

The ACE Group Emergency Kit



Title	The Emergency Kit
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The ACE Group Emergency Kit

Definition:

Emergency: 'A serious, unexpected, and often dangerous situation requiring immediate action.'¹

Introduction:

It is a moral and professional obligation for practitioners to risk assess their practice and to take appropriate steps to mitigate those risks. In aesthetic practice, it is essential that practitioners are familiar with the possible risks and complications associated with the treatments they provide and the patients they treat. Although rare, some complications require immediate attention either because they are life threatening, can have catastrophic consequences or because immediate attention will protect the patient from avoidable harm. Managing these emergency events requires competency, a safe environment, familiar and reliable management protocols and easy access to necessary medicines and devices. Management may also include onward referral pathways where appropriate and a policy for follow up and reporting to the appropriate organisations such as the MHRA and the manufacturer's regulatory affairs department.

The Aesthetic Complications Expert Group have provided guidelines on how to manage some of the most common and more serious complications that may occur in aesthetic practice along with treatment algorithms that practitioners should be familiar with. In order to provide safe treatments and correctly manage adverse events, practitioners must have and be competent to use and

administer essential medicines and devices.

Although the ACE Group Emergency Kit covers the most widely performed aesthetic treatments, it is not intended to be prescriptive. Practitioners who are carrying out treatments outside of this scope or more invasive procedures are likely to need additional prescription medications and equipment, such as AEDs or cardiac monitoring, to manage potential complications.

Background:

Whilst vital to have an emergency kit, it is equally important the practitioner is competent to use it appropriately. As complications in aesthetic practice are rare, regular CPD activities to maintain and demonstrate competency are essential. Basic Life Support and anaphylaxis training should be undertaken annually to refresh and update knowledge and skills in line with guidelines from statutory bodies. In any event where a patient's life or sight is threatened, emergency services should be called to attend immediately, and the patient transferred to hospital for further treatment or monitoring. Even if the patient appears to have recovered from an anaphylactoid event, the patient must go to hospital for observation and possible referral to immunology for diagnosis and counselling².

Quick reference guides and management algorithms are useful aide memoires when an adverse event occurs, and these should be kept with the emergency kit, and/or posted on walls or staff boards to become familiar reading.

Other members of the practice team should also be familiar with their supporting roles should an adverse event occur. Practice drills help ensure everyone knows where the emergency kit or equipment is, what it contains and what their roles should be.

Since the emergency kit contents are likely to be used infrequently (if ever), it is important that it is checked regularly, to ensure the medicines and devices are within expiry dates, not damaged, working properly and all present and correct. A log is useful to record that checks have been made and this should be completed at least monthly as a matter of routine.

Adrenaline:

The Resuscitation Council recommends the use of adrenaline ampoules, rather than auto-injectors, for healthcare workers who should have the competency and skills to draw up and administer from ampoules³. The ampoules offer significant cost benefits to the practitioner, particularly when they will need to be discarded and replaced when they reach their expiry date. Auto-injectors are designed primarily for lay people to be simple and efficient to use and they often have a shorter shelf-life of about 6 months. The brands, EpiPen[®] and Jext[®] are preloaded with a 300mcg dose which is less than the 500mcg recommended for adults, the needle length of 15/16mm risks subcutaneous rather than intramuscular injection which may affect efficient absorption⁴. The brand Emerade[®] supplies auto-injectors with a choice of doses which includes the adult dose of 500mcg, it also has a 23mm needle increasing the likelihood of an intramuscular injection in most adults.

Doses may need to be repeated at 5-minute intervals until the paramedics arrive. Based on the 10-minute national standard for emergency services to attend, a minimum of two doses should be contained within the emergency kit and more than this if ambulance services are likely to take longer than ten minutes to arrive.

Further information can be obtained from the British National Formulary or Electronic Medicines Compendium.

Exclusions:

According to the latest guidance from the Resuscitation Council, the administration of chlorphenamine and hydrocortisone should be restricted to practitioners who are experienced in their use and not administered first line³. It is unlikely that practitioners who are working solely in aesthetic medicine would be considered experienced and therefore the recommendation would be to call an ambulance and carry out Basic Life Support until help arrives.

The ACE Group no longer recommends the inclusion of GTN paste in the emergency kit. Hyaluronidase is first line treatment and should be used to recover perfusion. However, practitioners who use non-hyaluronic acid dermal fillers in their practice may choose to continue to include this within their kit although evidence for its effectiveness is weak.

Prescription medication that does not need to be administered immediately should be prescribed to the patient for them to collect from a local pharmacy as a matter of governance. The ACE Group provides a list of formulary items that can be referred to for this purpose.

Non-prescribing practitioners:

Non-prescribing practitioners must discuss policy with their prescriber and agree a protocol for prescription, supply and administration of emergency prescription only medications. Prescribers and those who administer are equally accountable to the patient, legislation and their professional standards.

Adrenaline can be administered without a prescription according to Regulation 238 of the Human Medicine Regulations 2012, in emergencies anybody can inject adrenaline and other drugs listed in Schedule 19 of the Regulations for saving a life.

