Emergency Care Clinical Network

EMERGENCY DEPARTMENT

SNAKE BITE ENVENOMATION CLINICAL PATHWAY

SURNAME	URN	
GIVEN NAME	DOB	SEX
ADDRESS		
SUBURB	TELEPHONE	
POSTCODE		

Date:___/___/___

Time of snake bite:____:____

This clinical pathway only applies to suspected community-acquired snake bites in patients who are not snake handlers. Specific advice regarding bites in snake handlers and from exotic snakes should be obtained from a clinical toxicologist.

		Initial if completed
IMMEDIATE MANAGEMENT	**Apply pressure bandage, immobilise limb and immobilise the person**	
	• Use a broad 15cm elasticised bandage • Start bandaging at snake bite, cover whole limb, be as firm as if bandaging a sprained ankle • Immobilisation of the limb (e.g. splint) and immobilisation of the patient (e.g. bed rest) is essential **Time pressure bandage applied ____:_____**	
EARLY DECISION MAKING	**Discuss with a clinical toxicologist (e.g. Poisons Information Centre 13 11 26)**	
	There are a number of relative indications for antivenom that require expert interpretation. Early discussion with a clinical toxicologist is **strongly recommended** in the following instances to determine if antivenom is required: • any patient with significant symptoms (especially headache and vomiting) or any patient who appears systemically unwell • any abnormality of INR, APTT, fibrinogen, D-dimer, full blood count (leukocytosis, evidence of thrombotic microangiopathy) or CK > 1,000 IU/L	
	Indications for antivenom: seek advice from a clinical toxicologist (e.g. Poisons Information Centre 13 11 26)	
	• Neurotoxic paralysis (e.g. ptosis, ophthalmoplegia, limb weakness, respiratory effects) • Coagulopathy (e.g. unclottable blood, INR > 1.3, prolonged bleeding from wounds and venepunctures) • History of unconsciousness, collapse, convulsions or cardiac arrest.	
	Choice of antivenom: seek advice from a clinical toxicologist (e.g. Poisons Information Centre 13 11 26)	
	If there is a delay in contacting a clinical toxicologist and there is clear indication for antivenom, administer one vial of tiger snake antivenom and one vial of brown snake antivenom. All cases of envenomation should be discussed with a toxicologist to guide treatment and appropriate disposition.	
ACUTE MANAGEMENT	**Prepare to manage anaphylactic/anaphylactoid reactions**	
	• Critical care area with monitoring (e.g. resuscitation bay / monitored bed) • IV line in situ (two (2) IV access sites if possible) • IV fluids prepared, primed and available for immediate infusion • Adrenaline prepared and available for immediate administration.	
	Preparation and administration of antivenom	
	• Dilute in 100–500mL of sodium chloride 0.9% (one vial of tiger snake antivenom and one vial of brown snake antivenom can be administered in the same 100-500 mL sodium chloride 0.9% infusion) • Administer over 15–30 minutes • Release pressure bandage and immobilisation **after** antivenom has been fully administered • If requiring further management advice, contact the toxicologist (13 11 26) • **Time of antivenom administration:____:____**	

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		Initial if completed
ONGOING CARE	**Monitor progress: seek advice from a clinical toxicologist (e.g. Poisons Information Centre 13 11 26)**	
	Monitor, investigate for, and treat complications such as occult bleeding, electrolyte abnormality (e.g. hyperkalaemia, signs of renal impairment).	
	6 hours post antivenom: INR, APTT, fibrinogen, D-dimer, UEC, CK, FBE and film. If not improving/unsure, seek advice from a clinical toxicologist.	
	12 hours post antivenom: INR, APTT, fibrinogen, D-dimer, UEC, CK and FBE. If not improving/unsure, seek advice from a clinical toxicologist.	
	Note: Coagulopathy may not begin to improve until about 12 hours. Persistent coagulopathy is not an indication for additional antivenom. Seek advice if concerned. Use of blood products (e.g. fresh frozen plasma) may be considered in an actively bleeding patient but should be discussed with a clinical toxicologist (e.g. Poisons Information Centre).	
	12-hourly bloods thereafter until consistently improving: INR, APTT, fibrinogen, D-dimer, UEC, CK and FBE.	

ADMISSION	**Location**	**List criteria**	
	ED observation unit		
	Ward		
	ICU/HDU		
	Transfer		

DISCHARGE		
	Criteria for discharge during daytime (do not discharge at night): seek advice from a clinical toxicologist (e.g. Poisons Information Centre 13 11 26)	
	Uncomplicated myotoxicity and mild neurotoxicity • Clinical features resolving • Blood tests normalising • It is at least 12 hours post antivenom.	
	Venom-induced consumptive coagulopathy INR, APTT, creatinine and platelet count normalising.	
	Other criteria (list):	
	Discharge advice	
	Explanation of the risk of serum sickness (~30%) characterised by flu-like symptoms, fever, myalgia, arthralgia and rash developing 4–14 days post antivenom.	
	Letter to GP including advice regarding recognition and treatment of serum sickness.	

Pathway completed by:

Name: ______________________________ **Sign:** ____________________ **Designation:** _____________

Date: ___/___/___ **Time:** ____:____

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