RECOMMENDED TREATMENT REGIMEN FOR MANAGEMENT OF ANAPHYLAXIS IN A RADIOLOGY SUITE

MILD: nausea/vomiting and skin reaction only

- Stop administration of contrast
- Provide supportive measures
- Closely observe for any changes suggestive of moderate reaction
- Use only oral nonsedating antihistamines to treat skin reactions

MODERATE: hypotension, bronchospasm or breathing difficulties +/- skin reaction

- Stop administration of contrast media
- Call for help/ambulance
- O_2 via mask 6-10L/min
- Lay patient flat unless breathing difficulties, then allow to sit.
- Use IM adrenaline dosage chart from ASCIA document (See below)
- Closely observe for any changes suggestive of severe reaction
- Repeat IM adrenaline 5 minutely as needed.

ADRENALINE DOSAGES CHART

Age (years)	Weight (kg)	Vol. Adrenaline 1:1000	Adrenaline Autoinjectors
< 1	5-10	0.05-0.1mL	
1-2	10	0.1mL	10-20 kg (~1-5 years) 0.15mg (green labelled) device
2-3	15	0.15mL	
4-6	20	0.2mL	
7-10	30	0.3mL	>20 kg (~>5 years) 0.3mg (yellow labelled) device
10-12	40	0.4mL	
>12 and adults	>50	0.5mL	

SPECIAL CIRCUMSTANCES: add the following therapy

HYPOTENSION

- Establish large bore IV access
- Elevate the legs
- Normal saline 20 mL/kg initially

BRONCHOSPASM

- Children Salbutamol (Metered dose inhaler, MDI)
  < 6 years 6 X 100 mcg puffs MDI, or 2.5-5 mg nebulised
  > 6 years 12 X 100 mcg puffs MDI or 5 mg nebulised
- Adults Salbutamol
  12 X 100 mcg puffs or 5 mg nebulised

SEVERE: life threatening hypotension, bronchospasm or airway obstruction

- Stop administration of contrast media
- Call for help/ambulance
- Oxygen via mask 6-10l/min
- Lay patient flat unless breathing difficulties
- Commence CPR if required at any stage
- Use IM adrenaline dosage chart from ASCIA document (See below)
- Repeat IM adrenaline 5 minutely as needed
- Seek emergency medicine/critical care specialist advice

ADRENALINE DOSAGES CHART

Age (years)	Weight (kg)	Vol. Adrenaline 1:1000	Adrenaline Autoinjectors
< 1	5-10	0.05-0.1mL	
1-2	10	0.1mL	10-20 kg (~1-5 years) 0.15mg (green labelled) device
2-3	15	0.15mL	
4-6	20	0.2mL	
7-10	30	0.3mL	>20 kg (~>5 years) 0.3mg (yellow labelled) device
10-12	40	0.4mL	
>12 and adults	>50	0.5mL	

SPECIAL CIRCUMSTANCES: add the following therapy

UPPER AIRWAY OBSTRUCTION

- Nebulised adrenaline 5 mL i.e. 5 ampoules of 1:1000
- Call for airway management expertise (Anaesthesia/MICA/Critical Care physician)

PERSISTENT HYPOTENSION

- Establish large bore IV access
- Elevate the legs
- Normal saline 20 mL/kg initially and repeat up to 50 mL/kg in first 30 minutes
- If patient on beta blockers consider 1 -2 mg of glucagon IV (Adult dose)

PERSISTENT WHEEZE

- Children Salbutamol (Metered dose inhaler, MDI)
  < 6 years 6 X 100 mcg puffs MDI, or 2.5-5 mg nebulised
  > 6 years 12 X 100 mcg puffs MDI or 5 mg nebulised
- Adults Salbutamol
  12 X 100 mcg puffs or 5 mg nebulised
- IV hydrocortisone 5 mg/kg to maximum of 200 mg

REFERENCES

Australasian Society of Clinical Immunology and Allergy. Acute Management of Anaphylaxis Guidelines. Balgowlah NSW. 2015 From: http://www.allergy.org.au/health-professionals/papers/acute-management-of-anaphylaxis-guidelines Accessed 5 January 2016.

O'Meara M & Watton DJ. Advanced Paediatric Life Support: The Practical Approach. Appendix J Formulary. 5th [Australian] ed. 2013. Blackwell, West Sussex.

The Royal Australian and New Zealand College of Radiologists®

The Faculty of Clinical Radiology

www.ranzcr.edu.au