



Panic Values Table

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إعداد منتدى النقاش الإلكتروني و مجموعة السلامة بمعهد البحوث الطبية

Chemistry

Test	Low	Possible Effect	High	Possible Effect
Albumin	1.7 g/dL	Hepatic failure		
Amylase			>10X ULon (U/L)	Acute pancreatitis
Ammonia			110 umol/L	Hepatic encephalopathy
Bilirubin total (neonates)			>15 mg/dl	Kerniktrus
Bilirubin direct (neonates)			>2mg/dl	Cholangitis –sepsis
Calcium	6 mg/dL	Tetany	13 mg/dL	Cardiac arrest
Calcium, Ionized	0.75 mmol/L	Tetany	1.6mmol/L	Cardiac arrest
Chloride	80 mmol/L	Tremors	120 mmol/L	Lethargy
Cholinesterase (acetyl), RBC	<0.50X LLoN (U/L)	Apneoa		
CO2	<10 mmol/L	Acidosis (m)	>40 mmol/L	Respiratory failure
Creatinine			6.5 mg/dL	Acute renal failure
Glucose	50 mg/dL	Coma	450 mg/dL	Keto acidosis
Iron			>55 umol/L (if age <10 years)	Hematochromatosis
Lipase			>10X ULon (U/L)	Acute pancreatitis
Magnesium	1 mg/dL		4.9 mg/dL	Renal failure, hypothyroidism
Phosphorus	2 mg/dL		8.9 mg/dL	Heart block
Potassium	2.5 mEq/L	Ventricular tachycardia	6.5 mEq/L	Cardiac arrest
Protein (total)	3.4 g/dL	Hepatic failure	9.8 g/dL	Paraproteinemia
Sodium	120 mEq/L	Coma	160 mEq/L	
Urea			200 mg/dL	Acute renal failure
Uric acid			13 mg/dL	

CSF

Test	Low	Possible Effect	High	Possible Effect
WBC	<4000	Infection	>30	Meningitis
Blast/tumor cells			Any	Malignancy

Haematology

Test	Low	Possible Effect	High	Possible Effect
Hemoglobin	< 6g/dL	Heart failure	>20 g/dL	Thrombosis
Hematocrit	15%	Heart failure	>50%	Hemoconcentration
Platelet Count	<20,000 / L	Bleeding	>1,000,000 / L	Thrombosis
Neutrophil Count	<500 / L	Infection	>40000 / L	Hyperviscosity
INR			>6.0	Bleeding
APTT			>100 seconds	Bleeding
Fibrinogen	100 mg/dl	Bleeding / DIC		



Morphology			Positive malaria smears	
			Positive intracellular bacteria in WBC	
Cross match problems			Any positive results	

Urine analysis

Test	Low	Possible Effect	High	Possible Effect
Ketenes			Present	DKA*
Myoglobin			Present	Acute renal failure
Hemoglobin			Present	Intravascular hemolysis

*DKA: Diabetic keto acidosis

Blood gases

Test	Low	Possible Effect	High	Possible Effect
pH	< 7.2	Acidosis, life threatening	> 7.6	Alkalosis, life threatening
pCO ₂	< 20 mmHg		> 65 mmHg	Respiratory failure
pO ₂	< 40 mmHg	Hypoxia		

Microbiology (results could be delayed for several days)

Finding	Significance
Positive blood culture	Septicemia
Positive fungal cultures	Immunosuppression
Positive CSF cultures	Meningitis
Pseudomonas species from eye cultures	Loss of vision
Infection in immune-compromised patients	Overwhelming sepsis

Pathology (results could be delayed for several days)

Finding	Significance
Bacteria in bone marrow or heart specimens	Endocarditis
Crescents in kidney biopsy	Renal failure
Fat in mucosal biopsies, colonic endoscopic polypectomies, endometrial curettage	Perforation
Leukocytoclastic vasculitis	Organ failure
Malignancy	<i>Variable</i>
Mesothelial cells in endomyocardial or transbronchial biopsies	Perforation
Transplant rejection	Loss of graft
Uterine contents without villi or trophoblast	Ectopic pregnancy



Radiology

Finding	Significance
Acute aortic dissection	Ischaemia to vital organs
Acute deep vein thrombosis	Pulmonary embolism
Acute pulmonary embolism	Hypoxia – respiratory failure
Acute spinal cord compression	Loss of vital functions
Acute testicular/ovarian torsion	Necrosis – ischaemia
Ectopic pregnancy	Shock – rupture
Intracranial hemorrhage	Coning
Ischemic bowel	Sepsis
Leaking abdominal aortic aneurysm	Rupture
Massive hemoperitoneum on CT or ultrasound	Shock
Misplacement of tubes or catheters	<i>Variable</i>
New perforated viscus	Sepsis
Pneumothorax, if unsuspected	Respiratory embarrassment, hypoxia
Tension pneumothorax	Respiratory embarrassment, hypoxia
Unstable spine fracture	Spinal cord compression

Therapeutic drugs

Test	High	Possible Effect
Acetaminophen	>660 umol/L (>4 hrs post ingestion)	Liver failure, encephalopathy
Carbamazepine	>63 umol/L	Ataxia, confusion
Digoxin	>3.5 nmol/L (>6 hrs post dose)	Arrhythmia
Lithium	>2.5 mmol/L	Agitation
Phenobarbital	>250 umol/L	Coma, renal failure
Phenytoin	>130 umol/L	Seizers
Salicylate	>3.0 mmol/L	Acidosis, GIT bleeding, renal failure
Theophylline	>220 umol/L	Supraventricular tachycardia
Amitriptyline	>1.8 umol/L	Coma
Gentamicin	Trough >2.0 mg/L (>8 hours post dose for multiple daily dosing)	Renal failure
Valproic Acid	>1400 umol/L	Cardiac arrest, apnea

Toxic drugs

Test	High	Possible Effect
Ethanol (plasma)	>33 mmol/L	Lactic acidosis
Lead	>3.0 umol/L	Porphyria
Methanol	All positives	Blindness