Medical emergencies

in dental practice: *the five P's*

By Vipul Patel¹

Medical emergencies in dental practice are an uncommon event, especially when you consider the amount of dental visits/consultations that are delivered by the profession throughout the world on a daily basis. However, when they do occur they often create enormous anxiety amongst dental professionals despite these individuals being more than capable and professionally trained to deal with such eventualities. As patient and

professional expectations increase, we need to ensure we manage any medical emergency occurring in dental practice - often under great stress - effectively and efficiently.

Who ate all the pies?

The phrase 'who ate all the pies?' reflects a comment made by a professional colleague when asked about patients at risk of medical emergencies in dental practice. His reply to the question about who our high risk patients are was ... 'the fat ones'. Not very sensitive. Anyone who has seen me lecturing will know that I am one of these 'fat ones' ... although 'big boned' is what I would like

to think. The point to make is please do not judge someone only by the way they look and wrongly assume all patients who are obese or overweight will have a medical emergency, as often it will be the patients you least expect. Although body mass index is a risk factor for heart disease your truly vulnerable patients for emergencies are those at the extremes of the age range, patients with concurrent diseases or poly-pharmacy and those recovering from major surgery or illnesses.

This article is not meant to be a detailed presentation of all medical emergencies in dental practice and their management, but to provide some simple hints and tips to

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managing medical emergencies by using the five P's: Plan, Prepare, Predict, Professional, Pray.

Plan

As a healthcare professional and as a dental practice team you need to ruthlessly plan for medical emergencies as they will occur, however uncommon, and often when you least expect them and are least prepared for them. By having *written protocols* for the management of common emergencies and resuscitation, and undertaking periodic in-house team *simulations* and role play, you will practise this essential skill.

One positive way to continually manage our risk is to identify weaknesses in our systems and our processes. This is best done through *reflective learning* and a critical appraisal of previous emergencies. This will allow us to be optimally prepared for any emergency.

Prepare

We must have a robust *medical history questionnaire*, which specifically asks the questions we want the answers to. Remember patients will often only answer the questions asked and with the shortest of answers. Also, note that the default answer is often 'no' whenever we come across a question we don't understand.

After completion you must go through the questionnaire with the patient with prompts to extract further relevant details ... akin to a detective probing his main suspect – although please don't be too ruthless! Ensure signed medical history questionnaires are updated at least annually and the patient is asked about changes to their medical status at each visit. However, be careful not to believe everything that you are told as people are known to lie and not everything is always as it seems.

Apple or orange... You decide!

There is no statutory list of *medical emergency equipment* for dental practice but guides to best practice. Each practice is different in its skill mix and its level of service provision to its patients. However, you must ensure you have the correct quantity and quality of medical emergency equipment for your

patients' needs, which is accessible, functional and within its use-by date. Do check all *medical emergency drugs* carefully for use-by dates and check they are stored correctly. Ensure the team has the knowledge and skills to deliver the correct dose/quantity of drug quickly by the most

asthma who use an inhaler (Fig. 4) or angina patients using glyceryl trinitrate (GTN) spray under their tongue (Fig. 5).

Fig. 3 Bag-valve-mask (BVM) apparatus

Above
Fig. 2 Glucagon injection kit
Right
Fig. 1 Medical emergency kit

Fig. 4 Asthma inhaler

appropriate route. However, most importantly make sure everyone knows where the medical emergency equipment is kept, how to use the equipment and who is named responsible to replenish the stock. *Audit* this inventory to ensure compliance.

Figure 1 shows an example of a medical emergency kit and Figure 2 shows a glucagon injection kit. Figure 3 is a bag-valve-mask (BVM) apparatus.

For patients with a certain condition it may be advisable to ask the patient to bring their *own medication* in at each visit so if it is needed the patient is familiar with its use and correct delivery and it is more likely to be in-date. This could be relevant to patients with

Fig. 5 Glyceryl trinitrate (GTN) spray

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Predict

Look at your patients: not a glance but a good look, often easier when greeting them at arrival. Look for *subtle signs or salient symptoms*, which may suggest the early stages of a medical emergency. The patient who is flushed or sweating, and the patient who is anxious and in pain, could easily be masking some deeper medical problems. Ask questions now or potentially delay diagnosing a medical emergency.

Be confident to quickly and accurately assess the *basic parameters of health*, namely pulse rate/rhythm and breathing rate/pattern, to ensure vital clinical signs are not overlooked and management delayed. If you

**‘BE CONFIDENT IN YOURSELF AND GIVE THE PATIENT
CONFIDENCE IN YOU AND YOUR TEAM...’**

are not happy with the patient’s medical state delay dental treatment, unless absolutely necessary, and use the time to help the patient, which may mean calling emergency services or the patient’s general medical practitioner.

If you are faced with an ensuing medical emergency recall the simple acronym that you have learned many times to help you remember what to do and in which order:

Dr’s ABC:

- D** Danger (check for danger or potential risks)
- R** Response (assess patient consciousness)
- S** Shout for help
- A** Airway (open the airway with manoeuvres like head tilt/chin lift)
- B** Breathing (look, listen and feel for normal breathing for ten seconds – if not breathing start cardiopulmonary resuscitation)
- C** Circulation (look for signs of bleeding and shock, check pulse)

Professional

As dental healthcare professionals you have a *duty of care* to your patients and this should be your ultimate responsibility. Maintain your professional status with pride. Ensure you meet your *core CPD* requirements for this essential subject, which must include training in resuscitation and basic life support. Become confident in diagnosing a medical emergency and managing them with the professional expertise you possess and the skills that you have developed. You can use the protocols that you have written up and practised repeatedly as a team. Be *confident* in yourself and give the patient the confidence in you and your team ... this is more likely to result in a positive outcome.

Pray

For those who are not religious, I’m sorry, but you’re left with only 4 P’s. For the rest of us it’s never a bad thing to have some *divine help*. God bless.

Good luck and remember the quote by Oscar Wilde: ‘you know more than you think you know, just as you know less than you want to know’.

Include reading this article in your non-verifiable (general) CPD - just make a note of it in your personal development plan or record.

Vipul will be delivering the BDA Training Essentials course *Management of medical emergencies for the whole dental team* in London on Friday 12 September. This course offers five hours of verifiable core CPD. Call 020 7563 4590 to book your place.

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