



Lab Report For:

PATIENT NAME: Drummer Baily

SPECIMEN ID #: 145557

SPECIES: Equine

GENDER: Female

BREED: Arabian

AGE: 15.0

WEIGHT: 920 lb

DRAW DATE: 30-Sep-14

RECEIVED DATE: 1-Oct-14

SAMPLE TYPE: Serum

COMMENTS: none

PATIENT STAGE: unknown

TREATMENT: none

VETERINARIAN: Dr. Michael Brown

FACILITY: Main Street Animal Hospital

11 Main Street

Fairview, CA 99999

PH: 555-555-5151

FAX: 555-555-5252

HPT EQUINE

REPORT DATE: 3-Oct-2014

TEST NAME	RESULT	UNITS	FLAG	REFERENCE INTERVAL
e-HPT equine specific haptoglobin	259.8	mg/dL	M	Decreased (D): < 25 Normal: 25 - 75 Low Inflamm (L): 75.1 - 140 Mod Inflamm (M): 140.1 - 300 High Inflamm (H): ≥ 300.1

Flag Interpretation

Decreased: intravascular hemolysis, severe liver disease

Low to Moderate: Inflammatory diseases such as cancer, IBD, heart, kidney disease

High: Diseases that cause severe inflammatory response such as cancer, IBD, infection, and autoimmune conditions. Infection often triggers HPT levels in excess of 500 mg/dL.

General Comments

HPTequine measures equine-specific haptoglobin (e-HPT), an acute phase protein, produced mainly in the liver as a response to inflammation and the release of cytokines. Serum HPT has been shown to be an effective measure of general inflammation. The concentration of HPT correlates to both the severity and duration of the inflammatory stimuli.

Acute phase proteins constitute a group of proteins (e.g., CRP, haptoglobin, serum amyloid A) which are part of the innate host defense system. Their blood concentration changes rapidly in response to any tissue damaging causes such as infection, immune-mediated disorders, neoplasia, trauma, and others. HPT decreases rapidly when inflammatory stimulation is no longer present.

A low inflammatory state is healthy, however HPT has a role in removing free hemoglobin to prevent kidney damage and to return iron stores. Therefore, HPT levels can be decreased in hemolytic anemia, particularly intravascular. HPT is produced in the liver and may be decreased in severe liver disease.

HPT measurements may be useful for:

Preventative Care Health Screen: The high sensitivity and low specificity of the acute phase response allows for potential detection of subclinical or pre-clinical inflammatory disorders. An elevated HPT indicates the presence, but not the cause, of an inflammatory disease state.

Perioperative Monitoring: HPT levels are expected to increase post-operatively, with the magnitude of increase related to the intensity of the surgical trauma. Normalization of HPT within 1-2 weeks post-operatively has been suggested as being more effective in monitoring post-surgical progress than WBC counts.

Monitoring Disease Progression/Response to Treatment: HPT has been shown to be an effective marker for disease activity and response to therapy in a wide range of inflammatory conditions such as infection, inflammatory bowel disease, IMHA, heart disease, kidney disease and other systemic disorders.

Hemolytic Anemia: HPT binds free hemoglobin levels will be decreased in red cell hemolysis. HPT can be useful in the diagnosis and therapeutic monitoring of hemolytic anemia.

Tech: RR