

Lab Procedure Reference Sheet

Alkaline Phosphatase --

Suspect: Hepatic Disorders (cirrhosis/biliary obstruction/liver tumor)
 Vitamin B imbalances
 Scurvy
 Bone issues
 GI ischemia/infarction
 RA
 Rickets
 Pagets of the bone
 Thyroid disorder

Chiropractic case management – typically referral to PCP/specialist for definitive diagnosis/treatment options.

Calcium --

Suspect: Vitamin D Deficiency
 Parathyroid Issues (kidney stones, bone pain, osteopenia/porosis, GI issues)
 Bone Diseases/Adrenal Diseases

Chiropractic case management – typically referral to PCP/specialist for definitive diagnosis/treatment options.

CBC w/Differential --

Suspect: Infections
 Anemias
 Blood Dyscrasias
 Allergies

Symptoms: Fatigue
 Fever
 Bruising

Possible Findings: RBC changes – for anemias/dyscrasias
 WBC changes – for infections/allergies/dyscrasias
Anemias/bacterial/fungal/parasitic infections/dyscrasias – referral warranted

Comprehensive Metabolic Panel –

Suspect: Liver Issues
 Kidney Issues
 Diabetes
 Mineral Imbalances

Symptoms: Fatigue
 Abdominal/Back discomfort/pain
 Muscle Changes

Possible Findings: Values outside of normal range.

Most likely, referral further evaluation/treatment – possible consideration for additional

examination/dietary/nutrient supplementation – note, if recommendations are given, follow up tests to determine response/change is required.

Electrolyte Panel (typically included in comprehensive metabolic panel – CMP)

Symptoms: Nausea
Weakness
Confusion
Abnormal Heartbeat

Clinical correlation with patient history/symptoms to determine chiropractic case management (dietary, supplements, referral)

ESR (Erythrocyte Sedimentation Rate) – nonspecific test

Suspect: Infections (acute/chronic)
Inflammatory diseases
Necrotic diseases
Severe anemias
Malignancy

Chiropractic case management – typically referral to PCP/specialist for definitive diagnosis/treatment options.

GGT (Gamma-Glutamyl Transferase) – detects liver cell dysfunction

Suspect: Hepatic disorders
MI
Alcohol ingestion
Pancreatitis

Chiropractic case management – typically referral to PCP/specialist for definitive diagnosis/treatment options.

HgbA1c – for diabetes diagnosis

HCG Total (Blood) – pregnancy diagnosis

HCG QL (Urine) – pregnancy diagnosis

Lipid Panel –

Suspect: Hyperlipidemia (Family hx/ADLs)
Liver Dysfunction

Symptoms: N/A (Usually based on patient hx)

Possible Findings: Values elevated, indicated hyperlipidemia
Values decreased, possible hepatic inflammation/injury/disease

Cardiac Risk Ratio (CRR): (Total Cholesterol divided by HDL – reflects risk for possible CVD development. 2-5 is normal range for adult)

Obstetric Panel – initial prenatal testing – typically run by patient's Ob/Gyn

Potassium --

Suspect: GI disorders
 Hepatic disorders
 Renal disorders
 Adrenal disorders
 Infections
 Rx side-effect

Chiropractic case management – typically referral to PCP/specialist for definitive diagnosis/treatment options.

PSA (Prostate Specific Antigen) – prostate issues (Infection/BPH/Cancer)

Protein --

Suspect: Muscle disorders
 Decreased immune function
 Renal issues
Albumin: Maintains osmotic pressure
 Synthesized in liver – levels commonly decrease in the presence of liver disease
Chiropractic case management – typically referral to PCP/specialist for definitive diagnosis/treatment options.

Rheumatoid Factor --

Suspect: Rheumatoid Arthritis
 Autoimmune Diseases
 TB
 Scleroderma
 Chronic Hepatitis
Chiropractic case management – typically referral to specialist for definitive diagnosis/treatment options.

Thyroid Panel –

Suspect: Thyroid Dysfunction
Symptoms: Weight Fluctuation
 GI/GU Symptoms
 Menstrual Changes
 Temperature Sensitivity
 Mood Changes

Possible Findings: Values elevated – hyperthyroidism
 Values decreased – hypothyroidism

Note, that patient's may exhibit thyroid symptoms in the presence of normal lab findings, which may warrant thyroid supplement support.

Abnormal findings – refer to PCP/Endocrinologist.

Vitamin D --

Suspect: Mood Issues
NMS Symptoms
Rickets
Calcium absorption issues (osteopenia/osteoporosis)
Immune system dysfunction
GI malabsorption issues
Acute inflammation presentations
Liver disease

Symptoms: Multiple/based on organ involvement

Supplementation with Vitamin D3 can be beneficial; although, due to fat solubility – regular retesting to evaluate response to supplementation is needed.

Uric Acid --

Suspect: Gout
Malignancies
Renal disease
Thyroid dysfunction
Alcoholism

Chiropractic case management – typically referral to PCP/specialist for definitive diagnosis/treatment options.

Urinalysis Dipstick/Complete –

Suspect: UTI
Kidney Infection/Inflammation
Kidney Stone
Liver Issues
Cystitis
Diabetes

Symptoms: Dysuria
Hematuria
Urinary Frequency
Lower Abdominal &/or Suprapubic &/or Flank Pain
Polydipsia/Polyuria
Fatigue
Fever
Upper abdominal/RUQ pain

Possible Findings: WBC changes
RBC changes
Glucosuria
Budding Yeast
Bilirubin
Urobilinogen

Most likely, referral for further evaluation/treatment.