The ACE Group Emergency Kit:

The following table outlines the medicines and devices the emergency kit should contain:

	Must contain
	Should contain
	Useful to have

In addition, it is good practice to include in the kit any needles, syringes or diluents needed to administer emergency drugs:

Bacteriostatic saline, normal saline or water	4 x 5ml
2ml Luer-lok Syringe	2
10ml Luer-lok Syringe	2
1ml Graduated Syringe	3
23G Blue Needles (25-30mm)	4
27G Grey Needles	2
30G Yellow Needles	2

Drug/Item	Dosage	Quantity	ACE Guideline
Adrenaline	1:1000/ml	2	Anaphylaxis
Hyaluronidase	1500 I.U.	4	Hyaluronidase
Aspirin	300mg	4 x 75mg	Vascular Occlusion Visual impairment
Timolol Eye Drops	0.5%	1 x 5ml	Visual impairment
Loratadine or Cetirizine	10mg	1	Allergy/angioedema
Sodium bicarbonate	Dissolvable powder	50g	Chemical peels
Saline eye wash	10ml	2	Sharps and splash injuries

Drug or Device	Anaphylaxis	Vascular occlusion	Visual impairment/ Blindness	Vasovagal episode	Angioedema	Burn (Heat)	Burn (Chemical)	Splashes into the eye
Telephone to call 999	X		X					
Adrenaline	X							
Hyaluronidase		X	X					
Blood pressure monitor	X			X				
Guedel airway	X							
Guedel mask	X							
Pulse oximeter	X			X				
Aspirin 300mg		X	X					
Strong paper bag			X	X				
Cold/Hot pack		X				X		
Oxygen, mask and tubing	X			X				
Timolol 0.5% eye drops			X					
Oral antihistamine					X			
Sodium bicarbonate							X	
Eye wash								X



ACE Group: Emergency Drug Stock & Checklist:

					Clinic to complete monthly stock check and tick box below to confirm											
Item	Dose	Quantity	Used	Discarded	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hyaluronidase	1500 iu															
Hyaluronidase	1500 iu															
Hyaluronidase	1500 iu															
Hyaluronidase	1500 iu															
Adrenaline	1:1000															
Adrenaline	1:1000															
Aspirin	300mg															
Timolol Drops	0.5%															
Loratadine	10mg															
Cetirizine	10mg															
Normal saline																
Bacteriostatic																
Water																

Key points:

- Ensure that the Aesthetic Complication Expert Group guidelines folder is kept with the Emergency Kit in the case of a complication, this will allow easy reference to treatment algorithms and dosages and reconstitution for the drugs that may be required.
- Display Resuscitation/DRABC laminated posters in all clinical rooms.
- Ensure that patients are fully informed of common and serious complications that may occur with a specific treatment and that if a patient has an increased risk that this is highlighted on the consent form that they sign.
- If a patient requires resuscitation or has been treated for an anaphylactic reaction, they should be admitted to hospital via an ambulance as further anaphylaxis may occur when the initial dose of adrenaline wears off.
- In the event of a complication, ensure contemporaneous records and photographs are made. After a complication has occurred, ensure that there is appropriate follow up until it has fully resolved.
- Complete a significant event form where available and inform your medical defence insurance company at the earliest convenience.
- For complications caused by a certain medical product, consider whether this needs reporting via the Yellow Card scheme to the MHRA and/or reporting to the manufacturer.
- Seek more expert help from a practitioner experienced in managing complications when needed.
- Grab packs should have been prepared by the Laser Protection Advisor in clinics who are offering Laser/IPL treatments which provides details on the laser device and power output and wavelength which should be sent with the patient to the Eye Casualty in the event of an eye injury.

References

1. English Oxford Living Dictionaries, available at <https://en.oxforddictionaries.com/definition/emergency> [Accessed 11/11/2018]
2. National Institute for Health and Clinical Excellence, 2018. *NICE*. [Online] Available at: <https://nice.org.uk> [Accessed 31 September 2018]
3. Resuscitation Council (UK), 2014-18. *FAQs*. [Online] Available at: <https://www.resus.org.uk/faqs-anaphylaxis-treatment/> [Accessed 31 September 2018]
4. Simons FE, et al, 2001. Epinephrine absorption in adults: intramuscular versus subcutaneous injection. *J Allergy Clin Immunol.*, 5(108), pp. 871-3

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The ACE Group have produced a series of evidence based and peer reviewed guidelines to help practitioners prevent and manage complications that can occur in aesthetic practice. These guidelines are not intended to replace clinical judgement and it is important the practitioner makes the correct diagnosis and works within their scope of competency. Some complications may require prescription medicines to help in their management and if the practitioner is not familiar with the medication, the patient should be appropriately referred. Informing the patient's General Practitioner is considered good medical practice and patient consent should be sought. It may be appropriate to involve the General Practitioner or other Specialist for shared care management when the treating practitioner is not able or lacks experience to manage the complication themselves. Practitioners have a duty of care and are accountable to their professional bodies and must act honestly, ethically and professionally.

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