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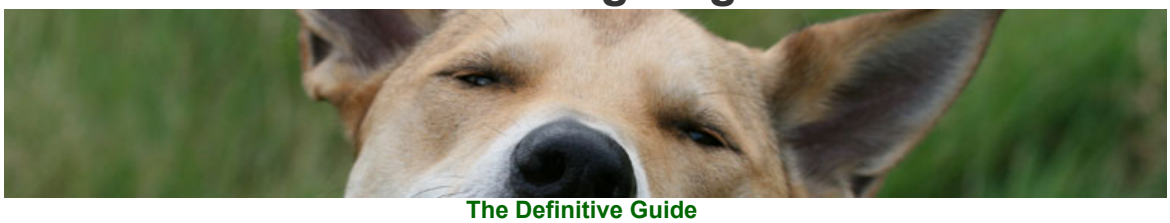
Neutering Dogs



The Definitive Guide
Including the use of Suprelorin dog contraceptive

(Neutering) Spaying and Castration.

Is the surgical removal of the reproductive organs in both male and female dogs

I begun studying and reporting on the effects of early **neutering** (the generic term for both spaying and castration) after many years of observation that culminated in my articles on the possible detrimental outcomes caused by these operations.

I still get many requests for further information, regarding when, or even if you should get your dogs **"Neutered".** Therefore this article is meant to be a guide as to what to do. And in what circumstances would neutering be useful and beneficial. And when it may not be in the dogs best interest. It also explains the medical procedure and what hormones are removed or reduced because of neutering.

Hormones:
All mammals are born with various hormones. Three of the most important ones are **Oestrogen, Progesterone, and Testosterone.** All dogs male and female have these hormones. by what degree each hormone is present determines the sex of the animal.

These are commonly called sex hormones, and are related to reproduction. However they also play a very important role in other aspects of the animal's well being. They allow and create physical, social, and behavioural maturity. Without these hormones the dogs, if immature when the operation is carried out may not behaviourally and physically reach full maturity. Both physiological and psychological problems may occur because of these early invasive operations.

During my studies, I started noticing frustration, lack of attention, inability to concentrate, and puppy like behaviour, these traits were far more prevalent in dogs that were neutered and spayed at a younger age, than those who were allowed to mature naturally before neutering.

I call this (**paedomorphic behaviour**). In other words dogs that retain perpetual puppy like characteristics. I also observed that bitches spayed too early, may be far more interesting to intact males; which may cause the female to become aggressive and protective of this unwanted attention in adulthood.

Despite popular belief spaying does not calm a female dog down. It may help to calm certain behaviour's in males, but definitely not females.

I think it is important to understand that I am not totally against neutering. Though I do have some very grave concerns even in adult dogs, especially females However my major issues are focused on early neutering before the dogs are both physically and mentally mature. That and the fact that it is sometimes recommended for the wrong reasons for the wrong dogs at the wrong time. Not all dogs benefit from neutering in fact many may suffer a negative reaction including increased aggression and psychological problems.

Is Neutering a Cure All? I cannot tell you how many times I have heard people say **"Oh just have it done that will sort all the problem out"** This statement could not be further from the truth. Neutering is a very invasive operation and can lead to numerous physical and mental complications. It can also considerably worsen the behavioural problem you were attempting to overcome, especially if the dogs has aggression related to fear.

Once castration and spaying has been done it is irreversible you cannot put back in what you have removed. I have spoken to numerous people who bitterly regret having the operation done. Unfortunately by that time it is too late. This is especially the case when you have a fearful or timid dog. Spaying or castrating a dog like this can often make the fear behaviour's worse. The sex hormones and especially testosterone and oestrogen, play a major part in giving dogs an element of calmness, confidence, and well being.

I have seen male dogs that have previously been non-aggressive, suddenly start to attack other dogs. These attacks are normally aimed at both male and female dogs. Some male and females become withdrawn and terrified of almost everything. Fearful of sounds and movements and sometimes people they have known and other friendly dogs they have played with in the past.

I saw and treated a female dog recently a St Bernard. It had to be brought out to me on two leads with two people hanging onto it as it had turned so aggressive to both dogs and humans just five days after spaying. It had also started attacking and bullying a Poodle that it had lived with since it was a pup. Fortunately I managed to work with the dog and it is far better now. I have also had a lot of success with many other females that have reacted badly to spaying. I actually see quite a few of these aggressive behaviours post spaying each year. Having said that I do deal a lot with aggression. It is therefore possible it's not as common as it may appear but it does happen. The problem as always is finding someone who actually understands what has happened and is able to work with each individual dog, as one size does not fit all.

