemic lupus erythematosus
SOA	Swelling of ankles

SOB	Shortness of breath
SOL	Space-occupying lesion
SPMS	Secondary progressive multiple sclerosis
SSRI	Selective serotonin reuptake inhibitor
SVCO	Superior vena cava obstruction
SVT	Supraventricular tachycardia
T₄	Thyroxine
T°C	Temperature
TACS	Total anterior circulation stroke
TAVI	Transcatheter aortic valve implantation
TB	Tuberculosis
TEER	Transcatheter edge-to-edge repair
TENS	Transcutaneous electrical nerve stimulation
TFT	Thyroid function test
THR	Total hip replacement
TIA	Transient ischaemic attack
TIMI	Thrombolysis in myocardial infarction
TKI	Tyrosine kinase inhibitor
TLC	Total lung capacity
TL_{co}	Carbon monoxide transfer factor
TNM	Tumour nodes metastasis (staging)
TOE	Transoesophageal echo
ToF	Tetralogy of Fallot
tPA	Tissue plasminogen activator (alteplase)
TPHA	Treponema pallidum haemagglutination assay
TPMT	Thiopurine methyltransferase
TPW	Temporary pacing wire
TR	Tricuspid regurgitation
TSAT	Transferrin saturation
TSH	Thyroid stimulating hormone
TTE	Transthoracic echo
tTG	Tissue transglutaminase
TTR	Time in therapeutic range
TV-ICD	Transvenous implantable cardiac defibrillator
TWI	T-wave inversion
U&E	Urea and electrolytes
uACR	Urine albumin: creatinine ratio
UC	Ulcerative colitis
UFH	Unfractionated heparin
UIP	Usual interstitial pneumonia
UKHSA	UK Health Security Agency
UMN	Upper motor neurone
uPCR	Urine protein: creatinine ratio
US	Ultrasound
UTI	Urinary tract infection
VATS	Video-assisted thoracoscopic surgery
VEGF	Vascular endothelial growth factor
VEP	Visual evoked potential
VIP	Vasoactive intestinal peptide
VQ	Ventilation–perfusion
VSD	Ventricular septal defect
VT	Ventricular tachycardia
VTE	Venous thromboembolism
WCC	White cell count

Advice

Preparation

Practice makes perfect: it makes the art of eliciting clinical signs second nature and allows you to concentrate on what the physical signs actually mean. Practice makes you fluent and professional and this will give you confidence under pressure. We strongly encourage you to see as many patients as possible in the weeks leading up to the exam. Practise under exam conditions with your peers, taking it in turns to be the examiner, and use the mark sheets provided. This is often very instructive and an occasionally amusing way to revise! It also maintains your motivation as you see your performance improve. We encourage you to seek as much help as possible from senior colleagues too; many remember their MRCP exam vividly and are keen to assist you in gaining those four precious letters after your name.

The day before

Check that you have your examination paperwork in order with your examination number as well as where and what time you are needed – you don't want to get lost or be late. Also ensure that you have packed some identification (e.g. a passport) as you will need this to register on the day. Remember to take with you vital equipment you are familiar with using, particularly your stethoscope, although avoid weighing yourself down with cotton wool, pins, otoscope and so on. The necessary equipment will be provided for you. Punctuality is important and reduces stress, so we advise that you travel to your exam the day before, unless your exam centre is on your doorstep. Avoid last-minute revision and try to relax – you will certainly know enough by now. Spend the evening doing something other than medicine and get an early night!

On the day

Think carefully about your attire – first impressions count both with the examiners and more importantly with the patients. Broadly speaking, exam dress policy is similar to that required of NHS employees. You should look smart and professional, but above all wear something that is comfortable. Shirts should be open collar (not low cut) and short sleeved to enable bare-below-the-elbow and effective hand sanitation. Remove watches/jewellery (wedding bands are permitted) and dangling necklaces/chains that could be distracting or hit the patient. Facial piercings other than ear studs are not recommended.

