



Why choose Laparoscopic Ovariectomy?

There is a reduction in the amount of pain after the keyhole spaying operation.

The surgical incisions are much smaller with keyhole surgery: two midline incisions 0.5 cm to 1 cm compared to a single 3 cm to 15 cm incision, which means your dog is likely to have a speedier recovery. The benefits can be appreciated better in larger dogs as the instruments are the same for all dog sizes.

Your pet will return to their normal level of exercise sooner. Normally she must rest for 10-14 days, but after laparoscopic surgery only 5 days rest is required on average.

There is a significantly reduced risk of complications.

Can every dog have keyhole surgery for neutering?

For very small dogs, there is not enough space for our keyhole cameras and instruments. Traditional open surgery is safer in such small patients. This can be discussed with your vet to ensure the most appropriate surgery is undertaken. For older dogs, who may already have early stages of disease in their womb or for dogs with confirmed disease of their womb (e.g. pyometra), traditional open surgery to allow easy removal of the womb is advised. We would also recommend open surgery in patients that are severely overweight, although, as with traditional surgeries, a pre-surgical weight loss programme to reduce overall increased risk would be recommended.

What does Laparoscopic Ovariectomy involve?

In many ways the process is similar to the traditional spay, all aspects of pre-surgical preparation are identical and your pet will only need to be with us for the day. The main difference is the process once your pet is under anaesthetic. Two small incisions are made on the dog's abdomen along the midline. A small amount of carbon dioxide gas is introduced internally through the first, smaller incision, to lift the body wall away from the internal organs, creating an internal 'tent' effect. A small camera is then inserted into the patient through the same incision to visualise the ovaries and other abdominal organs. Surgical instruments are inserted through the second, slightly larger incision, to remove the ovaries. We only remove the ovaries and leave the womb (uterus) inside.

Why does the laparoscopic ovariectomy cost more than a traditional spay?

Keyhole surgery requires the use of highly specialised equipment, including small cameras, video screens and special instruments (e.g., vessel sealers), some of which can only be used a few times or only once.

Does keyhole spaying have any downsides?

For keyhole surgery, we clip a larger area of fur extending up both sides of the dogs. This allows us to pick up the ovaries internally from the outside as they are actually

very close to the spine of a dog. Complications can happen with any surgery, but they are very rare. In the worst case, keyhole surgery is converted to traditional open surgery, with no long-term consequences.

I see that only the ovaries are removed, what are the health risks to my pet if the womb is left inside?

Simple removal of the ovaries is less traumatic than combined removal of the ovaries and womb. Womb disease in dogs, including infection and cancer, are mainly due to the female hormone, oestrogen. Oestrogen is produced by the ovaries, so as long as these are removed, the risks of womb diseases are very small. The uterus has historically been removed, as this is 'what has always been done' and taught. Many other countries have been performing ovariectomies (removing the ovaries only) for many years without any negative outcomes.

Can my dog still get a pyometra (womb infection)?

No. There has to be active ovarian tissue left behind for this to be a possibility.

What if you can see something wrong with the uterus?

This can be removed. The uterus can be removed laparoscopically or via a traditional open surgical approach. The decision is made on a case-by-case basis, depending on the patient and circumstances, as no two cases are exactly the same.

What about urinary incontinence?

This is yet undecided. The occurrence of SMI (Sphincter Mechanism Incompetence), a leaking bladder when at rest, occurs in mostly older spayed female dogs. This is linked to the lack of oestrogen. There is some anecdotal evidence that keyhole spaying, by leaving the support structure of the uterus behind, improves the management of SMI when it happens. Research on this is ongoing.

To achieve keyhole surgery the abdomen is inflated with carbon dioxide - I have heard this causes pain in people?

There is no evidence that this causes pain in dogs. In some people, the carbon dioxide used in laparoscopy activates the phrenic nerve causing shoulder pain in some people who undergo such surgery.

What about male dogs with undescended testicles (Cryptorchid Testicles)?

The benefits in castrating cryptorchid male dogs using laparoscopic techniques are identical to spaying bitches laparoscopically. The cryptorchid testicle is much easier to locate using laparoscopy and can be removed through smaller incisions.