

Vcheck cPL CASE STUDY

Clinical evaluation of Vcheck cPL kit for the diagnosis of pancreatitis in dogs

Background

Diagnosis of canine pancreatitis is often challenging and relies on a constellation of history, physical examination, and diagnostic findings.

Purpose

To assess the value of the Vcheck cPL kit and its importance in diagnostic decision making

Subjects

31 Dogs in a pancreatitis-suspected group, admitted to an 'A' university animal hospital in Taiwan

31
DOGS



Methods

[Prospective study]

Clinical signs, physical examination findings, hematological and biochemistry analysis, and the Vcheck cPL results were recorded. Consensus scores of 0, 1, or 2 were given based on the evaluation of the likelihood of pancreatitis in dogs by five experienced internists.

Results

Measurement of Vcheck cPL was considered useful in diagnosing pancreatitis with other diagnostic findings, and also in monitoring recovery from pancreatitis along with CRP levels.

CASE 1



- ✓ **History** : Bladder calculus, sweat gland adenocarcinoma at the digit
- ✓ **Clinical sign** : Anorexia, lethargy, panting, abdominal pain, vomiting
- ✓ **Consensus score by experts** : 2/2 (pancreatitis by diagnosis) → Hospitalized
- ✓ **Vcheck cPL** : 1,547 ng/ml (normal < 200), **Vcheck CRP**: 180.6 mg/L (normal < 20)

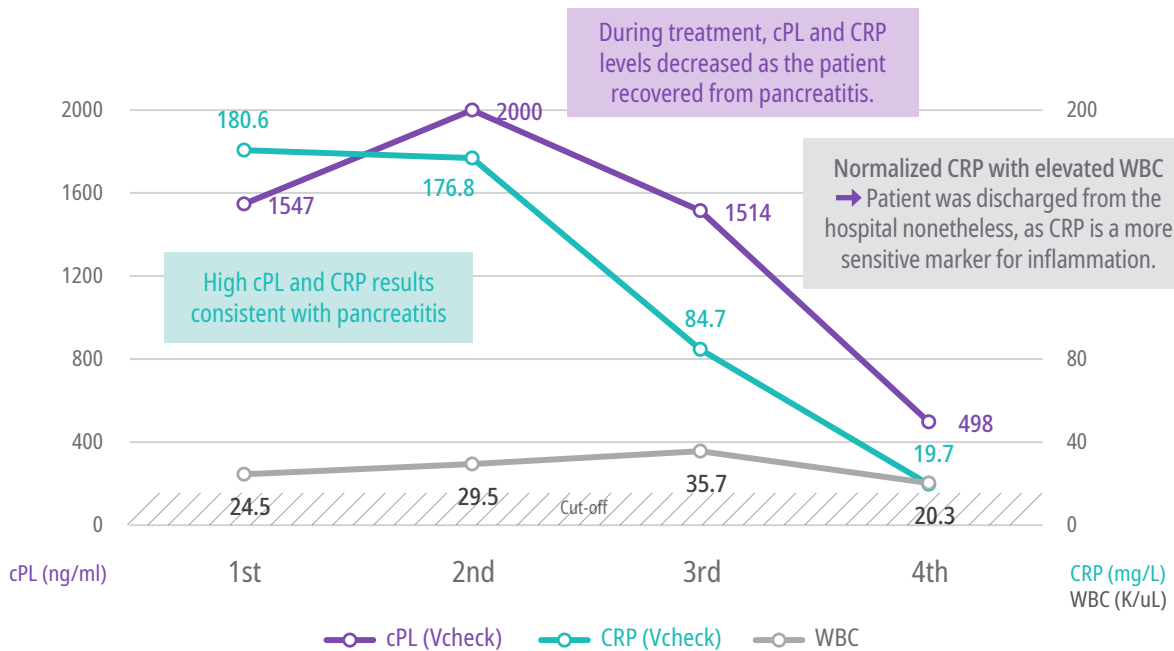
CBC

Parameter	Result	Reference
HCT	45.3 (-)	39 – 56 %
RBC	5.85 (-)	5.5 – 8.5 M/uL
HGB	13.4 (-)	11 – 19 g/dL
WBC	24.5 (High)	5.05 – 16.76 K/uL
NEU	32.4 (High)	2.96 – 11.64 K/uL
LYM	1.19 (-)	1.05 – 5.10 K/uL
MONO	1.19 (High)	0.16 – 1.12 K/uL
PLT	377 (-)	117 – 460 K/uL

Biochemistry

Parameter	Result	Reference
Amylase	> 2500 (High)	500 – 1500 U/L
Lipase	5777 (High)	200 – 1800 U/L
CREA	2.5 (High)	0.5 – 1.8 mg/dL
ALP	3192 (High)	23 - 212 U/L
ALT	220 (High)	10 - 125 U/L
GGT	67 (High)	0 - 11 U/L
Glucose	72 (-)	70 – 143 mg/dL