Examination

You will have 16 mark sheets – two for each encounter. There will be a short problem-orientated clinical question with an instruction prior to starting the station encounter, for example 'This man has been inadvertently dropping things – please assess his upper limbs neurologically' or 'This woman has been complaining of breathlessness – please assess her cardiovascular system'. Use the preparatory time before each case wisely and remember to answer the question when presenting your findings.

When you enter the station encounter, hand the mark sheets to the examiners and remember to **HIT** it off with the examiners and the patient:

- Hand sanitization (if available).
- Introduce yourself to the patient and ask permission to examine them.
- Take a step back once the patient is appropriately uncovered/positioned and spend 20 seconds observing them closely. This is roughly the time it takes for hand sanitizer to dry. It can feel an extraordinarily long period of time when under exam conditions but it is time well spent. As soon as you start touching the patient, your focus becomes blinkered and you will miss vital peripheral clues to the case.

Remembering to HIT it off will help settle your nerves and then you'll be underway. The rest will follow fluently if you are well practised.

Rather like when looking in the rear-view mirror in a driving test, be sure to convey to your examiner what you are doing. Try not to move the patient excessively and repeatedly; your examiner will be expecting to see you do things in an efficient and familiar order and doing so looks systematic, practised and fluent. However, if you do forget to do something halfway through the examination, or you have to go back to check a physical finding, that's fine. It's more important to be comprehensive and sure of the clinical findings than just to try to be 'slick'.

Spend the last few moments of your examination time working out what is going on, what the diagnosis is and what you are going to say to the examiner. There's still time to check again. Most examinations can be completed by standing up and saying to the examiners a phrase like 'To complete my examination I would like to check...' and then listing a few things you may have omitted and/or are important to the case, such as blood pressure, urine dipstick and so on.

Presentation

Eye contact and a direct, unambiguous presentation of the case convey confidence and reassure examiners that you are on top of things. Avoid the phrases 'I'm not sure if it is...' and 'I think it is...' Be definitive and avoid sitting on the fence, but above all be honest. Don't make up clinical signs to fit a specific diagnosis (some cases may be normal to assess your ability to detect the absence of signs). Try not to present clinical signs that are inconsistent with the diagnosis or differential diagnosis.

There are two ways to present the case:

- State the diagnosis and support this with key positive and negative clinical findings – if (and only if) you are confident you have secured the correct diagnosis.
- State the relevant positive and negative clinical signs (it's often easier to do this in the order you elicited them) and then give the differential diagnosis that is consistent with these – particularly if you are unsure of the diagnosis.

Where possible, you should comment on the disease severity or disease activity. Consider complications of the diagnosis and mention if these are present or not. Know when to stop talking. Brevity can be an asset: it avoids you making mistakes and digging a hole for yourself! Wait for the examiners to ask a question and do not be pre-emptive – the examiners may follow you down the rabbit hole and possibly expose a gap in your knowledge.

Examiners

Prior to you examining the patient the examiners will have individually 'calibrated the case' to assess its difficulty and ensure that the clinical signs are present. This maintains the fairness and robustness of the exam and makes sure consistency exists in exam centre marking. There will be two examiners for every carousel station and usually one will lead the discussion with you. Both will have the mark sheets that you gave them at the start of the encounter and will mark you independently without collaboration. Contrary to popular belief, they both want you to pass. They are there because they are Fellows of the College in good standing and support the training and progression of the talented physicians of the future.

Mistakes happen

If you do make a mistake and realize it, don't be afraid to correct yourself. To err is human and the examiners may overlook a minor faux pas or mis-speak if the rest of the case has gone well. It's not uncommon to think that you have failed a case halfway round the carousel and that your chances of passing PACES have been dealt a fatal blow. We are often our own harshest critics, so don't write yourself off. Frequently, all is not lost. Don't let your performance dip on the next cases because you are still reeling from the last. Put any mistakes behind you and *keep calm and carry on!*

