

UC Veterinary Medical Center – San Diego

Our mission is to discover, apply and disseminate new knowledge to promote animal health and welfare, and to advance the diagnosis, treatment, control and prevention of animal diseases. In addition we strive to provide high quality veterinary medical care and client services for all.

The University of California Veterinary Medical Center – San Diego brings specialized clinical services to veterinarians and pet owners living in Southern California. The University of California Veterinary Medical Center – San Diego is a center of excellence based on cooperation with the UC Davis School of Veterinary Medicine, UC San Diego Health Sciences, and animal institutes of the San Diego region.



The center promotes and enhances animal health through interdisciplinary teaching, research, service and outreach.

Clinical Leadership



Dr. Larry D. Cowgill, DVM, PhD,
Dipl. ACVIM - Director



Dr. Sheri Ross, DVM, Dipl. ACVIM



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VETERINARY MEDICINE

UC Veterinary Medical Center – San Diego

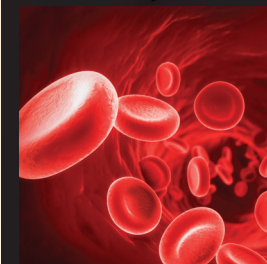
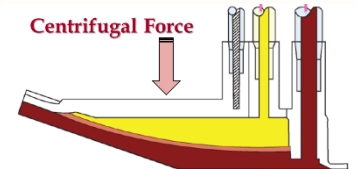
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THERAPEUTIC APHERESIS



**UC Veterinary Medical Center
San Diego**



The UC Veterinary Medical Center – San Diego announces the availability of Therapeutic Apheresis (therapeutic plasma exchange, plasma adsorption, and leukopheresis) as an addition to its extracorporeal offerings in Sorrento Valley.



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WELCOME

to the UC Veterinary
Medical Center – San Diego

What is Therapeutic Apheresis?

Therapeutic apheresis is a process of selectively removing blood components (plasma, RBCs, WBCs, and platelets) from continuously flowing blood by centrifugation.

▣ **Therapeutic Plasma Exchange (TPE)** is the procedure to remove pathologic substances (generally pathologic antibodies and exogenous toxics) from patients with immune-mediated or autoimmune diseases, drug overdosage, or poisoning.

▣ **Plasma Adsorption** selectively removes exogenous poisons, drugs, or endogenous substances (cytokines, cholesterol) which are not removable by hemodialysis.

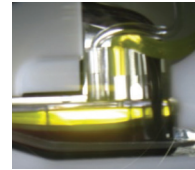


▣ **Leukopheresis** selectively removes abnormal RBCs and malignant leukocytes. Alternatively, healthy components of the buffy coat (platelets, lymphocytes, stem cells, granulocytes) are harvested for selective processing and reinfused for immunotherapy or transplantation.

Indications for TPE

Neuromuscular Diseases

- Myasthenia gravis
- Polyradiculoneuritis
- Acute polymyositis



Hematologic Diseases

- Immune-mediated hemolytic anemia
- Immune-mediated thrombocytopenia
- Hyperviscosity syndrome
- Hyperleukocytosis (leukemia)
- Polycythemia
- Pure red cell aplasia (anti-EPO antibodies)
- Neonatal isoerythrolysis
- Red blood cell exchange

Kidney Diseases

- Lyme-associated nephritis
- Systemic lupus
- Lepto-associated pulmonary hemorrhage
- Lyme-associated glomerulonephritis

Metabolic Diseases

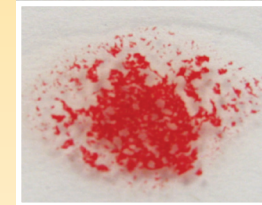
- Acute hepatic failure
- Hyperlipidemia

Miscellaneous

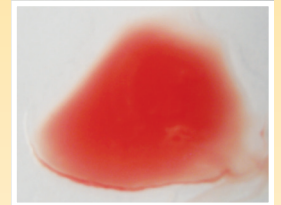
- Drug overdosage
- Exogenous toxin removal
- Polyarthritis
- Pemphigus foliaceus



Immune-mediated hemolytic anemia



Pre treatment



Post treatment

Effects of a single (3-hour) TPE treatment to correct severe in-saline agglutination in a dog with IMHA.

Therapeutic Plasma Exchange should be considered as a **FIRST LINE** treatment for severe IMHA.



Therapeutic plasma exchange and plasma adsorption for acute poisoning