Real-time monitoring of biomarkers during hospitalization



CASE 2



- ✓ **History** : Hospitalized for pancreatic carcinoma, recurrent illness of vomiting and diarrhea
- ✓ **Clinical sign** : Anorexia, weight loss, vomiting, diarrhea
- ✓ **Consensus score by experts** : 2/2 (pancreatitis by diagnosis) → Hospitalized
- ✓ **Vcheck cPL** : > 2,000 ng/ml (normal < 200), **Vcheck CRP**: 89.3 mg/L (normal < 20)

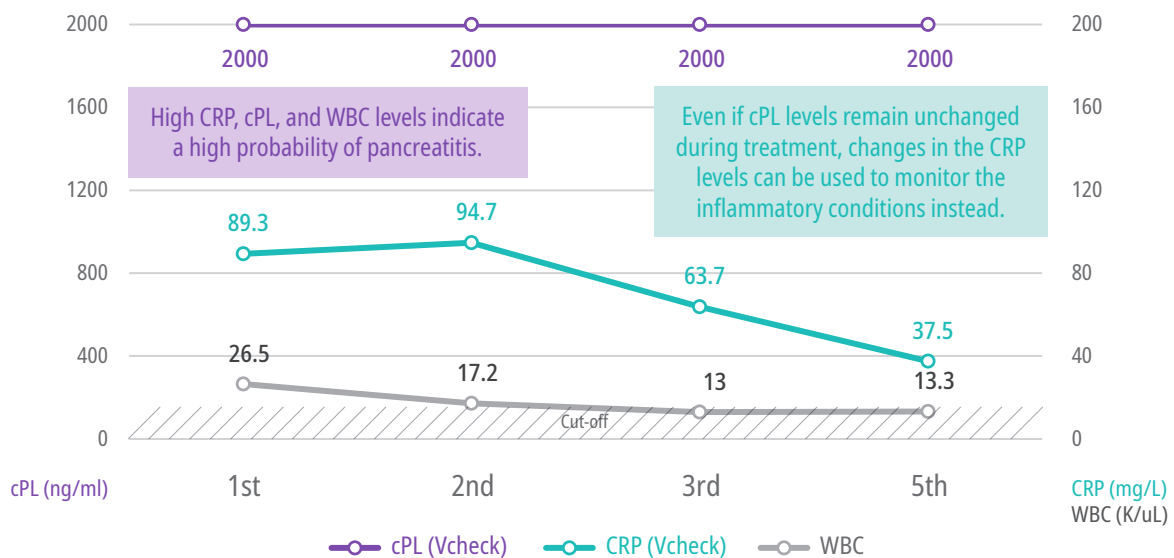
CBC

Parameter	Result	Reference
HCT	47.4 (-)	39 – 56 %
RBC	9.04 (High)	5.5 – 8.5 M/uL
HGB	17.2 (-)	11 – 19 g/dL
WBC	26.45 (High)	5.05 – 16.76 K/uL
NEU	23.95 (High)	2.96 – 11.64 K/uL
LYM	1.72 (-)	1.05 – 5.10 K/uL
MONO	0.54 (-)	0.16 – 1.12 K/uL
PLT	62 (Low)	117 – 460 K/uL

Biochemistry

Parameter	Result	Reference
Amylase	> 2500 (High)	500 – 1500 U/L
Lipase	> 6000 (High)	200 – 1800 U/L
CREA	1 (-)	0.5 – 1.8 mg/dL
ALP	73 (-)	23 - 212 U/L
ALT	38 (-)	10 - 125 U/L
GGT	3 (-)	0 - 11 U/L
Glucose	104 (-)	70 – 143 mg/dL

Real-time monitoring of biomarkers during hospitalization



CASE 3



- ✓ **History** : Pancreatitis, diabetes (under control)
- ✓ **Clinical sign** : Acute abdominal pain, vomiting
- ✓ **Consensus score by experts** : 2/2 (pancreatitis by diagnosis) → Hospitalized
- ✓ **Vcheck cPL** : 1,426 ng/ml (normal < 200), **Vcheck CRP** : 117.5 mg/L (normal < 20)

CBC

Parameter	Result	Reference
HCT	36.6 (Low)	39 – 56 %
RBC	5.96 (-)	5.5 – 8.5 M/uL
HGB	13.6 (-)	11 – 19 g/dL
WBC	5.82 (Low)	5.05 – 16.76 K/uL
NEU	4.25 (-)	2.96 – 11.64 K/uL
LYM	1.27 (-)	1.05 – 5.10 K/uL
MONO	1.08 (-)	0.16 – 1.12 K/uL
PLT	394 (-)	117 – 460 K/uL

Biochemistry

Parameter	Result	Reference
Amylase	1199 (-)	500 – 1500 U/L
Lipase	1822 (High)	200 – 1800 U/L
CREA	1.1 (-)	0.5 – 1.8 mg/dL
ALP	1536 (High)	23 - 212 U/L
ALT	71 (-)	10 - 125 U/L
GGT	8 (-)	0 - 11 U/L
Glucose	576 (High)	70 – 143 mg/dL

Real-time monitoring of biomarkers during hospitalization

