Who we are

Dr. Sarah Steinbach
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Small Animal Internal Medicine

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Veterinary Specialist
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What is hemodialysis?

Hemodialysis is a lifesaving procedure for acute kidney injury and often the only option in oliguric and anuric patients with fluid overload.

- Can be used to treat intoxications including ethylene glycol, baclofen, NSAIDs and many more.
- Helps to stabilize patients with urinary obstruction prior to surgery.
- May be a life-prolonging option in patients with chronic kidney disease.

Every patient is different and we can discuss the case with you to find out if hemodialysis would be appropriate. It also allows us to answer any questions you might have about the procedure to better inform your client.

Contact Us

Referral Help Desk 765-496-1000
After Hours Emergency 765-494-1107
Clients 765-494-1107

Tina Turner, a 7 year old Affenpinscher, underwent a life-saving hemodialysis procedure after ingesting as much as 45x the recommended dosage of Rimadyl. Rimadyl can cause acute kidney or liver injury when ingested in high doses. After a single five-hour dialysis treatment, Tina Turner was able to return home without acute kidney injury despite her binge.

"Dialysis can change the outcome for a patient experiencing toxicity," said Dr. Steinbach. "If caught early enough, it will clear the blood of toxins before they cause damage to the kidney and liver. If you can decrease the level of toxins, you will decrease the level of organ damage."
Frequently Asked Questions

I am suspicious about ethylene glycol poisoning in my patient, when should I contact you?
ASAP! Hemodialysis is able to remove the toxin before it actually causes damage to the kidney. Therefore the earlier an animal is treated the better (this is not only true for ethylene glycol but for many other toxins too). Nevertheless, to prevent metabolism of ethylene glycol until the animal arrives at Purdue, standard of care (intravenous ethanol or fomepizol) is necessary. Please contact us as soon as possible and we will guide you through the process.

I have a case I want to refer for hemodialysis, how do I proceed?
As for any other referral call our referral help desk at 765-496-1000 and let them know that you have a case for possible hemodialysis. One of the hemodialysis doctors will then speak to you to get some background information on the case and discuss how to proceed.

I have a case, which might need hemodialysis, but it is out of normal business hours. What should I do?
Contact our emergency service (765-496-7911). They will either directly arrange a referral or get in contact with the hemodialysis back-up to discuss the case with you.

Does hemodialysis heal kidney disease?
No, it does not. Hemodialysis is able to remove waste products accumulating in the body due to failing kidneys. In patients with acute kidney disease it buys time for the kidney to recover, while we can make the patient feel better. In chronic kidney disease, it helps take away the same waste products, but there is no hope for recovery. Once started, chronic therapy is necessary.

I have a patient with AKI, but I am not sure if the patient would profit from hemodialysis, what should I do?
Hemodialysis should be considered as a treatment option as it can speed up recovery for many patients. Feel free to call us as early as possible in the disease process and we can discuss the options with you. If hemodialysis is not an option for your patient, we are more than happy to discuss conservative treatment strategies with you.

How many treatments are necessary?
This depends heavily on the indication and degree of damage to the kidney. To treat intoxications generally only a single treatment is necessary and the patient may be able to go home the next day. In patients with AKI, often multiple treatments are necessary over a period of several days and patients will usually need to be hospitalized for 7 – 10 days. With chronic kidney disease, chronic treatments will be performed on an out-patient basis 2-3 times a week.

Can a cat have hemodialysis?
The simple answer is yes. But, the smaller the patient the more challenging the treatment. Usually small patients (<4 kg) will need a blood transfusion for each treatment. Please call us and we can discuss if hemodialysis is an option.

I just want to know more about it!
You can find more information on our service on www.vet.purdue.edu/hemodialysis. If you have specific questions do not hesitate to contact us directly through our referral help desk 765-496-1000 and as to speak to one of the hemodialysis doctors.

What can I tell a client whom I refer for hemodialysis?
Usually we will discuss important information with you during your initial referral call. On our website you can find important information on hemodialysis. You will also find a pdf document summarizing some important facts about hemodialysis for clients. Feel free to print those out for your client.

Know Your Vowels
Use the mnemonic below to remember common indications for hemodialysis:

- Acid base problems
- Electrolyte Problems
- Intoxications
- Overload of Fluids
- Uremic Symptoms

Call us as early as possible if you think you have a patient that might benefit from hemodialysis.