The latest in desexing – Ovarian Sparing Desexing Procedure

I would like to start by saying over the past few months I have been involved in some Vet HQ firsts. First time diagnosed, first time surgeries, and first procedures even when taking into consideration the specialists out there.

My goal was to have the best in sub specialist GP practices in the country and I thank my team for making that happen.

So what is so new that can make an old man like me get excited?

It is called an ovarian sparing desexing procedure.

In a nutshell we leave one ovary and remove the rest of the female genital tract including the cervix in large breed female dogs. Why? Because the evidence is starting to prove it is better.

Let me explain and let me first say a big thank you to Dr Abbie Tipler a specialist surgeon in Brisbane, who brought this to the Australian College of Veterinary Surgeons – Surgery Chapter last year where I was present and acted like a sponge.

Let me explain!

I have been educated that 'desexing is the responsible pet ownership decision'. This is what my profession has advocated. It supposedly creates less unwanted animals and considering we have such a huge problem with animals in shelters this is a good thing, right! Perhaps we need to challenge this.

In a recent article published owners provided valid surveys for 6,018 dogs, including 1,056 sexually intact, 1,672 castrated, and 58 vasectomized male dogs and 792 sexually intact, 2,281 spayed, and 159 female dogs that had undergone ovary-sparing spay. Longer exposure to gonadal hormones, regardless of reproductive status, was associated with reduced odds of general health problems and both problematic and nuisance behaviours.

There is so much information available out there and I have put a link to a blog by Dr Abbie.

But I will attempt to give you a very brief summary.

The generally accepted trends are as follows:

1. Desexing at greater than 12-18 months will result in less influence on developmental diseases e.g. orthopaedic disease
2. Desexing at a later age, can still have effects on degenerative disease. Preserving the hormones for longer, may reduce these diseases – e.g. neoplasia
3. Hormones have an effect on growth plate closure, ligament and muscle formation, relaxin and Luteinizing Hormone (LH).

I should at this point say that we recommend female cats to be desexed between 3-6 months of age and male cats to be desexed at 6 months of age.

PROCEDURE OPTIONS

Females:

Ovariohysterectomy – traditional approach.

Ovariectomy – spares the uterus. This is the traditional method for laparoscopic spey. Because you remove the hormonal effect on the uterus this procedure will not result in pyometra etc. It is essentially the same procedure as above in most respects.

Ovary-sparing hysterectomy – this procedure renders a dog sterile, however the hormones are maintained. You can leave one or both ovaries and it should be outlined in the records which ovary is left. The dog has a heat cycle and there may be a small amount of bloody discharge and they will be attractive to male dogs. They may have the behavioural side effects of being on heat such as yowling etc. Theoretically they cannot get a pyometra, however if you leave any uterine endometrial tissue, then this can result in a stump pyometra. You need to aim to remove the uterus beyond the cervix.

There is a new paper reporting on the outcomes and complications of this procedure, that was published in 2023.

Salpingectomy - Tubal ligation – in every way this dog is intact, but just can't become pregnant. The exact technique and complication rate has not been well-reported in the literature, it can be technically challenging and one complication is iatrogenic uterine ligation instead, which leads to fluid building up in the uterus and problems. It is not my preferred technique for hormone-sparing sterilisation for these reasons.

Males:

Traditional castration - removes the hormones

Vasectomy - preserves the hormones.

The outcomes of vasectomy were also looked at in the 2023 paper

In summary, the new paradigm, is for the vet and pet owner to use the available data-based information to decide on the best age and procedure for the dog dependent on owner situation and dog breed. If there is no data available on a certain breed, extrapolation from similar breeds may be possible.

So what do we recommend?

We recommend a consult with one of the vet team or nurse team at 6 months to discuss your options for your pet. It would appear now there is no cookie cutter approach anymore.

1. Small Breed Male Dogs <10kg : 6-12 month desexing
    i. Standard castration technique
2. Medium - Large Male Dogs >10kg 9-12 months desexing
    i. Vasectomy early (3m) if worried about dog getting another dog pregnant
    ii. Standard castration technique
3. Small Breed Female Dogs <10kg : 9-12 months desexing
    i. Standard technique after first heat
    ii. Ovarian sparing technique (at 6m) to maximise benefits discussed above and to reduce bleeding during
4. Medium – Large Female Dogs >10kg 12-24 months desexing
    i. Ovarian sparing technique (at 6m) to maximise benefits discussed above and to reduce bleeding during

It should be noted that it would appear that at some point we will recommend that we remove the remaining ovary after an ovarian sparing technique. This will be anywhere after the 2 year of age mark.

We understand that this will be a lot to take in and we will encourage a conversation at 6 months so we can discuss the best thing for your pet.

Dr Geoff