Contrast Studies – What to Know & Expect

A variety of contrast studies are available; each utilizing a contrast agent. After administration of the contrast agent, a series of diagnostic images are then taken to track the contrast agent through a particular body function.

A veterinarian may recommend a contrast study to for further evaluation of an organ(s) or their function(s). Your pet may receive a:

- **Cystogram:** a contrast agent is injected into the bladder via a urinary catheter to produce images of your pet's bladder.
- **Intravenous Pyelogram (IVP)/Excretory Urogram**: a contract agent is injected intravenously via a catheter to produce images of your pet's kidneys, their collecting or drainage system (the ureters), and the bladder.
- **Fistulogram**: a contrast material is injected into a visible opening to produce images of a fistula.
- **Abdominal Angiogram:** a contrast agent is injected intravenously via a catheter into your pet to look at blood flow and vessels in organs in your pet's belly (i.e., liver, spleen). A CT (computed tomography) scan will typically be utilized with the angiogram.
- **Positive Contrast Esophogram:** a barium contrast material is administered orally to produce images of the esophagus, stomach, and small intestine. Images may be produced using a special x-ray (fluoroscopy) to see internal organs in motion. An x-ray examination that evaluates only the pharynx and esophagus is called a barium swallow.

Preparation: Read our *Client Preparation Guide* to prepare for your pet's appointment. This procedure requires your pet to remain relaxed and motionless for a period of time, and may require sedation and/or anesthesia. For further information, refer to our Sedation and Anesthetic Fact Sheet. We also recommend all of our clients become familiar with our *Terms and Conditions*.

Process: For scheduled procedures, your pet must be admitted for the day.

1. During admission, we will ask you to sign consent forms for the procedure and address questions you may have.
2. Once admitted, a veterinarian will evaluate your pet, their medical history and lab work, and any radiographs (if applicable).
3. An intravenous catheter will be placed in a leg vein for the administration of anesthetic agents. This requires hair clipping at the site. In rare circumstances, a small area on your pet's chest may also be shaved to place a patch that monitors heart rate.
4. Depending on the type of study, the contrast material may be injected through an IV, urinary catheter, or administered orally.
5. Your pet will then be moved to the imaging suite, positioned, and the study conducted. A specially trained registered veterinary technician will be with your pet during the whole process to monitor their health status.
6. During the procedure, your pet may be placed in various positions to obtain the best quality images.
7. Images are taken at several intervals (i.e., 5, 10, and 20 minutes). Completion is determined upon what appears on each image. For example, if only one kidney and its ureter are seen after the 5, 10, and 20-minute images are taken, the doctor will then decide when further images should be taken.
8. Once the study is completed, your pet will be brought to our intensive care unit, where a team of veterinarians and registered veterinary technicians will continue to monitor your pet during their recovery.
9. Once a veterinarian has determined that your pet is cleared for discharge, we will call to inform you that your pet is ready to go home.
10. After evaluating all of the information, the radiologist will then be able to make any recommendations on treatment, medication, and/or further diagnostics, and will provide a report to your veterinarian within 24 hours. Your veterinarian will discuss the study findings with you.
11. If additional procedures are required (aspiration or biopsy), you will be contacted prior to the procedure and the benefits/risks and associated costs will be discussed. Any additional results will be forwarded to your veterinarian when they are received.

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