RESUSCITATION COUNCIL OF SOUTHERN AFRICA

2015/16

Emergency Management of **ANAPHYLAXIS**

ALLSA ALLERGY SOCIETY OF SOUTH AFRICA

(Adult and Child)

ACUTE RESPIRATORY DIFFICULTY
(Progressive Swelling, Stridor, Wheezing, Distress)
and/or
SIGNS OF SHOCK/HYPOTENSION
(especially if skin or mucosal changes are present)

Early (first line) treatment

ADRENALINE
1mg/ml (1:1000) - 0.01mg/kg IM (Maximum - 0,5ml IM)
or
Auto-Injector
> 6 yrs - 0,3 ml IM
< 6 yrs - 0,15 ml IM
REPEAT EVERY 5 - 15 MINUTES IF NO IMPROVEMENT

OXYGEN – MONITORS – IV ACCESS
- High flow oxygen
- Maintain patent airway (Intubate/Cricothyrotomy if necessary)
- BP, Sats, ECG monitoring
- Lie patient supine with legs elevated if hypotensive
- High flow IV line

Adjunctive treatment

H1 ANTIHISTAMINE
Promethazine
> 12 yrs - 25 mg IM or slow IV
6 - 12 yrs - 12,5 mg IM or slow IV
2 - 6 yrs - 6,25 mg IM or slow IV
(Avoid if < 2 yrs old and low BP)

CRYSTALLOID
(e.g. Ringers/Balsol)

Rapid infusion of 1 - 2 litres (20 ml/kg for children) if no response to adrenaline

Repeat IV infusion as necessary, as large amounts may be required

Adrenaline infusion (0,1 - 1 ug/kg/min) ONLY if unresponsive to IM adrenaline and fluids

NEBULISED BRONCHODILATORS
(if severe bronchospasm, and especially if on beta blockers)

Salbutamol
> 6 yrs - 5 mg every 15 - 20 mins
< 6 yrs - 2,5 mg every 15 - 20 mins

WITH Ipratropium
> 6 yrs - 0,5 mg every 15 - 20 mins
< 6 yrs - 0,25 mg every 15 - 20 mins

H2 RECEPTOR ANTAGONIST
Ranitidine
Adult - 50 mg IM or slow IV (diluted in 20 ml over 2 min)
Child – 1 mg/kg (Max - 50 mg)

OR

Cimetidine
Adult – 300 mg IM or slow IV (diluted in 20 ml over 2 min)
Child – 5 mg/kg (Max - 300 mg)

GLUCAGON
Adult – 1 - 2 mg IM or slow IV every 5 mins if unresponsive to adrenaline, and especially if on beta blockers
Child – 20 ug/kg (Max - 1 mg)

(Look out for vomiting and hyperglycaemia)

CORTICOSTEROIDS
Hydrocortisone
> 12 yrs - 200 mg IM or slow IV
6 - 12 yrs - 100 mg IM or slow IV
1 - 6 yrs - 50 mg IM or slow IV
< 1 yr - 25 mg IM or slow IV

Important Information

Q When is it appropriate to initiate treatment for Anaphylaxis?

A ANY SYMPTOMS SHOULD BE TREATED IMMEDIATELY. Do not wait for symptoms to progress. [1]

Q What should happen once a patient is resuscitated?

A Patients must be transferred to a medical facility for observation for 4 - 6 hours or longer based on the severity of the reaction due to the risk of biphasic reaction. [2]

Q What is the discharge protocol for patients leaving the hospital?

A Ensure patients leave with: [2]
1. A referral to a specialist
2. An Anaphylaxis Emergency Action Plan
3. An Adrenaline Auto-Injector

Q Why are Antihistamines considered adjunctive treatment?

A H1-antihistamines may relieve itching and uticaria but do not prevent or relieve life threatening symptoms of anaphylaxis. [2]
The use of antihistamines alone is the most common reason reported for not using adrenaline and may place a patient at **significantly increased risk for progression towards a life-threatening reaction.**

For more information visit www.resuscitationcouncil.co.za

EPIPEN® EPIPEN Jr®
(Adrenaline) Auto-Injectors 0.3/0.15 mg

References: 1. Simons FER, Ardusso LRF, Bilò MB, El-Gamal YM, Ledford DK, Ring J, *et al.* World Allergy Organization guidelines for the assessment and management of anaphylaxis. *WAOJ.* 2011. 2. Boyce JA, Assa'ad A, Burks AW, et al. Guidelines for the Diagnosis and Management of Food Allergy in the United States: Report of the NIAID-Sponsored Expert Panel. *J Allergy Clin Immunol.* 2010;**126**,6:S1-S58.