

training

# Surgery emergencies

Dentists must be prepared for medical problems to occur in their practices, says Jane Lambert.

Medical emergencies continue to be rare in dental practices, but there is a public expectation that dentists and their teams should be competent in managing common emergencies.

The Resuscitation Council UK has identified the most likely medical problems that could occur in dental practices. These include vasovagal syncope (faints), hypoglycaemia, angina, seizures, choking, asthma and anaphylaxis. Myocardial infarction and cardiopulmonary arrest are less common.

It is normal for dental staff to take the medical and drug history of patients attending their practice. It is important that patients with known medical conditions are assessed as to their risk of having an emergency episode whilst at the practice. With angina, an attack could be precipitated by anxiety or stress and could, therefore, happen in the dental surgery. With asthmatic patients it is important to assess the severity of their illness and the consequent risk of them being in an emergency situation. Patients with epilepsy will usually be able to advise the dental practitioner about their illness and how well it is controlled. Insulin treated diabetics are those most likely to become hypoglycaemic in the surgery. In addition, all patients should be asked about their allergies. However, even in identifying and reducing any risk



● Patients expect the dental team to be able to deal with a certain level of medical emergencies.

factors, medical emergencies will still happen whilst patients are visiting their dentist.

## Guidance

Despite such emergencies being so rare, published guidance from the General Dental Council in 2005 has clearly stated the following: medical emergencies can occur at any time; all members of staff need to know their role in the event of a medical emergency; members of staff need to be trained in dealing with such an emergency; and dental teams should practise together regularly in simulated emergency situations.

As a company with many years' experience of training dental staff, we at ECG Ltd often get asked about

medical emergencies and emergency drugs, but there has been no formal training given to practices in this area other than in resuscitation procedures. Dental practitioners have frequently expressed their concern about lacking confidence in administering the drugs that they keep.

It is refreshing to have had the *Standards for clinical practice and training for dental practitioners and dental care professionals in general dental practice* document published by the Resuscitation Council UK in 2006. From these standards, the recommended

emergency drugs for general dental practice include glyceryl trinitrate (GTN) spray (400micrograms/dose), salbutamol aerosol inhaler (100micrograms/actuation),

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**Jane Lambert**  
is a director of ECG Ltd.

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• Adrenaline injection (1:1000, 1mg/ml), aspirin dispersable (300mg), glucagon injection (1mg, oral glucose solution/tablets/gel/powder), midazolam (5mg/ml or 10mg/ml – buccal or intranasal) and oxygen.

The Resuscitation Council UK also recommends that, where possible, drugs in solution should be in a pre-filled syringe, that all drugs should be stored together in an 'emergency drug' container and that an adequate supply of oxygen should be available for medical emergencies. One of the biggest changes is the recommendation for taking out all intravenous emergency drugs from previous lists. Most staff members have felt relieved about this change and are subsequently more confident in dealing with the recommended drug list already mentioned.



• An unwell patient should not leave the practice unaccompanied, or drive.

### Training programme

Following on from the publication of these standards and discussions with dental team members, ECG Ltd designed a four-hour training programme to cover the recognition and initial treatment of these emergencies.

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This course adopts the 'ABCDE' principle of assessing a sick patient, a training method that gives practitioners a systematic approach to dealing with all medical emergencies in children and adults. The ABCDE approach – Airway, Breathing, Circulation, Disability and Exposure – is covered in detail on the ECG course and is a recommended method of assessment by the Resuscitation Council.

Medical emergency scenarios are run in the course to consolidate what has been taught – this always proves to be a very valuable exercise.

Many dental practices have asked ECG Ltd to deliver this course and feedback has been excellent. On all courses that have been taught, dental practitioners have shared their experiences of dealing with medical emergencies in their careers and they welcome the opportunity to formally address the topics.

Dental practitioners have also often asked for training in preparing and administering intramuscular injections, which is something that ECG Ltd provides during the training sessions. Training in this area should also address the issue of 'patient transfer and post-emergency care'. Questions of whether a patient would need to be transferred to hospital or not, depending on his/her condition after treatment, frequently arise during training. When patients remain unwell (or if there is any doubt concerning their health) they should be assessed by a doctor, which will usually mean going to hospital by ambulance. If a patient recovers completely and hospital admission is not deemed necessary, safe medical practice

would mean that he/she should not leave the practice unaccompanied or drive a motor vehicle.

In summary, recording a patient's medical and drug history will enable dental practitioners to identify those at particular risk of suffering an emergency episode and appropriate measures can be taken to reduce the chance of such an emergency occurring. However, emergencies will still happen and we at ECG Ltd recommend that staff members review their current knowledge and skills including the administration of drugs, and seek appropriate training if required. ■

View *Standards for clinical practice and training* on the resuscitation Council UK website at [www.resus.org.uk](http://www.resus.org.uk)

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