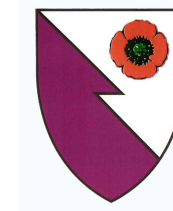
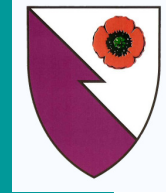




Conjoint MCEM/IEEM in Hong Kong

2009, Hong Kong

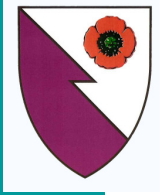




Programme



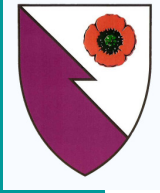
- 0900 - 0930 Registration
- 0930 - 1030 Briefing - new exam format
(Prof. Tim Rainer)
- 1030 - 1045 OSCE demonstration
- 1045 - 1100 Break
- 1100 - 1200 OSCE workshop
- 1200 - 1230 Round up, Q&A
(Prof. Tim Rainer)



Aims

At the end of this session, participants will:

- Understand the transition processes from MRCS/IEEM to MCEM/IEEM
- Understand the structure/format of MCEM
- Be familiar with the tools used in the MCEM
- Understand the reliability/validity of these tools
- Know the eligibility criteria for the MCEM



Disclaimer!

- Both UK and HK Councils are working through transition
 - Pace of change in UK and HK are different
 - Governing bodies are different
- Both need to check the legal basis of actions
- Both need to be fair to trainees



Disclaimer!

- UK CEM need to check that the regulations can be different in different countries and that this will not open us to any discrimination allegation on the part of UK applicants.



Important websites

<http://www.collemergencymed.ac.uk/>

<http://www.collemergencymed.ac.uk/CEM/Training%20and%20Examinations/Exams/default.asp>

<http://www.foundationprogramme.nhs.uk/pages/home/key-documents#foundation-programme-curriculum>

<http://www.mmc.nhs.uk/curriculum.asp?m=3>



Transition Processes

- Pre-January 2009
 - FRCS/MRCS/IEEM
- January 2009 – August 2010
 - MCEM/IEEM
- Post-August 2010
 - Settled period (but is still negotiable)
 - Overseas countries running MCEM need to align with UK training



The intent and history of MCEM

- Examinations.... that reflect the skills, knowledge and attitudes required for a doctor to work (semi) independently in the ED
- UK examination – to select appropriate candidates for further training
- April 2003 – first diet



The intent and history of MCEM

- 1900 candidates have sat Part A exam
= pass rate 20-25%
 - 1500 candidates have sat Part B
= pass rate \approx 40%
 - 1000 candidates have sat part C
= pass rate \approx 30%
-
- 450 Members by Examination



What competences are needed?

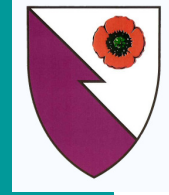
- Clinical skills – gathering information
- Data interpretation – analysing information
- Diagnostic skills – synthesising information and making a conclusion
- Communication skills – giving and receiving information
- Development of the management plan – decision making and working with others



Other Emergency Medicine skills



- Judgement
- Team leadership
- Prioritisation
- Multi-tasking
- Compassion
- Equality/respect
- Coaching/mentoring



Tools available

- **Exams**

- Written

- MCQ, EMQ, Short answer, essay, dissertation

- Viva

- structured, open

- OSCE

- Clinical exams

- Short cases, long cases

- **Work place based assessment**



Key principles

- Summative vs formative
- Sense of achievement
- Hurdle of minimum competence
 - not ranking/excellence
- Filter/selection therefore standardised
- Reliable

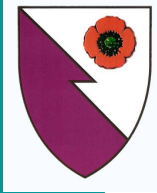


Key principles

- Criterion referenced vs norm referenced
- **Predetermined set pass criteria**
- **Adjusted in light of cohort performance**

UK Training and Examination Programme

Cumulative Years Post MBBCh	Training	Specialty Training	Examinations	Registration		Hong Kong Training
1	Year 1 (FY1)		MCEM Part A (MBBCh+18 months)	Provisional		Intern/ Houseman
2	Year 2 (FY2)			Full		Basic Training
3	Year 3 (ST1)	Emerg M Acute M	MCEM Parts B and C (MBBCh+42 months)			
4	Year 4 (ST2)	ICU Anaes				
5	Year 5 (ST3)	Paediatrics MSK			Specialty Training	
6	Year 6 (ST4)					
7	Year 7 (ST5)					
8	Year 8 (ST6)					

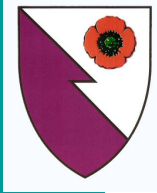


UK College Exams – when?



