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APPENDICES

Reagent for laboratory experiments

0.15 M Phosphate buffered saline (PBS) pH 7.4.

NaCl	8.0	g
KCl	0.20	g
Na ₂ HPO ₄	1.15	g
KH ₂ PO ₄	0.20	g

Dissolve in distilled water, adjust to pH 7.4 with HCl and adjust to 1000 ml final volume with distilled water

Creatine phosphokinase assay (Sigma kit no. 520)

Phosphocreatine solution

1 vial with 15 ml of TRIZMA buffer solution (no 520-5)

Stable for several months stored frozen may be frozen and thawed repeatedly. Mix by inversion before use

ADP-gluthathione solution

1 vial with 6 ml of water

Stable for at least 3 months stored frozen may be frozen and thawed repeatedly. Mix by inversion before use.

p-Hydroxymercuribenzoate solution

Stored in refrigerator (2-8°C).

α-Naphthol solution

1 vial with 10 ml of Alkaline solution (no 520-30)

Solution is not stable and must be preparation fresh daily.

Diacetyl solution

0.1 ml of Diacetyl (no 520-40) + 200 of DW.

Solution is stable for at least 1 week while refrigerated (2-8 °C)

Creatine kinase standard (0.4 mmol/l)

Creatine standard (no 520-60) + 10 ml DW

Solution below 0°C. Solution is stable for at least 3 months

Lowry method for protein determinationSolution A (fresh preparation)

3 % Sodium tartrate	0.1	ml
1.5 % CuSO ₄ .5H ₂ O	0.1	ml
3 % Na ₂ CO ₃ in 0.15N NaOH	9.8	ml

Solution B (fresh preparation)

2 N Folin&Ciocalteu's phenol reagent	1	ml
Distilled water	1	ml

The Modified Snake Severity Score (*C. rhodostoma*)

Criteria	Level
Pulmonary system	
• No symptom/sign	0
• Minimal dyspnea, chest tightness, mild or vague systemic discomfort, or respirations 20 – 25 breaths /min	1
• Moderate dyspnea (tachypnea, 26 to 40 breaths/minute; use of accessory muscle)	2
• Cyanosis, air hunger, extreme tachypnea or respiratory insufficiency/ failure	3
Cardiovascular system	
• No symptom/sign	0
• Tachycardia (100 to 125 beats/minute), palpitations, generalized weakness, benign dysrhythmia, hypertension	1
• Tachycardia (126 to 175 beats/minute), or hypotension, with systolic blood pressure greater than 100 mmHg	2
• Extreme tachycardia (>175 beats/minute), or hypotension, with systolic blood pressure < 100 mmHg, malignant dysrhythmia, or cardiac arrest	3
Local wound	
• No symptom/sign	0
• Pain, swelling, or ecchymosis within 5 to 7.5 cm. of bite site	1
• Pain, swelling, or ecchymosis involving less than half the extremity (7.5 cm from bite site)	2
• Pain, swelling, or ecchymosis extending beyond affected extremity (more than 100 cm from bite site)	3
Gastrointestinal system	
• No symptom/sign	0
• Abdominal pain, tenesmus, or nausea	1
• Vomitting or diarrhea	2
• Repeated vomitting, diarrhea, hematemesis, or hematochezia	3
Hematologic system	
• No symptom/sign	0
• Coagulation parameters slightly abnormal: PT <20 seconds; PTT < 50 seconds; platelets 100,000 to 150,000 /ml; or fibrinogen 100 to 150 ug/ml ; VCT 10-20 min	1
• Coagulation parameters abnormal: PT <20 to 50 seconds; PTT < 50 to 75 seconds; platelets 50,000 to 100,000/ml; or fibrinogen 50 to 100 ug/ml ; VCT 21-30 min	2
• Coagulation parameters abnormal: PT<50 to 100seconds; PTT <75 to 100 seconds; platelets 20,000 to 50,000/ml ; or fibrinogen < 50 ug/ml; VCT > 30 min	3
• Coagulation parameters markly abnormal: with serious bleeding or the threat of spontaneous bleeding: unmeasurable PT or PTT; platelets < 20,00/ml ; or undectable firbrinogen, severe abnormalities of other laboratory values including VCT also fall into this category	4
Central nervous system	
• No symptom/sign	0
• Minimal apprehension, headache, weakness, dizziness, chills or paresthasias	1
• Moderate apprehension, headache, weakness, dizziness, chills, paresthasias, confusion, fasciculation in area of bite site	2
• Severe confusion , lethagy, seizures, coma, psychosis, of generalized fasciculation	3

PT: Prothrombin time; PTT : Partial thromboplastin time; VCT : Venous Clotting Time

The Modified Snakebite Severity Score (*N. kaouthia*)

Criteria	Level
Pulmonary system	
• No symptom/sign	0
• Dyspnea, minimal chest tightness, mild or vague discomfort, or respiratory rate 20 – 25 breaths/Min	1
• Moderate respiratory distress (tachypnea, 26 to 40 breaths/minute; accessory muscle use)	2
• Cyanosis, air hunger, extreme tachypnea, or respiratory insufficiency/failure	3
Cardiovascular system	
• No symptom/sign	0
• Tachycardia (100 to 125 beats/minute), palpitations, generalized weakness, benign dysrhythmia, or hypertension	1
• Tachycardia (126 to 175 beats/minute), or hypotension, with systolic blood pressure greater than 100 mmHg	2
• Extreme tachycardia (>175 beats/minute), or hypotension, with systolic blood pressure < 100 mmHg, malignant dysrhythmia, or cardiac arrest	3
Local wound	
• No symptom/sign	0
• Pain, swelling, or ecchymosis within 5 to 7.5 cm. of bite site	1
• Pain, swelling, or ecchymosis involving less than half the extremity (7.5 cm from bite site)	2
• Pain, swelling, or ecchymosis extending beyond affected extremity (more than 100 cm from bite site)	3
Gastrointestinal system	
• No symptom/sign	0
• Pain, tenesmus, or nausea	1
• Vomiting or diarrhea	2
• Repeated vomiting, diarrhea, hematemesis, or hematochezia	3
Hematologic symptoms	
• No symptom/sign	0
• Coagulation parameters slightly abnormal: PT <20 seconds; PTT < 50 seconds; platelets 100,000 to 150,000 /ml; or fibrinogen 100 to 150 ug/ml	1
• Coagulation parameters abnormal: PT <20 to 50 seconds; PTT < 50 to 75seconds;platelets 50,000 to 100,000 /ml; or fibrinogen 50 to 100 ug/ml	2
• Coagulation parameters abnormal: PT<50 to 100seconds; PTT <75 to 100 seconds; platelets 20,000 to 50,000/ml ; or fibrinogen < 50 ug/ml	3
• Coagulation parameters markedly abnormal: with serious bleeding or the threat of spontaneous bleeding : unmeasurable PT or PTT; platelet < 20,00/ml ; or undetectable fibrinogen, severe abnormalities of other laboratory values including VCT also fall into this category	4
Central nervous system	
• No symptom/sign	0
• Minimal apprehension, headache, weakness, dizziness, chills or paresthesia	1
• Moderate apprehension, headache, weakness, dizziness, chills, paresthesia confusion, or fasciculation in area of bite site, ptosis and dysphagia	2
• Severe confusion , lethargy, seizure, coma, psychosis, of generalized fasciculation	3

PT: Prothrombin time; PTT : Partial thromboplastin time

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