APPENDIX A: CRITICAL VALUES TEST LIST

CRITICAL TESTS (All results to be called)
- Surgical Pathology Frozen Section

CHEMISTRY:

CRITICAL VALUES:
- Amylase---------- Above 345 IU/L
- Bilirubin, Neonate Total--- Above 15 mg/dL
- Calcium------------- Below 6 mg/dL or above 14 mg/dL
- Ionized Calcium----- Below 3.0 mg/dL or above 6.5 mg/dL (adults) -- Below 2.0 mg/dL or above 6.0 mg/dL (<1 yr)
- Carbon Monoxide (CO)--- Above 20%
- TCO2---------------- Below 15 meq/L or above 50 meq/L
- Glucose---------------- Below 40 mg/dL or above 700 mg/dL
- Glucose (NEWBORN)---- Below 30 mg/dL or above 300 mg/dL
- Glucose (CSF)-------- Below 40 mg/dL
- Lactic Acid (plasma)---- Above 5.0 mmol/L
- Lactic Acid (CSF)------ Above 3.2 mmol/L
- Magnesium------------ Below 1.2 mg/dL or above 4.9 mg/dL
- Potassium------------ Below 2.5 meq/L or above 6.5 meq/L
- Potassium (NEWBORN)---- Below 2.5 meq/L or above 7.0 meq/L
- Sodium--------------- Below 120 meq/L or above 160 meq/L
- Total T4------------- Below 2 ug/dl or above 20 ug/dl
- Troponin I----------- ≥ 0.31 ng/mL
- pH-------------------- Below 7.2 or above 7.6
- PCO2------------------ Below 20 mm Hg or above 70 mm Hg
- PO2-------------------- Below 40 mm Hg
- Acetaminophen------ Above 50 ug/ml
- Alcohol--------------- Above 300 mg/dL
- Carbamazepine------- Above 12 mcg/mL
- Digoxin--------------- Above 2.5 ng/ml
- Dilantin/Phenytoin---- Above 30 ug/ml
- Lithium-------------- Above 1.5 mEq/L (Above 1.2 mEq/L (State Operated Services))
- Phenobarbital-------- Above 50 ug/ml
- Salicylates---------- Above 30 mg/dL
- Theophylline/Aminophy--- Above 20 ug/ml (neonates >10)
- Valproic Acid--------- Above 150 ug/ml
- Gentamicin----------- Above 2 ug/ml trough, Above 16 ug/ml peak
- Tobramycin---------- Above 2 ug/ml trough, Above 16 ug/ml peak
- Vancomycin--------- Above 40 ug/ml peak

ALERT VALUES
- Magnesium – Call all results for OB patients on Magnesium

HEMATOLOGY/COAGULATION:

CRITICAL VALUES:
- Prothrombin Time------- Greater than 55 seconds
- INR--------------------- Greater than 5.0
- APTT (PTT)
  On Heparin------- Greater than 90 seconds
  (Therapeutic Range: up to 60 seconds)
  Not on Heparin-------- Greater than 70 seconds
- Fibrinogen------------ Less than 90 mg/dL
- Hemoglobin-------------- Below 5 or above 20 gm/dL
- Hematocrit-------------- Below 15%
- Platelets---------------- Below 10,000/mm3
  Neonates Below 30,000/mm3
- WBC--------------------- Below 2,000 or above 50,000/mm3
- Blasts seen on smears > 1 month (unless previously known)

ALERT VALUES
- Blood Parasites from Peripheral Smear
- Malignant cells seen in body fluids

BACTERIOLOGY/MOLECULAR:

CRITICAL VALUES:
- Positive Blood Culture
- Any indication of Clostridium perfringens on wound culture
- Cryptococcal Antigen
- Any positive gram stain or culture on CSF
- Any positive systemic Fungus culture
- Any positive Group B strep screen or PCR on inpatients
- Any Group B strep isolated from newborns
ALERT VALUES

- Any positive TB smears or cultures
- Increased Antimicrobial Resistance:
  - Carbapenemase-producing Enterobacteriaceae (CRE or KPC)
  - ESBL on inpatient cultures
  - Methicillin resistant Staphylococcus aureus on inpatients (MRSA)
  - Vancomycin resistant Enterococci isolated on inpatients (VRE)
  - Vancomycin intermediate or resistant Staphylococci (VISA or VRSA)
- C. difficile on inpatients
- Legionella Urine Antigen
- Endotoxin testing is positive for Hemodialysis samples
- Biofire Respiratory Panel: when B. pertussis DNA detected
- Biofire Stool studies when positive (pathogen is detected)

URINALYSIS: (NEWBORNS)

CRITICAL VALUES:

- Positive Ketones

BLOOD BANK

CRITICAL VALUES:

- An inability to have compatible blood components available due to positive Antibody Screen or other undue delay.

ALERT VALUES

- All Antibody Screens results for pre-surgical patients

ANATOMIC PATHOLOGY/CYTOLOGY

CRITICAL VALUES

- Malignancy in superior vena cava syndrome*.
- Neoplasms causing paralysis*.
- Bacteria or fungi in CSF cytology.
- Herpes in pap smears of near term pregnant patients*.

*For all of the above marked with a star, the pathologist must be given the appropriate history by the clinician in order to know that these are critical values.

ALERT VALUES

- Any new unexpected malignancy.
- A positive AFB stain.
- New (unexpected) blasts in a blood smear or a new diagnosis of an acute leukemia in a bone marrow.
- Fat in an endometrial curettage (unless a pick up).
- Pneumocystis, fungi (other than contaminating Candida), or viral changes in BAL, bronchial washing or brushing cytology.
- Fungi in FNA, other than fungus considered to be contamination (such as from an endoscopic FNA).
- Clinically significant disagreement between frozen section and final diagnosis.
- Clinically significant disagreement between immediate interpretation and final FNA diagnosis.
- Clinically significant disagreement or change between RMH/MPC interpretation and the outside pathologist consultation.
- Fat in a colonic endoscopic polypectomy that does not represent a submucosal or mucosal lipoma.
- Any other unexpected, potentially significant finding.
- Any case with a high chance of misunderstanding of key features of the report.


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