

THE CONSORTIUM¹

Overseas Registration Examination Part 2

Medical Emergencies Guidance

¹ **THE CONSORTIUM** is made up from the following organisations:

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Introduction

A candidate is expected to be able to show competence, knowledge and familiarity in the different aspects of dentistry which are outlined in the Learning Outcomes in the GDC's document '*Preparing for Practice*' (*PfP*)². The standards of conduct, performance and ethics required are described in the GDC's publication '*Standards for the Dental Team*'³.

PfP divides the Learning Outcomes for the UK undergraduate curriculum into four Domains which reflect the full range of knowledge, skills, attitudes and behaviours that a dentist must demonstrate at a level appropriate for registration. These Domains which are integral to the ORE Part 2 are:

- The Clinical Domain
- The Professionalism Domain
- The Communication Domain
- The Management and Leadership Domain

The full range of knowledge, skills, attitudes and behaviours that are contained within these Domains of the *PfP* are examined within the four component examinations⁴ of the ORE Part 2.

Information and Instructions

The primary aim of this assessment is to evaluate a dentist's ability to manage an adult or child who becomes acutely unwell in dental practice. This component of the examination will comprise one 13 minute session.

1. The Assessment

This consists of two parts:

- An interactive oral and practical assessment based on three structured scenarios selected from an agreed Medical Emergency question bank, and;
- A demonstration of single-handed basic life support on an adult or child

The assessment takes the Resuscitation Council document "*Medical Emergencies and Resuscitation Standards for Clinical Practice and Training for Dental Practitioners and Dental Care Professionals in General Dental Practice*"⁵ (including 2015 update) as its guideline.

A. Medical Emergencies Structured Scenarios

It aims to assess competence in the management, in both adults and children, of:

- a. anaphylaxis
- b. acute shortness of breath including asthma and hyperventilation
- c. swallowed / inhaled foreign body
- d. a collapse of unknown cause
- e. vaso-vagal attack
- f. post-operative haemorrhage
- g. hypoglycaemia
- h. fitting
- i. acute onset chest pain
- j. corticosteroid insufficiency
- k. needlestick injury

The related applied pathology, human disease, clinical pharmacology and ethical considerations of these acute medical emergencies may be assessed, as well as

² [http://gdc-uk.org/aboutus/education/documents/preparing%20for%20practice%20\(revised%202015\).pdf](http://gdc-uk.org/aboutus/education/documents/preparing%20for%20practice%20(revised%202015).pdf)

³ <http://gdc-uk.org/Dentalprofessionals/Standards/Documents/Standards%20for%20the%20Dental%20Team.pdf>

⁴ <http://www.orepart2.org.uk/guidance/>

⁵ <https://www.resus.org.uk/search/?q=MEDental>

prevention.

The candidate needs to be able to list, identify, discuss and demonstrate the equipment needed to deliver emergency care as well as drug doses and preferred methods of administration

The rapidity of response to a medical emergency has to be appropriate. If the response is delayed, maintaining life until the emergency services arrive will fail. Therefore certain exercises in the assessment may be time limited. Marks will be awarded for completing the exercise in the length of time allocated.

B. Basic Life Support

Resuscitation technique and the management of cardiac arrest including the use of the automatic defibrillator in adults and children.

The September 2015 guidelines should be used in this assessment⁶.

The candidate is read the BLS scenario which is set within the dental surgery.

As best practice, candidates will be expected to use a pocket mask for ventilation. Mouth to mouth ventilation is not acceptable in a health care setting.

The pocket mask will have a manufacture approved cross infection bio-filter in place and this should remain in situ throughout the whole assessment. The filter is designed to protect the candidate from respiratory pathogens and does not affect the ability to ventilate the manikin. Removal of the filter or non-use of the mask represents unsafe practice and the marks gained will reflect this. In this situation the candidate will not be allowed to ventilate, but asked to continue the exercise as if they had successfully delivered the ventilations. However, no marks will be awarded for the ventilations. The rest of the exercise will be marked as normal.

2. Duration and Timing of the Assessment

Each assessment lasts 13 minutes. The first 8 minutes is the structured oral, the last 5 minutes the demonstration of single handed basic life support skills.

The manikins will be tested by the examiners every six candidates to make sure they work effectively.

The administrator will indicate when half the examination is completed.

3. Marking

The three scenarios are considered equal in weighting to the basic life support assessment, with no compensation of marks between the two components (candidates should pass the scenarios and BLS separately). There is compensation between the scenarios. The answer to each question and components of BLS will be graded into one of four categories - **Clear Pass, Borderline Pass, Borderline fail, Clear Fail/Not done.**

Underlying this is a numerical value assigned to the scale which will differ for each question/component of BLS dependent on the importance of the correct answer to medical outcome and potential harm to patients. This system of weighting is derived from the collective judgement of a panel of examiners, including GDC external

⁶ <https://www.resus.org.uk/resuscitation-guidelines/adult-basic-life-support-and-automated-external-defibrillation/#sequence>

examiners. By this means the “pass mark” is set for each scenario and the BLS demonstration.

The two examiners will mark independently for each question.

A mark for communication skills and professionalism will also be recorded.

Structured Oral

For the structured oral there will be three themes for each candidate.

The themes for a diet will be chosen by the lead examiner and the examiners follow structured questioning on that topic.

For each theme, all candidates will be asked 5 questions which centre on clinical management.

As the first assessor is asking the structured questions, their colleague will be making notes on the performance of the candidate. This should reverse when the second assessor begins to ask questions.

Each examiner grades the performance of the candidate over each question without discussion with his fellow assessor, giving one of the following grades Clear Pass/ borderline pass/ borderline fail / clear fail.

As the questions all regard the action of the dentist in a medical emergency the candidate is advised to provide concise answers. The examiners will not prompt the candidate or rephrase the questions.

Basic Life Support

The candidate will only be interrupted to give information which may impact on the resuscitation attempt and they should continue the resuscitation attempt until told to stop.

At the end of the practical demonstration questions may be asked.

Each assessor independently rates all components of the BLS attempt against the structured mark sheet giving one of the following grades to each component: Clear pass/ borderline pass / borderline fail / clear fail

4. Example – Medical Emergencies

Themes assessed: Asthma algorithm / Salbutamol mode of action

Opening statement

A 24 year old patient with known asthma is having an amalgam restoration replaced in your surgery.

Your nurse notices that the patient is becoming increasingly agitated, the patient begins to cough and wheezes slightly.

You notice that they are finding it difficult to breathe.

Core questions

a. What do you think is happening?

The patient is beginning to suffer an acute asthma attack

b. What are the clinical signs of acute severe asthma?

Inability to complete sentences in one breath respiratory rate of >25/min

Tachycardia (heart rate >110/min)

- c. How will you manage this patient?
Stop treatment and remove all instruments from the mouth
Sit the patient upright and give the patient their usual medication (salbutamol) or salbutamol from drug box 4-6 activations via a spacer
Oxygen 10L/min
- d. If they fail to respond to the initial treatment what do you do?
Repeated dose salbutamol may be necessary every 10 minutes – shaking suggests reached drug threshold
Call emergency services
- e. What are the clinical signs of life threatening asthma which you as a dentist could elicit?
Cyanosis (blue tinge to peripheries – fingers, lips)
Respiratory rate <8/min bradycardia (heart rate <50/min) exhaustion
Confusion
Decreased conscious level
Inability to complete full sentences