Despite what the so called experts say, all behavioural problems do not stem from pack mentality there are many other variables. These one trick ponies would have us believe that all we have to do is ignore the dog when we come in and eat before it and everything is miraculously cured. Absolute nonsense, please read the **Alpha Myth**

Operation Requirements

Females: The surgeon will make an incision in the middle of the abdomen to locate the reproductive tract, and removes the ovaries and uterus. The medical term for the operation is ovariohysterectomy (OHE). This procedure is carried out under a general anaesthetic. The operation normally requires the removal of the uterine body and horns, the ovaries, and the tubes connecting the ovaries to the horns.

A dog's uterus is a Y-shaped organ with two horns and a body. The procedure may take longer for larger or overweight dogs. Do not bathe your dog or allow swimming for the first ten days after surgery or until after the stitches have been removed.

Males: Both testicles are removed through a skin incision in front of the scrotum. The scrotal sack is left in place, but this often shrinks given a little time. This procedure is also carried out under a general anaesthetic. The operation itself normally takes between 30-40 minutes. Stitches may be used that are dissolvable, others vets use non-dissolvable sutures and these need to be removed about 10 days after the operation. No bathing or swimming until stitches are removed, therefore it may be advantageous to bathe the dogs both male and female before the operation. The medical name for the procedure is orchidectomy.

Misdiagnosis:

The concern I have is with the one size fits all scenario, that suggests that neutering is the answer to every behavioural problem It isn't. There are many reasons for a dogs behavioural issues. Hormones may play a part, but not in every case. For instance if you are hoping to stop aggression and that aggression is fear based then neutering may often make the dog more fearful therefore more aggressive.

Whatever the apparent behavioural problem, many people will suggest neutering, despite the fact that the dog may be suffering from fear, anxiety, a medical condition, or other non-hormonal reasons for the behaviour. Neutering can actually have a serious detrimental effect, rather than the positive outcome that is being hoped for.

What Are The Hormones For:

Progesterone is a hormone that the body produces which helps to regulate females monthly cycle. Men also produce a small amount of progesterone, but it is less important to sexual maturity than testosterone. Progesterone also aids immunity and can reduce inflammation and swelling, it also helps regulate the thyroid gland, and keeps blood-clotting levels at normal values.

It has a impact on keeping bones strong, produces collagen, and helps keep nerves functioning, It can be said to keep people young. Low progesterone levels also decreases the body's ability to create new bone cells. Hence the problems in old age of Osteoporosis in females, that have gone through what is euphemistically know as **"The Change"**

Oestrogen: This hormone is considered to play a significant role in females mental and physical health.

There are oestrogen receptors in your bones, brain, blood vessels, and the central nervous system. Oestrogen seems to affect lots of different parts of the body and is also important to mood and well-being. Doctors now believe that oestrogen may help keep bones strong and healthy. While oestrogen's are present in both male and females, it is found in females in significantly higher quantities.

Testosterone: This is a hormone from the androgen group. In mammals, testosterone is secreted in the testicles of males and also to a far lesser extent in the ovaries of females. And is the principal male sex hormone.

In male dogs, testosterone plays a key role in health and well-being, as well as preventing bone problems. Certain behavioural problems are driven by testosterone, namely roaming, inter-dog aggression, this would be normally against other intact males, and certain sexual behaviour's including marking, humping and mounting plus of course mating. Castration may not solve all or even any of the above problems though it certainly can help. In some cases it actually could have a detrimental effect?

All three of these hormones are quite vital to maturity in all mammals' not just dogs.

Progesterone receptors are found in brain cells, in nerve sheaths and in bone cells in both male and female dogs. That is a strong indicator that progesterone is involved in their function. It also appears to be involved in a range of other biological activities. Therefore neutering before both physical and psychological maturity may have a real impact on the health and well being of your dog.

When Should You Neuter?

Females: If you own a very small dog then you could possibly neuter after one season, in medium dogs two seasons would be far more prudent, large dogs three seasons and giant breeds four seasons unless medical needs suggest otherwise.

If it were my dog even with small dogs, I would never spay until the dog has had at least two seasons. You then need to wait three month after the last season before spaying, unless medical conditions require otherwise.....

