



Spaying or Neutering your dog – Why and When?

Summary.

- We recommend spaying and neutering for the best health and happiness for your pet
- Smaller breeds can usually be spayed and neutered earlier than larger breeds
- If spaying after a season we need to wait 4 months for the hormonal quiet time
- Avoiding weight gain after spay or neuter is important
- Nervous, anxious dogs should be spayed or neutered later to allow confidence to develop; careful socialisation and training is important to help these dogs as well
- Please talk to us about timing and any specific concerns you may have

What is spaying and why do we recommend it?

- Spaying, also referred to as de-sexing or fixing, is the removal of the ovaries and uterus from female dogs. It prevents unwanted pregnancy, stops the hormonal cycle and associated bleeding, prevents false pregnancy (see below) and has multiple health benefits including significantly reduced risk of mammary (breast) cancer and prevention of pyometra, a life-threatening uterine infection.

When should we spay?

Although there are massive benefits to spaying, the timing is important to reduce any negative impact.

Negative effects of spaying at the wrong time could include increased tendency to gain weight, increased risk of joint disease in predisposed breeds, increased risk of urinary incontinence in old age and behavioural changes. There is also a possible increase in some types of cancer in predisposed breeds associated with early neutering.

Some of the negative effects such as joint disease may be secondary to obesity which can be avoided by appropriate nutrition. Spaying and neutering reduce the metabolic rate in many dogs which can lead to excessive weight gain if food is not adjusted accordingly. A gain in weight is not inevitable after spaying; please chat to us about appropriate diets.

The first decision is whether we spay before or after the first season. A season, or heat, is the time when a female dog is receptive to males and can get pregnant. It is associated with bleeding and swelling of the vulva and lasts an average of 3 weeks. The first season usually happens between 6-12 months old, typically being earlier in small breeds and later in large breeds.

There are potential advantages and disadvantages to either option depending on the individual dog:

Pre-season:

- Prevents the mess and hassle of having a season
- Completely prevents unwanted pregnancy
- Provides the best risk reduction for mammary cancers
- May increase the risk of urinary incontinence in later life in predisposed breeds e.g. Irish setters, Bearded and Rough collies, Dobermans and Dalmatians
- May increase the incidence of joint problems in susceptible breeds; it is unclear if this association is mostly due to the increased tendency for being overweight
- Some people believe dogs spayed early display more juvenile behaviour
- Spaying nervous or anxious dogs too young can affect their confidence

Post-season:

- Lower risk of urinary incontinence in larger and predisposed breeds
- Possible reduced risk of joint disease in large susceptible breeds
- Potential reduction of general cancer risk in predisposed breeds such as Boxers
- Obesity may be less common in dogs spayed later although this is primarily preventable with control of food intake

Most studies which have looked at the timing of spaying only have small numbers of animals which makes it hard to interpret the effect of timing versus the effects of random chance. Recommendations are therefore based on the best information that we have at the moment and are not set in stone.

In a recent review of the literature the timing of spaying was not important in 21 out of 36 breeds.

Specific breed recommendations were:

- After 6 months: Australian cattle dog, Rottweiler, Saint Bernard
- After 11 months: Border collie, English Springer Spaniel, Labrador
- After 23 months: Boxer, Cocker Spaniel, Doberman, German Shepherd, Shetland Sheepdog, Shih Tzu.
- The study suggests considering not spaying Golden Retrievers however this is based on weak evidence and other factors should be considered in making this decision.

General recommendations are:

- Small breeds: spaying at around 6 months old prior to a season
- Large breeds: spaying 4 months after the first season
- Very large breeds: may be best to have two seasons

This is because larger breeds are slower to mature and often more predisposed to urinary incontinence and joint disease later in life.

Anxious or nervous dogs are best being allowed to have one season and spay 4 months later as oestrogen is a confidence hormone and it is better to have this for longer.

False pregnancy

It is important to wait 4 months after the end of a season before we spay; the reason for this is the risk of a false pregnancy (also known as pseudopregnancy).

Dogs have a very similar pattern of hormones after their season whether or not they are pregnant, this means that many dogs will have behavioural changes, development of mammary glands and even milk production when they are not pregnant.

Behavioural changes can include nesting behaviours e.g. collecting toys, increased anxiety and even aggression.

If we spay and remove the ovaries during this false pregnancy the body can remain in this hormonal pattern permanently without prolonged medical treatment. This can lead to problems such as mastitis (infection of the mammary gland due to milk stagnation) and serious behavioural problems over the long term.

By 4 months after the season the majority of dogs will be in their hormonal quiet time but we will always check for physical signs of false pregnancy before spaying to ensure no complications further down the line.

Male dogs and Neutering

Neutering male dogs will reduce the tendency to roaming or stress when they can sense a female in heat in the area. Unwanted behaviours such as humping and some triggers of aggression towards other dogs are generally reduced. It will also reduce benign prostate problems, risk of perineal hernia and prevent testicular cancer.

Timing is simpler due to having constant hormonal levels however there are still size and breed considerations regarding joint development, obesity and cancer risk.

As with females some of the negative effects such as joint disease may be secondary to obesity which can be avoided by appropriate nutrition. Spaying and neutering reduce the metabolic rate in many dogs which can lead to excessive weight gain if food is not adjusted accordingly. A gain in weight is not inevitable after neutering; please chat to us about appropriate diets.

The recent literature review made the following recommendations:

- After 6 months: Cocker Spaniel, Corgi, Labrador
- After 11 months: Beagle, Border collie, Boston terrier, Golden retriever, Miniature Poodle, Rottweiler
- After 23 months: Bernese Mountain Dog, Boxer, German Shepherd, Irish Wolfhound, Standard Poodle
- The study suggests considering not neutering male Dobermans however this is based on weak evidence and other factors should be considered in making this decision.
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General recommendations are similar to females

- Small breeds: 6 months onwards
- Medium breeds: 9 months onwards
- Large breeds: 12 months onwards
- Giant breeds: 2 years onwards

Nervous or anxious dogs should be neutered later as testosterone is a confidence hormone and we don't want to take this away too soon.