

# Laparoscopic Surgery

# What is laparoscopic surgery?

Laparoscopy surgery ('key hole surgery') involves use of one or more small devices ('ports') to access the abdominal cavity with a telescopic camera and surgical instruments to perform surgery on or biopsies of abdominal organs. In order to create space, the abdomen is inflated with non-toxic CO2 gas. This allows much less invasive access to perform these surgeries by removing the need to create a large incision to allow direct visualisation.

The most common surgery performed in this way is the spay for female dogs. Other surgeries than can be performed include removal of retained testicles, abdominal organ biopsies including liver, spleen, kidney, pancreas and lymph nodes; assisted bladder surgery to remove stones or biopsy masses.

## How does laparoscopic spay differ to traditional spay?

Laparopscopic spay is normally performed as an ovariectomy (removal of the ovaries alone) whilst open spay in the United Kingdom is usually performed as an ovariohysterectomy (removal of the ovaries and uterus). Ovariectomy is simpler and faster and has been repeatedly shown to have the same benefits as ovariohysterectomy such as prevention of season, pregnancy, false pregnancy and prevention of pyometra (infection in the uterus). Complication rates are similar with either, so ovariectomy is preferred for laparoscopy.

## What are the advantages of laparoscopic spay?

- Smaller incisions reduce risk of potentially serious incisional complications such as hernia
- Less risk of other wound complications such as seroma (fluid build up under the skin)
- Generally considered less painful during and after the operation due to smaller incisions and less pulling
- Humans can experience shoulder pain after laparoscopy due to the gas used. This is not recognised in animals
- Quicker return to normal activity approximately 5 days instead of 10-14 days plus

# How long must my dog rest after laparoscopic spay?

The anaesthesia will cause some sleepiness for 24 hours or so, after which your dog can be taken for short lead walks several times daily. We recommend not more than 10-minute lead walks for 5 days after which they can be returned to normal. Swimming and bathing should be avoided for 10-12 days until the small wounds are fully healed.

## What are the risks associated with laparoscopic spay?

Risks are very similar to standard open spay but generally less serious. Neutered dogs can become overweight if their intake is not controlled, some neutered dogs develop a variable degree of urine incontinence, neutering may increase risk of certain cancers and joint issues, but this is complicated by breed and weight gain as well. With any surgery there is a risk associated with anaesthesia including death (<0.01% in healthy dogs for neutering), risk of bleeding and infection.

Risks specific to laparoscopy include an extremely small risk of embolism (gas in the blood stream), very small risk of organ penetration (but organ damage is possible with traditional surgery too).

## What is the cost associated with laparoscopic surgery?

# Vet Surgery Services



Laparoscopic equipment is more expensive and more fragile than normal surgical instruments and additional equipment is needed to provide light, gas and camera equipment. Additionally, extra disposables are needed to ensure sterility. There is a supplement to cover these additional costs. The exact cost depends on what procedure being performed, please ask your vet for an estimate.