

Key-hole Bitch Spays

When first introduced in human medicine, keyhole surgery was viewed with suspicion – however by the mid 1990's it was in common use, with well-established advantages over conventional surgery including reduced pain, reduced complication rates and quicker recovery times. We now know that these same benefits apply to veterinary patients.



What is keyhole surgery?

Keyhole surgery involves the use of special instruments, inserted through 3-10mm holes, to manipulate internal organs. The procedure is viewed using a camera inserted through a similar sized hole, with the image displayed on a television screen.

Two or three "ports" (or holes) are usually necessary - one for each instrument, and one for the camera.

"Laparoscopy" is the name used for keyhole abdominal surgery. Gas is used to inflate the abdomen, and so create space to view and manipulate the organs.

Keyhole surgery is also referred to as minimally invasive surgery.

What are the differences between keyhole and conventional bitch spays?

- Conventional bitch spays require a larger wound (typically 30-80mm, depending on the size of the bitch.) Keyhole surgery is carried out through two ports, 5-10mm long.
- Conventional bitch spays involve removal of both ovaries and also the uterus (womb). In keyhole bitch spays we only remove the ovaries.
- Conventional bitch spays use stitches to tie off the blood vessels and control bleeding. In keyhole bitch spays, the blood vessels are electrically sealed.





Why don't we remove the uterus in keyhole bitch spays?

Traditionally, the uterus has been removed during spays to prevent the risk of uterus infection ("pyometra") developing in later life. However, pyometra requires the hormonal influence of the ovaries on the uterus, and so having removed the ovaries, pyometra will not develop. Removing the ovaries without the uterus is a quicker and less traumatic procedure. Removing the uterus would also require a third, and larger wound, as the uterus will not fit through the two standard ports used in a normal keyhole bitch spay.

Occasionally we will remove the uterus during a keyhole bitch spay, if we detect abnormalities in it at the time of surgery.

Benefits of keyhole surgery

- The smaller wounds mean that the procedure is less painful.
- Dogs seem to recover more quickly from keyhole surgery. They are usually more alert when they go home on the day of surgery. They can go for walks off the lead after three days - as opposed to ten days with conventional surgery.
- There is less risk of wound swelling, wound infection, and wound breakdown, which are the most common complications of conventional surgery. There is also less risk of haemorrhage, as the internal organs can be directly visualised after the ovaries have been removed.
- Better visualisation of the internal organs means other abnormalities may be picked up.

Overall, keyhole bitch spays are associated with less pain, less complications, and a quicker return to normal activities. Most of us are aware of the benefits of keyhole surgery in people, and so the procedure is becoming increasingly popular in pets.

Disadvantages of keyhole surgery

- Because of the specialist equipment and training required, the procedure tends to be more expensive.
- A wider clip is required for keyhole bitch spays to enable access to the ovaries.
- There is a risk of electrical damage to internal organs during the vessel sealing process. However this risk is usually very low.
- Occasionally, there may be a need to convert to conventional surgery if for example other abnormalities are detected.



For more information on keyhole surgery, please contact the practice.

