

INFORMATION SHEET for OWNERS

CLOSURE OF PATENT DUCTUS ARTERIOSUS

About your pet's referral to HeartVets

This information sheet has been designed to help you understand more about the procedure, includes a summary of what to expect and the answers to some commonly asked questions.

Afternoon Before:

We will admit your pet to the hospital the day before the procedure, this will give them a chance to settle in and for you to meet one of our cardiologist. During the consultation, our cardiologist will discuss the procedure, examine your pet and perform an ultrasound scan of the heart to double check everything and take the initial necessary measurements.

Your pet can have food and water as normal prior to being admitted on Tuesday afternoon. Please remember if they are on any medications or special diets, to bring them with you on the day.

Morning of the Surgery

Your pet will be given a premedication, which has a mild sedative effect, this will allow the cardiologist to perform a final ultrasound scan of the heart to double check the measurements.

A general anaesthetic is then performed, and your pet will be prepared for surgery. This will include clipping the fur from the surgical site, the area will then be given a thorough clean to ensure they are ready for the sterile procedure. Your pet will then be taken into our fully equipped dedicated surgical theatre and the operation performed.

Once the surgery has been completed, you will be telephoned by the cardiologist to let you know how everything has gone. Your pet will be well looked after by our nursing team whilst he/she is recovering from their anaesthetic and will be transferred to a warm padded bed to wake up. We will ensure adequate pain relief is given and once fully awake they will be offered a small amount of tummy friendly food.

On Wednesday afternoon, a follow-up ultrasound scan of the heart is performed to ensure everything is looking as it should.

Our dedicated ward nurses will closely monitor your pet for any complications such as bleeding or bruising from the surgical wound. One of the team will be in touch to arrange a suitable collection time on Thursday.

Day of Discharge

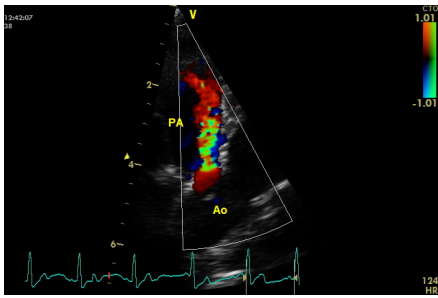
When you come to collect your pet, you will have a consultation with the cardiologist to discuss the surgery performed and go through the discharge instructions. We will also provide you with a written summary, as we appreciate it can be a lot to take in, a copy of which will be sent to your own vet.

Ensuring your pet is ready for surgery

Your pet is about to undergo a sterile procedure, it is important that they are clean and don't have any skin infections (including fleas) that could potentially contaminate the surgical site or implants.

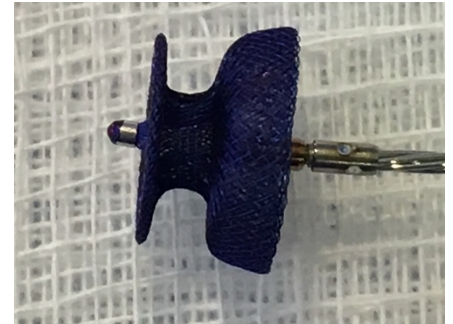
If necessary, please give your pet a bath prior to your appointment.

Patent Ductus Arteriosus (PDA)

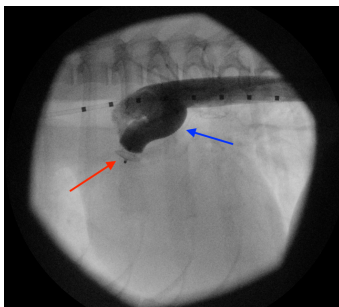


Patent ductus arteriosus (PDA) is a vessel connecting the two major cardiac vessels (the aorta and the pulmonary artery) which should have closed at birth. If left untreated, a PDA causes the heart to enlarge over time, eventually causing fluid to build up on the lungs ("heart failure"). Without treatment, about half of dogs with a PDA would die before their first birthday.

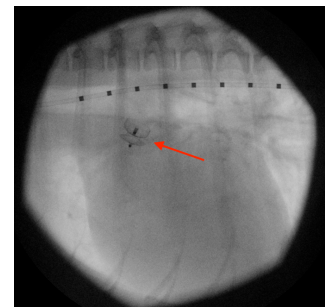
We close PDAs by passing catheters via the artery in the back leg and plugging the abnormal blood vessel with a metal plug (Amplatz Canine Duct Occluder – see imaged on right) to stop flow through it. This device has been specifically designed for use in dogs. Part of the assessment we make is to measure the size of the PDA (with ultrasound, or "Echo") to make sure that we fit the right size of ACDO. In our hands the success rate is very high and usually only involves an overnight stay after the procedure. Importantly, there is minimal pain, compared to traditional surgery.



Heartvets is one of the few specialist centres in the UK to regularly perform PDA closure. Due to our considerable experience we have a high success rate and the long-term outcome is very good.



This X-ray image shows an angiogram with dye inside the aorta and Ductus Arteriosus (blue arrow), to test the effectiveness and positioning of the ACDO before being released from the delivery catheter (red arrow). There is no contrast ('dye') escaping past the ACDO which indicates that it is in a good position and providing complete closure.



Once we have confirmed the ACDO (red arrow) is in a good position, it is then released from the delivery catheter and left in place in the heart, closing the vessel.

Following a successful PDA closure, the prognosis is excellent with a normal life expectancy, when there is no heart enlargement or evidence of congestive failure. If there were signs of heart enlargement or fluid build-up before closure then some dogs may need to stay on medication.

Before recommending PDA occlusion, one of our cardiologists will need to examine the patient and perform tests to confirm the diagnosis, measure the size of the heart and PDA and check for other heart defects which could affect the procedure.

We always recommend a follow-up scan by a cardiologist 3 to 6 months after the operation, to check that everything stays in place and to monitor the heart size and function. If your pet has been diagnosed with a PDA, ask your vet to contact us to discuss options for treatment.