Membership - to select the competent registrar

- College exams reflect other UK postgraduate exams – three stages of training
- Part A – early years, consolidating basic science applied to EM
- Parts B/C – demonstrating skills needed for independent practice and management of the clinical department



UK College Exams – when?

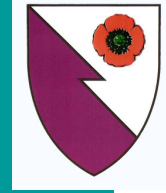


Fellowship– demonstration of skills needed to run a department and support others in clinical care



Eligibility for MCEM Part B

UK Criteria
Overseas Criteria



Current (2009) eligibility criteria in the UK



- **Part A**
 - 18 months after primary qualification
- **Parts B/C**
 - finished FY2 year AND completed at least 3 posts out of
 - 6/12 EM
 - 6/12 Acute medicine
 - 6/12 Anaesthetics
 - 6/12 ITU
 - 6/12 Paediatric EM
 - 6/12 Musculoskeletal EM



Previous eligibility criteria in the UK for Parts B/C – apply to Hong Kong



1. Proof of competency

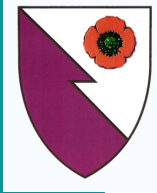
- Documented evidence of ALL Foundation Programme competencies
- (signed off by Training Supervisor)

AND

2. 18 months Experience Post Full Registration

- '6 months' EM, AND
- 2 x '6 months' in any one of related specialities

These criteria apply in Hong Kong for March 2009 and March 2010, until August 2010.



Relevant Specialties

General or acute medicine

Orthopaedic and trauma surgery

Critical care

Paediatrics

Neurology

Cardiology

Obs & Gyn

Psychiatry

Paediatric Emergency Medicine (up to 4 months may be counted as Emergency Medicine experience)

General surgery

Anaesthetics

Plastic surgery/burns

Neurosurgery

Cardiothoracic surgery

Thoracic surgery

Urology

ENT/ophthalmology

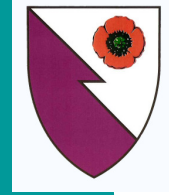


Other exceptions for overseas incl. Hong Kong

- See College websites

Until August 2010, MCEM Part may be replaced by:

- PEEM
- MRCS Parts 1 and 2
- MRCP Part 1
- FRCAnaes Part 1



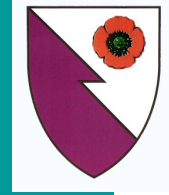
Transition Period



- Flexible and negotiable
- Currently lasts till end August 2010



MCEM Format



MCEM – Part A

- Content: Applied basics sciences
 - Anatomy
 - Physiology
 - Pharmacology
 - Pathology
 - EBM
- Format
 - 200 T/F MCQ & no negative marking



MCEM Parts B&C

- Planned together with host country
- Domains / clinical types covered
 - What type of case is common/important
- Types of skills
 - Communication, clinical, practical, team leadership
- Map to curriculum
 - Ensure curriculum is covered *****



MCEM – Part B

- Format:
- 16 Short answer questions – 2 hours, 7.5 mins each
- Stem – clinical scenario, short, succinct, relevant
- Three or four parts – each independent of previous
- Data interpretation
 - clinical photographs, X-rays, ECG, pathology
- Bullet point answers, first given is taken
- “Ideal answer” as guide to examiners

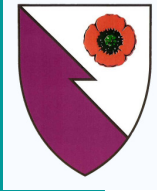


MCEM – Part C

- Format:
- 18 OSCE stations
 - each 7 minutes long with 2 additional rest stations
- Objective structured mark sheet
 - no qualitative comments
- 6 clinical skills, 6 practical skills, 6 communication skills
- Including marker stations
- Including resuscitation stations

Curriculum mapping

A4.1	Major trauma	Major trauma	head injury, pelvic, haemothorax, tension pneumothorax
A4.2	Major trauma	Head injury	subdural, extradural
A4.3	Major trauma	Chest trauma	tension pneumothorax, ruptured aorta
A4.4	Major trauma	Abdominal Trauma	
A4.5	Major trauma	spinal Injury	
A4.6	Major trauma	maxillo facial trauma	le fort, blow out fracture
A4.7	Major trauma	Burns	major burns, burns in child,
A5	Musculoskeletal injuries	Musculoskeletal injuries	various
A5.1	Upper limb	Shoulder	
	Upper limb	Elbow	supracondylar in child
	Upper limb	Long bones of upper limb	shaft of humerus, galleazi,



