



Lab Report For:

PATIENT NAME: Allie Albright

VETERINARIAN: Dr. Michael Brown

SPECIMEN ID #: 145556

DRAW DATE: 30-Sep-04

FACILITY: Main Street Animal Hospital

SPECIES: Feline

RECEIVED DATE: 1-Oct-14

11 Main Street

GENDER: Female Spayed

SAMPLE TYPE: Serum

Fairview, CA 99999

BREED: DSH

COMMENTS: none

PH: 555-555-5151

AGE: 7.0

PATIENT STAGE: unknown

FAX: 555-555-5252

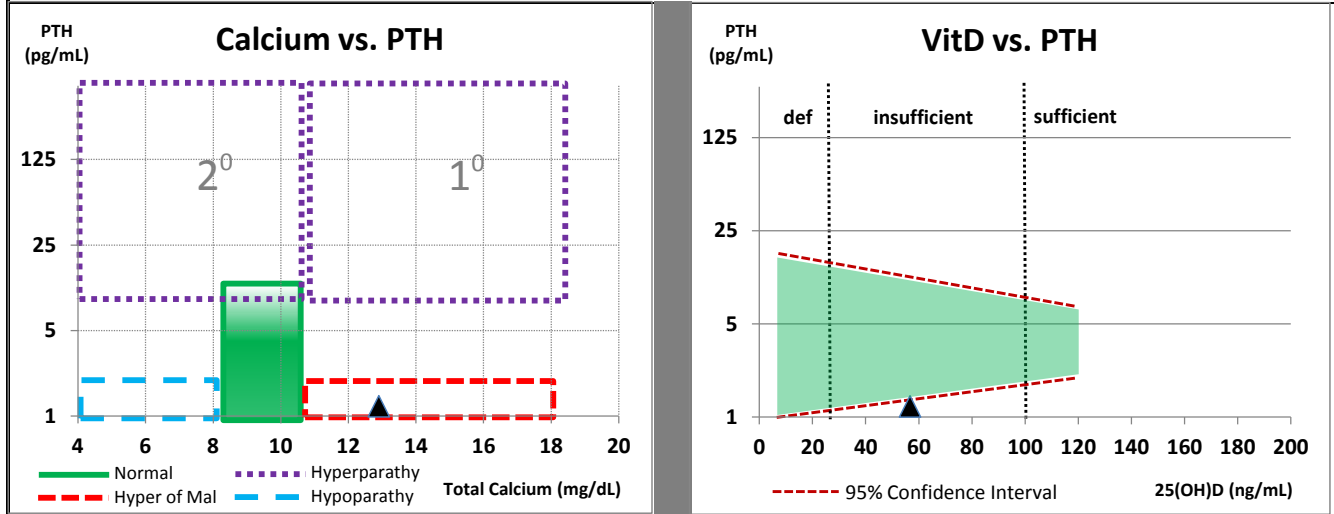
WEIGHT: 9.2 lb

TREATMENT: none

PTH 1-84 FELINE CALCEMIA PANEL

REPORT DATE: 3-Oct-2014

TEST NAME	RESULT	UNITS	FLAG	REFERENCE INTERVAL
<b>PTH 1-84</b> 1-84 parathyroid hormone	<b>1.2</b>	pg/mL		Normal: 1 - 14 Normal w/ Suff VitD: 2 - 8 High (H): ≥ 14.1
<b>VitD</b> 25 hydroxy-vitamin D	<b>56.7</b>	ng/mL	<b>Insuff</b>	Deficient (Def): ≤ 24.9 Insufficient (Insuff): 25.0 - 99.9 Sufficient: 100 - 120
<b>Calcium</b> total calcium	<b>12.9</b>	mg/dL	<b>H</b>	Low (L): ≤ 8.1 Normal: 8.2 - 10.5 High (H): ≥ 10.6



Interpretive Comment

**PTH 1-84 FELINE CALCEMIA PANEL** is a diagnostic tool to assist in the workup of hyper and hypo calcemia and includes PTH 1-84 which measures the complete PTH peptide sequence and is unaffected by PTH fragments; a particular problem in renal disease. To maintain calcium homeostasis, PTH and VitD work in concert to increase or decrease calcium absorption and/or resorption. PTH and VitD are inversely related; as VitD increases, PTH decreases.

**Calcium vs. PTH**

**Normal:** Population based reference interval. The darker shaded area represents where the majority of healthy cats should plot.

**Hypercalcemia of Malignancy:** This area reflects PTH-independent hypercalcemia for which malignant neoplasia is often suspect. Other conditions includes certain granulomatous diseases, hyperthyroidism, vitamin D intoxication and Addison's disease.

**Primary (1) Hyperparathyroidism:** This area reflects PTH-dependent hypercalcemia and due to an over-production of PTH - typically caused by a benign or malignant parathyroid tumor and in some instances 25(OH)D deficiency.

**Secondary (2) Hyperparathyroidism:** This area reflects PTH-independent normo/hypocalcemia. Conditions causing secondary hyperparathyroidism includes 25(OH)D deficiency and kidney disease.

**Hypoparathyroidism:** This area reflects PTH-dependent hypocalcemia and caused by insufficient amounts of PTH. Causes include damage to the parathyroid gland (trauma, chemo drugs, infection) and in certain autoimmune disorders.

**VitD vs. PTH**

There is a normal inverse relationship between 25(OH)D and PTH; the shaded area represents the 95% confidence interval. The normal range of PTH tightens as VitD sufficiency is attained. The two graphs are useful in diagnostic workup. **Call VDI for consultation.**

Interpretive comments are general in nature and in absence of detailed knowledge of patient status or treatment. For more information on specific cases, please contact VDI.

Tech: RR