



了解您寵物的血液檢驗

※血液檢驗讓我們能準確,安全,快捷地認定致病的原因,更讓我們有效地監察著動物的醫療過程.作為主人的您了解寵物病情之餘,並可參與寵物的治療程序.如有任何疑問,歡迎與診所職員聯絡.※

血液生化化驗

此類血液檢驗能鑑定內臟功能,電解質及荷爾蒙等含量.此檢驗對年老動物出現嘔吐,肚瀉,長期服藥者及將進行麻醉程序者,尤其重要.

血液生化項目	檢查器官	應用
ALB 白蛋白	肝腎	由肝臟分泌.此蛋白水平異常時,可能有肝病,腎病,脫水,腸胃道疾病或被寄生蟲感染.
ALKP 鹼性磷酸酶	肝	ALKP 的提升代表著肝臟受損,庫興氏綜合症(Cushing's disease),或年幼動物骨質增長.ALKP 檢驗於貓隻身上尤其俱代表性.
ALT 谷丙轉氨酶	肝	貓狗的肝病診斷指數.肝臟受損或肝病的會明顯上升,但不能顯示受損成因。
AMYL 澱粉酶	胰臟	胰臟指數的指標.胰臟製造和分泌澱粉酶,有助消化. AMYL指數上升與胰臟或腎臟出現毛病有關
UREA 血液尿酸素氮	腎	血液尿酸素氮由肝臟產生.並由腎臟排泄.肝病,腎病,脫水等可使UREA上升.主要是用來顯示腎臟功能的
Ca 鈣	---	維持心肌,神經肌肉正常的應激性,同時參與血液凝固,激活酶的活性.腫瘤,副甲狀腺機能亢進症(Hyperparathyroidism),腎病,低白蛋白(ALB),亦有其他疾病令Ca於血液含量有所偏差.
CHOL 膽固醇	肝	由肝臟分泌,反應膽管功能及肝功能,通常用於補充判斷疾病如肝病,庫興氏綜合症(Cushing's disease)和糖尿病
CREA 肌酸酐	腎	肌肉代謝產物,由腎臟排除,腎臟或尿道阻塞時會上升.如腎衰竭
GLOB 球蛋白	肝	血液中的一種蛋白質,此蛋白質上升代表長期炎症或某幾種疾病,並用作反映肝功能是否正常.由肝臟製造,存在於血液中
GLU 血糖	全身性	血糖於血液檢測中增加有可能是由糖尿病引起.血糖過低能引致虛脫,抽筋或昏厥.
PHOS 磷	腎	磷的升高與腎臟疾病(由其是末期腎病),甲狀腺機能亢進症(Hyperparathyroidism)或出血病症有關.
TBIL 總膽紅素	肝膽	膽紅素是膽汁的成份,由肝臟分泌到小腸.主要用於評估膽管系統及某些貧血的情況.
TP 血清總蛋白質	全身性	動物身體內的血清總蛋白質量有助於診斷肝,腎狀況,脫水,腸胃毛病和炎症

電解質

NA 鈉	此電解質會因嘔吐,肚瀉,腎病或愛迪生氏病而於血液中減少.亦能幫助了解動物身體內的水份含量.
K 鉀	嘔吐,肚瀉或排尿過量能令此電解質流失.鉀增加可能是因為腎臟衰竭,愛迪生氏病(Addison's disease),脫水或尿道梗阻.過量的鉀甚至會做成心臟停頓
Cl 氯	當動物出現嘔吐,或患上愛迪生氏病(Addison's disease):腎上腺皮質功能減退時,此電解質便會因此而流失.脫水會令氯於血液中的含量增加.

全血指數(CBC)

全血指數(CBC)是最常見的血液檢驗.CBC 能夠提供寵物各樣身體狀況,如有沒有脫水,貧血,細菌感染,血凝結的能力或免疫系統的反應能力等. CBC 檢驗對對有發燒,嘔吐,肚瀉,身體虛弱,牙肉蒼白或食慾不振等病徵的寵物是必需的. 施手術之前做全血指數亦可偵察到肉眼看不到的異常情況,以察安全.

HCT 血細胞百分比	血液中紅血球的百分比,可顯示貧血或脫水等徵
HGB 血紅蛋白	血紅蛋白是紅細胞主的主要部分,血紅蛋白能反映貧血程度
MCHC 平均紅細胞血紅蛋白濃度	鑒別貧血性質
WBC 白血球數量	身體的免疫細胞,白血球過多或少顯示某種疾病或感染.生理性增多,見於妊娠,劇烈運動,暴熱或嚴寒.病理性增多,主要受中性粒細胞影響
GRANS 顆粒白血球,淋巴細胞	
%GRANS	
NEUT 中性粒細胞	病理性增多:見於病原生物物的感染,急性溶血反應,急性大量出血 病理性減少:見於傷寒,病情性感染,幅射,再生障礙性貧血. 重度感染,抵抗力弱者. 若中性粒細胞不升降則是預後不良.
EOS 嗜酸性粒細胞	偵測過敏反應及其嚴重程度,寄生蟲感染,抗凝血素敏感度,急性嗜酸性. 細胞粒過多症
L/M 淋巴細胞	增多,見於病毒感染,慢性感染,手術後,白血病. 減少,見於嚴重化膿性感染,幅射.
%LM	
PLT 血小板數量	病理性增多,見於骨髓增生異常,急性大腸出血後,脾切除後,血小板增生症 病理性減少,見於牛蟬熱,骨髓生成障礙,貧血,肝病, DIC 消耗過多,脾功能亢進,免疫性血小板減少性,骨髓腫瘤(原發或繼發)
Retics 網狀紅血球	未成熟的紅血球,數量過多顯示可再生升貧血

