

ANAPHYLAXIS

Learners Guide

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PRE-READING

Please read one of the following before the session.

APLS Anaphylaxis Management

RCPCH Anaphylaxis Pathway

RCH Clinical Practice Guidelines : Anaphylaxis

CASE 1 (15 MINS)

An 8 year old girl presents after collapsing following attendance at a friend's birthday party. She was noted to have been eating a sandwich, then promptly developed respiratory distress. On admission with the ambulance crew she is audibly wheezy, with swelling of the tongue and lips.

How would you assess this child?

What is your immediate management?

How much adrenaline do you give and how?

Any adjunct therapies to consider?

CASE 2 (15 MINS)

A 3 year old presented with a localised erythematous rash after being stung by a bee at a family picnic. His family attended PED where he subsequently developed respiratory distress and he was treated with IM adrenaline. After a couple of hours he was playful and appeared well and his parents want to take him home.

What would you say to the parents?

How would you manage this patient?

What key points make up the discharge planning?

Do you know how to administer IM adrenaline?

EpiPen www.youtube.com/watch?v=FXlqSuzzrws (5 minutes)

ADVANCED DISCUSSION (20 MINS PER CASE)

ADVANCED CASE 1

A 6 year old spina bifida patient is currently admitted with an LRTI. She has been having a course of amoxicillin for the last week. You are crash bleeped to the ward where she is having her urinary catheter changed by a bank nurse. She is pale and cool to touch, with increased respiratory rate.

What's going on? Is this allergy? Is this anaphylaxis?

How would you treat it?

What allergy avoidance advice do you give?

ADVANCED CASE 2

An 8 year old girl presents after collapsing following attendance at a friend's birthday party. She was noted to have been eating a sandwich, then promptly developed respiratory distress. She has had 2 epipens with the ambulance crew, and a further dose in PED. You are called as senior support. Her sats are dropping and she is becoming bradycardic.

If the patient isn't improving after IM adrenaline, what are your next management plans?

How do you prepare for intubation?

What do you do next?

SIMULATION (30-60 MINS)

APLS sim on anaphylaxis (see APLS teaching website)

Quiz Questions (10 mins)

Question 1.

What dose of adrenaline would you give to a 5 year old presenting in suspected anaphylactic shock?

- A** 150 micrograms IM (0.15 mL) of 1:1000
- B** 150 micrograms IM (0.15 mL) of 1:10000
- C** 300 micrograms IV (0.15 mL) of 1:1000
- D** 300 micrograms IM (0.15 mL) of 1:10000

Question 2.

In order to diagnose anaphylaxis there must be a rash

- A** True
- B** False

Question 3.

Antihistamines can be used to treat anaphylaxis initially; epinephrine is only needed if symptoms worsen

- A** True
- B** False

Take Home Tips

- 1 Recognise broad presentation of anaphylaxis
- 2 Can be life-threatening– get senior help, get IV access
- 3 IM adrenaline – early and often
- 4 Biphasic reactions – consider when to discharge
- 5 Unusual allergens – latex

REFERENCES

<https://www.immunology.org/policy-and-public-affairs/briefings-and-position-statements/allergy>

<https://www.resus.org.uk/anaphylaxis/emergency-treatment-of-anaphylactic-reactions/>

<https://pedemmorsals.com/anaphylaxis/>

<https://dontforgetthebubbles.com/anaphylaxis-qa/>

http://site.cats.nhs.uk/wp-content/uploads/2018/01/cats_anaphylaxis_2018.pdf

<http://site.cats.nhs.uk/in-a-hurry/drug-calculator/>

<https://www.rcpch.ac.uk/resources/allergy-care-pathway-anaphylaxis>

Anagnostou et al. Myths, facts and controversies in the diagnosis and management of anaphylaxis. <https://adc.bmj.com/content/104/1/83>

Lee et al. Time of onset and predictors of biphasic anaphylactic reactions: a systematic review and meta-analysis of the literature. *Ann Emerg Med* 2014;64:S13

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