Blueprinting an individual diet



- What areas of the curriculum?
- Cover broad range
- Different types of questions

Blueprint



Area	OSCE	SAQ
Cardiology / CT	CVS examination	ECG – complete heart block
GI		Pancreatitis – clinical data
Respiratory		Xray - pneumonia
Renal/Urology		Biochem – renal failure
Neurology	Examine the PNS	CT - stroke
Psychiatry	Mental state exam	Clinical picture detox
Obs/Gynae		Maternal injury – trauma
Paediatrics	APLS scenario	Sick child with measles
Major trauma		Xrays
Resus	Defibrillation	
Orthopaedics	Examine a joint	Xray – child fracture

2

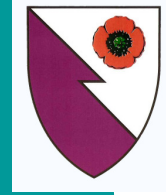
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Some key features of effective assessment



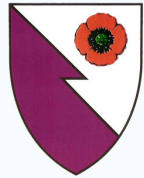
- Validity
- Reliability
- Feasibility



Examining vs. Teaching: What's different?



- No teaching or leading
- Minimal prompting
- No critique
- Feedback maybe given on missed key information
- Pass / fail options ??????
- Language is 'neutral'



Determining the height of the bar



2009/1/13

Hong Kong College of Emergency Medicine and
College of Emergency Medicine (UK)

34



Process

- SAQ – all marks combined (potential 160)
individual pass mark per diet
 - around 62-67%
- OSCEs - individual stations pass mark,
must pass 14/18
- Criterion referenced



Process

- Modified by examiner experience with candidates
- Reviewed in the light of the performance of the cohort - marker questions
- Final pass mark set – irrespective of individual candidate results



Pass - Fail

- If you pass Part B, but fail Part C you don't need to resit Part B again.



Short answer questions

- 16 in 2 hours
- Out of 10
- Stem – clinical scenario with data/pictures
- “ideal answer”
- First answers only taken
- Each part is independent of the other

Example question 1

- A 76 year old man is brought to the Emergency Department having been found on the floor by his daughter. She tells you that he has no significant past medical history and is normally completely independent. On examination he has expressive dysphasia, right sided facial weakness and a dense right hemiparesis.
- Initial observations are recorded as: temperature 38.9°C, respiratory rate 16 per minute, O₂ saturation 99% on 5 litres O₂, heart rate 98 per minute in atrial fibrillation, BP 185/100 mmHg, BM 11.6 mmol/l

Question 1

Biochemistry

Na 148 mmol/L (135-145)

K 3.8 mmol/L (3.4-5)

Urea 10 mmol/l (0-7.5)

Creatinine 110 micromol/l
(35-135)