荷爾蒙測試

Cortisol 皮質醇	用來判斷庫興氏綜合症 (Cushing's disease) 或愛迪生氏病 (Addison's disease) 的荷爾蒙. 測試名稱爲 low-dose dexamethasone suppression test 和 ACTH stimulation test
T4 甲狀腺素 Thyroxine	甲狀腺素是身體內的一種荷爾蒙. 此荷爾蒙下降(甲狀腺不足:hypothyroidism) 於狗隻中較常見,而甲狀腺功能亢進(hyperthyroidism) 則於貓身上比較常見.



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Understanding your pet's blood work!

Blood tests help us to determine causes of illness accurately, safely, and quickly and let us monitor the progress of medical treatments. If you have questions, ask any of our staff member. We want you to understand our recommendations and be a partner in your pet's care.

Complete Blood Count (CBC)

CBC gives information on hydration status, anemia, infection, the blood's clotting ability, and the immune system's ability to respond. This test is essential for pets with fevers, vomiting, diarrhea, weakness, pale gums, or loss of appetite. If your pet needs surgery, a CBC can detect unseen abnormalities.

- HCT (hematocrit) measures the percentage of red blood cells to detect anemia and dehydration.
- Hb and MCHC (hemoglobin and mean corpuscular hemoglobin concentration) hemoglobin is the oxygen-carrying pigment of red blood cells (corpuscles).
- WBC (white blood cell count) measures the body's immune cells. Increases or decreases indicate certain diseases or infections.
- GRANS and L/M (granulocytes and lymphocytes/ monocytes) are specific types of white blood cells.
- EOS (eosinophils) are a specific type of white blood cells that may indicate allergic or parasitic conditions.
- PLT (platelet count) measures cells that from blood clots.
- RETICS (reticulocytes) are immature red blood cells. High levels indicate regenerative anemia.

Blood Serum Chemistries

These common tests evaluate organ function, electrolyte status, hormone levels, and more. They are important in evaluating the health of older pets, pets with vomiting and diarrhea or toxin exposure, pets receiving long-term medications, and preanesthetic patients.

General and Pre-Anaesthetic Profile

- ALB (albumin) is a serum protein that helps evaluate hydration, hemorrhage, and intestinal, liver, and kidney disease.
- ALKP (alkaline phosphatase) elevations may indicate liver damage, Cushing's disease and active bone growth in young pets. This test is especially significant in cats.
- ALT (alanine aminotransferase) is a sensitive indicator of active liver damage but doesn't indicate the cause.
- AMYL (amylase) elevations show pancreatitis or kidney disease.
- BUN (blood urea nitrogen) indicates kidney function. An increased blood level is called azotemia and can be caused by kidney, liver, and heart disease, urethral obstruction, shock, and dehydration.
- Ca (calcium) deviations can indicate a variety of diseases. Tumors, hyperparathyroidism, kidney disease, and low albumin are just a few of the conditions that alter serum calcium.
- CHOL (cholesterol) is used to supplement diagnosis of hypothyroidism, liver disease, Cushing's disease, and diabetes mellitus.
- CREA (creatinine) reveals kidney function. This test helps distinguish between kidney and nonkidney causes of elevated BUN.
- GLOB (globulin) is a blood protein that often increases with chronic inflammation and certain disease states.
- GLU (glucose) is a blood sugar. Elevated levels may indicate diabetes mellitus. Low levels can cause collapse, seizures, or coma.
- PHOS (phosphorus) elevations are often associated with kidney disease, hyperthyroidism, and bleeding disorders.
- TBIL (total bilirubin) elevations may indicate liver or hemolytic disease. This test helps to identify bile duct problems and certain types of anemia.
- TP (total protein) indicates hydration status and provides information about the liver, kidneys, and infectious diseases.
- LIP (lipase) is an enzyme that may indicate pancreatitis.

Electrolytes

- Na (sodium) is an electrolyte lost with vomiting, diarrhea, and kidney or Addison's diseases. This test helps to indicate hydration status.
- K (potassium) is an electrolyte lost with vomiting, diarrhea, or excessive urination. Increased levels may indicate kidney failure, Addison's disease, dehydration, and urethral obstruction. High levels can lead to cardiac arrest.
- Cl (chloride) is an electrolyte often lost with vomiting and Addison's disease. Elevations often indicate dehydration.

Hormones

- T4 (thyroxine) is a thyroid hormone. Decreased levels often signal hypothyroidism in dogs, while high levels indicate hyperthyroidism in cats.
- Cortisol is a hormone that is measured in tests for Cushing's disease (the low-dose dexamethasone suppression test) and Addison's disease (ACTH stimulation test).