Males: This less clear cut as they do not have a season to calculate possible maturity. You need to look at breed and size, and any visual clues such as leg cocking. A large dog such as a Great Dane should not really be neutered before twenty seven months.

The larger the breed then the later they mature. therefore a German Shepherd size dog would be about 17 months, a Collie 15 months, a Miniature Yorkshire Terrier about 9/10 months. Unless of course there are medical or serious behavioural issues to take into consideration.

These are all approximates and each dog will vary. Look for leg cocking in the smaller dogs, when this is fully operational, in other words marking quite high rather than the dismal attempt where they almost fall over then wait a month then you can consider neutering.

What Other Problems May Occur? These are quite complex therefore I am going to give an overview and some snippets, and then direct you to the well known Vets and experts that make these observations.

Neutering at any time can have both positive and detrimental effects. Neutering early in my opinion will always cause detrimental effects. What you must take into account is neutering before maturity will normally cause bone and ligament problems, resulting in spindly legs, narrow chests, and thin skulls. It may also increase the risk of obesity and cause paedomorphic behaviour, lack of concentration, and puppy like behaviour for most if not all the dogs life. I can also increase the incidence of various cancers.

Neutering when adult may help certain behaviour's and will stop certain medical conditions. However it will also increase the chances of other medical conditions occurring such as prostrate cancer, thyroid dysfunction and bone cancer. Obesity is also a problem as neutering will change your dogs metabolism making it more sluggish.

Click in the vets and experts names to see the full articles

Castration at an early age will cause the dog to become overly tall, as the growth plates in the long bones will not close at the appropriate time; additionally, the dog will lack breadth of chest. The combination of these two factors sets the stage for your dog to have painful orthopaedic problems."

"The statement that your dog will not automatically gain weight is rubbish. Removing sexual hormones will change his metabolism and make your dog more sluggish, resulting almost inevitably in weight gain. Also, muscle tone will decline after castration, and the classic result of this is a fat dog in poor muscle tone that ends up having a cruciate ligament rupture in the knee"

Mary C. Wakeman, D.V.M.

"Spayed females have a 4 times greater risk of cardiac hemangiosarcomas, and neutered males also show a significant increased risk for this cancer compared to intact ones."

"Another cancer Dr Hahn discusses that deserves mention is prostate cancer because a lot of people erroneously believe that castration prevents this. In reality, it does not. In fact, castrated dogs have up to a 4 times greater risk of developing prostate cancer than intact animals. At the same time, spayed or neutered dogs have a 1.5 to 3 times greater chance of developing bladder cancer. Because of this, rectal examinations and abdominal palpation should always be part of a routine veterinary physical examination."

"The link between sterilization and osteosarcoma (i.e. bone cancer) is also troubling: Spayed and neutered animals are twice as likely to develop this cancer. ***Those spayed or castrated before their first birthdays had a roughly 1 in 4 lifetime risk for osteosarcoma and were significantly more likely to develop a tumor than intact dogs."***

Dr Kevin Hahn (Veterinary Oncologist)

Research since 1990 has shown that spay and neuter surgeries may have specific drawbacks as well as benefits. Dogs neutered before puberty tend to have longer legs, flatter chests, and narrower skulls than intact dogs of their breeds because the hormones that regulate sexual activity also interact with hormones that guide growth of muscles, bones, and tendons.

These physical differences can place more stress on joints and can cause problems for active dogs, especially those in training for agility and those that work in physically stressful jobs.

Additional drawbacks specific to spay surgery include increased incidence of bladder incontinence, triple the frequency of thyroid disease, and higher risk of some cancers, joint problems, and obesity and adverse reactions to vaccinations.

Laura J. Sanborn, M.S. of Rutgers University,

A recent report of the American Kennel Club Canine Health Foundation reported significantly more behavioural problems in spayed and neutered bitches and dogs which. The most commonly observed behavioural problem in spayed females was fearful behaviour and the most common problem in males was aggression.

A retrospective study of cardiac tumor's in dogs showed that there was a 5 times greater risk of hemangiosarcoma, one of the three most common cancers in dogs, in spayed bitches than intact bitches and a 2.4 times greater risk of hemangiosarcoma in neutered dogs as compared to intact males.

A study of 3218 dogs demonstrated that dogs that were neutered before a year of age had a significantly increased chance of developing bone cancer.(8) A separate study showed that neutered dogs had a two-fold higher risk of developing bone cancer. Despite the common belief that neutering dogs helps prevent prostate cancer, at least one study suggests that neutering provides no benefit.

