

Porto-Systemic Shunt

What is the portal vein?

The portal vein is a large vein in the abdomen that drains the stomach, intestines, pancreas and spleen, and empties into the liver. The liver then processes this blood (including the dissolved nutrients from food) into molecules that the body can use.

What is a shunt, and what are the symptoms?

Any abnormal communication between the portal vein and the other abdominal veins. It results in the blood being diverted (shunted) away from the liver, meaning the blood is not properly processed. This results in a liver that is too small, but also a build-up of toxins within the blood which can eventually damage your pet's brain. Affected dogs are usually young, small for their age, slim and can have various other symptoms including diarrhoea, dizziness, blindness and seizures (fits).

Investigation and treatment

You will have a consultation with either an internal medic or a surgeon. Both will be able to discuss the disease in more detail. Your pet will then have a full physical examination, blood tests and either an ultrasound or CT-scan of the abdomen. If a portosystemic shunt is diagnosed, surgery is rarely performed straight away, and medical management is usually used for at least one month in order to normalise your pet's blood chemistry first. When surgery is performed, the abnormal blood vessel must be identified and either tied-off, or slowly occluded to allow the liver to grow.

Why have I been referred?

Diagnosis and management of portosystemic shunts often requires advanced diagnostic imaging and the expertise of experienced medics and surgeons. Correct pre-operative management is vital to ensure the safety of your pet, and offers the best post-operative outcomes. Following surgery, you pet would be recovered in our dedicated ICU with intensive nursing management to ensure comfort. Our hospital is staffed 24h per day with vets and nurses, who can assist your pet's recovery from surgery and anaesthesia.

Prognosis

Most dogs do well after portosystemic shunt surgery, however the prognosis often depends on pre-surgical symptoms. Dog are usually hospitalised for 3-4 days post operatively to ensure close monitoring. Unfortunately, some dogs develop post-operative complications, including seizures and a build up of pressure within the abdomen but the vets and nurses on site will be able to notice these symptoms and intervene immediately. We often repeat blood tests a few weeks after surgery to determine the success of the procedure.