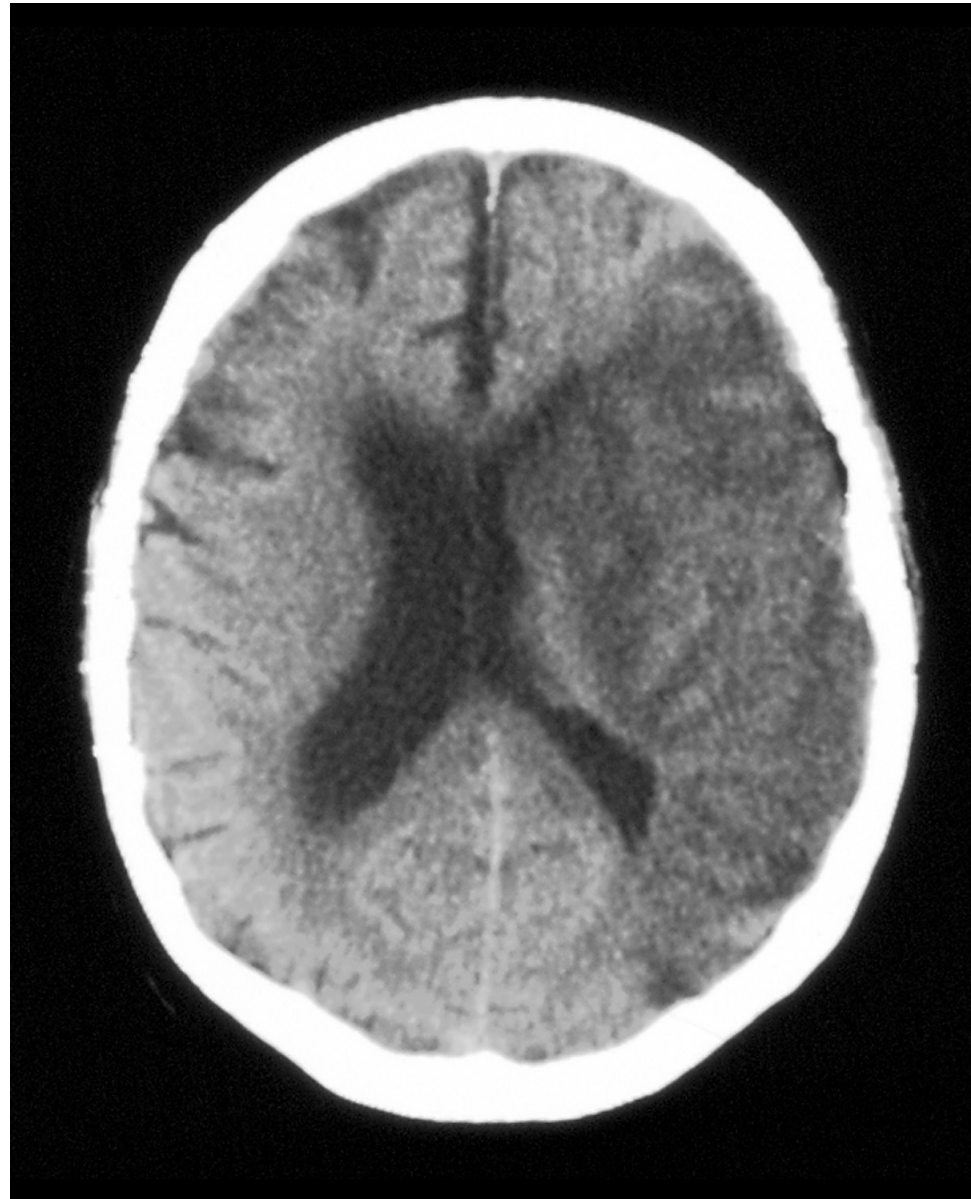
Glucose 12.8 mmol/l (3.5-5)

Haematology

Hb 14.8g/dl (11.5-16.6g/dl)

WBC $11.9 \times 10^9/l$ (4-11)

Platelets $387 \times 10^9/l$ (150-450)



**1) In which vascular territory is the lesion?
Be specific about the artery (2 marks)**

Left middle cerebral artery (*2 marks*) or left
anterior circulation (*1 mark*)

2) List 3 other neurological signs which may be present in this patient (3 marks)

- right hemisensory loss,
- visual field defect – *1/2 mark only*
- right homonymous hemianopia
- R sensory inattention/neglect

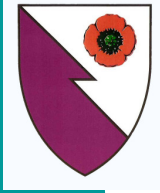
3) List 5 early management steps recommended by the Royal College of Physicians in their clinical guidelines. (5 marks)

- IV fluids to maintain hydration within normal plasma osmolality
- Treatment of pyrexia
- Sliding scale insulin to maintain glucose within normal limits
- Antiplatelet therapy/thrombolysis
- Referral to stroke/medical team
- Swallowing reflex assessment
- Pressure area care and/or early mobilisation 1/2
- *(1 each for any up to max of 5)*



OSCEs and paperwork

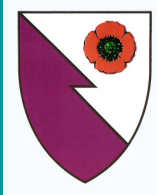
- 18 questions
- 7 minutes each and 2 rest stations
- Examiner instructions
 - Objective of station
 - Sequence
 - Role of examiner
 - Standardised prompt
- Candidate instructions
 - Scenario details
 - Task analysis
 - Examiner role



OSCE paperwork cont.



- Role player /nurse instructions – details
- Equipment needed
- Mark sheet –
 - steps in skills
 - global score – examiner
 - global score – role player

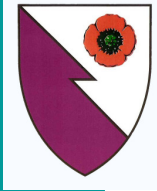


Ensure the candidates understand the instructions





The Future – beyond September 2010



The Future – After September 2010

- Training undertaken by candidates is similar to that which is undertaken in the UK
 - in order to have consistent eligibility criteria for the exam.
- UK Council will be presented with several options - at the March Council.



Questions