There certainly is evidence of a slightly increased risk of mammary cancer in female dogs after one heat cycle, and for increased risk with each subsequent heat. While about 30 % of mammary cancers are malignant, as in humans, when caught and surgically removed early the prognosis is very good.,

Chris Zink DVM, PhD, DACVP

But by far the most startling news to surface this year is the result of a study that shows that keeping ovaries to the age of six years or later is associated with a greater than 30% increase of life span in female Rottweiler's. (4) (7) Similar studies in humans reinforce this finding. (5),(6)

This is not just Rottweiler of course it also relates to all female dogs and appears to be ignored by the spay and neuter crowd that bays for anyone's blood who suggest otherwise. These people often have no idea what hormones are affected or how physically and mentally it affects the dogs they often condemn to years of sometimes pain and mental anguish. Do they imagine that these hormones are an additional extre like a Sat Nav on a car?

Neutering Male Dogs The Upside:

eliminates the small risk (probably <1%) of dying from testicular cancer

reduces the risk of non-cancerous prostate disorders

reduces the risk of perianal fistulas

may possibly reduce the risk of diabetes (data inconclusive)

Neutering Male Dogs The Downside:

if done before maturity, increases the risk of osteosarcoma (bone cancer) by a factor of 3.8; this is a common cancer in medium/large and larger breeds with a poor prognosis

Increases the risk of cardiac hemangiosarcoma by a factor of 1.6; this is a common cancer and major cause of death in some breeds

Triples the risk of hypothyroidismIncreases the risk of geriatric cognitive impairment

Triples the risk of obesity, and with it many of the associated health problems

Quadruples the small risk (<0.6%) of prostate cancer

Doubles the small risk (<1%) of urinary tract cancers

Increases the risk of orthopedic disorders

Increases the risk of adverse reactions to vaccinations

Increases the risk of fearfulness, noise phobias and aggression

FURTHER MEDICAL RESEARCH **please click to read**

Those who support early juvenile spay and castration are not quoting the percentages of testicular cancer in un-neutered dogs. They don't tell you that the rate is only about 7%, and that's in dogs that are never neutered. They also don't tell you that it is easy to manage and to prevent and cure after maturity. Behavioural studies show that sterilization increases fearfulness, noise phobias and aggression. Other well-documented adverse health effects of de-sexing include increased risk of bone cancer, hemangiosarcoma, hypothyroidism, and cognitive dysfunction in older pets.

Sterilization confers an increased susceptibility to infectious disease, and also a higher incidence of adverse reactions to vaccines.10 Is There An Alternative to Castration? Suprelorin is a new contraceptive implant for male dogs which offers the advantages of castration without surgery. What has been used in the past was Tardak, unfortunately it was short lived. It appears Suprelorin (a fairly new breakthrough) is far more effective and longer lasting. It slowly releases deslorelin, a hormone similar to those used to treat human prostate cancer. The low, continuous dose of deslorelin prevents the production of sex hormones. The biocompatible implant disappears over a period of time and does not have to be removed.

Suprelorin can be used as a 'road-test' to mimic the effect that would be seen without undergoing permanent and irreversible surgery. If a favourable response is seen castration can be carried out or Suprelorin could possibly be continued. Pre-Pubertal's or Juveniles: Because suprelorin/deslorelin suppresses gonadal steroids, its use may delay epiphyseal closure of the long bones, resulting in taller individuals, similar to the effects of pre-pubertal spaying and neutering in domestic dogs and cats.

So be careful regarding the use of this when the dogs are still physically immature. The other downside is that it cannot be used indefinitely as it suppresses all testosterone, unlike castration which only suppresses 90% the other 10% is produced through the thyroid gland, This 10% is important as the bones and other areas of the body could become affected.. What About Females: At present there is no Suprelorin specifically for female dogs though tests and experiments are being carried out. A product could be available for the females in time.

Stan Rawlinson April 2010

I have written two other articles regarding spay neuter Please see the full articles. One alludes to the practice of the RSPCA and other welfare organisations, and some breeders, spaying and castrating dogs at six weeks of age. In my opinion this is a national disgrace and the Vets that offer this service should look at the known facts of early neutering and remember that we should all use the adage ***"First Do No Harm"***

http://www.doglistener.co.uk/neutering/rspca.shtml
http://www.doglistener.co.uk/neutering/spaying_neutering.shtml

Further information and acknowledgements

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