# Medical emergencies: asthma





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## FEATURE



## Emma Hammett<sup>1</sup>

provides an up to date guide on

managing patients who have an asthma attack in the dental practice.

sthma is an extremely common chronic condition that can be triggered and exacerbated by the stress of visiting the dentist. When someone is having an asthma attack, their airways go into spasm which causes tightness of the chest; the linings of the airways become inflamed and phlegm is produced further obstructing the airways and leading to severe difficulty in breathing (Fig. 1). Asthma does lead to fatalities and should always be taken seriously.

Anyone who has been prescribed an inhaler should have it with them at all times.

Emma Hammett RGN of First Aid for Life is an experienced nurse, trainer, first aid expert and published writer. Emma provides the information in this article for guidance and it is not in any way a substitute for medical advice. First Aid for Life is not responsible or liable for any diagnosis made, or actions taken based on this information.

Emma says: 'First Aid for Life is an Award Winning and fully regulated first aid training provider and our trainers are highly experienced medical and emergency services professionals. We run practical courses for medical professionals throughout London: training in Emergency Life Support, choking, fitting, anaphylaxis and AED. Our training is always tailored to the needs of those attending and we are more than happy to cover any additional medical concerns as well. The course qualifies as verifiable CPD. We also have online first aid courses to update and refresh knowledge between the practical training. http://www.firstaidforlife.org.uk emma@ firstaidforlife.org.uk Tel: 020 8675 4036



Fig. 1 Asthma and your airways. This poster is available free of charge from emma@firstaidforlife.org.uk



Fig. 2 Triggers for an asthma attack. This poster is available free of charge from emma@firstaidforlife.org.uk

#### Common asthma triggers

There are many different triggers for asthma attacks and many asthmatics are well aware of their individual triggers, although they may not always be able to avoid them (Fig. 2).

Inflammatory factors that might trigger an asthma attack include allergens, work and respiratory infections. Irritants that might trigger an attack include strong smells, cold air and temperature change, exercise or stressful and emotional environments.

Other triggers for a potential asthma attack include poulltants, food additives, gastric reflux, tobacco and medications.

#### Symptoms of asthma

Symptoms of asthma include:

- A persistent cough (when at rest)
- A wheezing sound coming from the chest (when at rest)

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Fig. 3 Patient with asthma using volumiser, sitting upright



Fig. 4 Patient with asthma using volumiser sitting the wrong way round on a chair

- Difficulty breathing (breathing fast and with effort, using all accessory muscles in the upper body)
- Nasal flaring
- Unable to talk or complete sentences and possibly going very quiet
- An asthmatic patient may try to tell you that their chest 'feels tight' (young children may express this as tummy ache).

#### You must call an ambulance immediately and commence the asthma attack procedure without delay if someone:

- Appears exhausted
- Has a blue/white tinge around lips
- Is going blue
- Has collapsed.

Not everyone will get all of these symptoms.



## 'DO NOT TAKE A PATIENT EXPERIENCING AN

ASTHMA ATTACK OUTSIDE FOR FRESH AIR

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MAKE SYMPTOMS WORSE.'

Encouraging someone to sit upright is generally helpful when dealing with breathing problems (Fig. 3). Sitting the wrong way round on a chair may be a good position for them, as demonstrated in Figure 4.

**Do not** take a patient experiencing an asthma attack outside for fresh air if it is cold – as cold air can make symptoms worse.

#### Spacers/volumisers

Using a spacer or volumiser device has been shown to deliver medication more effectively and increases the amount of the medication reaching the airways rather than hitting the back of the throat. The use of a spacer device can help sufferers achieve better control of their asthma (Fig. 5).

Spacers come in a variety of shapes and sizes, but not all spacers fit all types of inhalers – use the spacer prescribed with the inhaler. Spacers for small children are usually fitted with a face mask. There is considerable coordination required to use an inhaler without a spacer and this can lead to increased stress and worsening of symptoms.

Patients should always keep the spacer with the inhaler and have both available at all times.

#### How to help in an asthma attack

The following guidelines are suitable for both children and adults (Fig. 6).

- Calm the situation and reassure the casualty as this can help them to control their symptoms; conversely, panic can increase the severity of an attack. Assist them to take one to two puffs of the reliever inhaler (usually blue) – using a spacer device if available.
- Sit them down, loosen any tight clothing and encourage them to take slow, steady breaths
- If they do not start to feel better, they should take more puffs of their reliever

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Fig. 6 How to help in an asthma attack. This poster is available free of charge from emma@firstaidforlife.org.uk

inhaler (up to ten at roughly two minute intervals)

- If there is no improvement after taking their inhaler as above, or if you are worried at any time, call 999/112
- The patient should keep taking the reliever inhaler two puffs every two minutes, whilst waiting for the paramedics to arrive.

Please note that if the patient has taken more than ten puffs at a time it won't have done them any harm. Salbutamol is a welltested medication and the main side effects from overdosing are lightheadedness and a slight tremor of the hands - both of which will resolve without treatment.

#### After an asthma attack

Within 48 hours of an attack, the patient should make an appointment with their doctor or asthma nurse for an asthma review.

People often have a variety of different asthma inhalers and medication to control their asthma - if they are having an asthma attack it is the reliever inhaler that they need. Reliever inhalers are usually blue and

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the other inhalers are often steroid based to reduce their sensitivity to asthma inducing agents.

Visit www.firstaidforlife.org.uk, email emma@firstaidforlife.org.uk or telephone 0208 675 4036 for more information about the first aid training we provide for dental practices throughout the UK. We also have a great range on online first aid courses through www.onlinefirstaid.com that are ideal for first aid refreshers and for completion of your verifiable CPD. First Aid for Life provides this information for guidance and it is not in any way a

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