VETS' CRUCIAL ROLE TO REDUCE NUMBER OF UNWANTED CATS

CAT charities are struggling to deal with the increasing number of unowned cats at a time when maintaining charity income is also challenging.

Perhaps good things will come out of these difficulties. Charities are becoming more sophisticated and professional. While there is always competition for income, they have realised finding universal solutions, rather than individual ones, and trying to get to the source of the problem, rather than mopping up the consequences, has got to be more successful.

Under the umbrella working group of the Cat Population Control Group (CPCG), charities RSPCA, Cats Protection, Blue Cross, PDSA, Battersea Dogs and Cats Home, Wood Green animal shelter and International Cat Care have set the task of working together to increase the success of neutering and cut the number of unwanted kittens. They are collaborating on research, surveys, experience and expertise to understand the problems and find the right approaches to engage owners, including exchanging information and collaboration (with both dog and cat charities) in finding the best ways to take the messages out to different communities.

This cannot happen without the collaboration of vets, whether they work solely for rescue organisations, do some work via their practice for rescue organisations or just neuter pet cats – the approach takes all of these into consideration. Vets are at

CLAIRE BESSANT

discusses the Cat Population Control Group's aims, and the prospect of neutering cats at a younger age

the very core of the process because, until some other form of permanent control is possible to stop reproduction, the surgical approach will be necessary and, while neutering is crucial, it is also only part of the veterinary health package cats need.

The CPCG's approach to timing of neutering is based on the Cat Group policy statement, published initially in 2006, which put forward the following suggestions for different populations of cats.

Main principles Make four months the norm for neutering of owned cats

To cut the number of litters being born because people don't consider neutering until at least six months of age (based on historical precedents) and thus some cats become pregnant accidentally, charities are urging all those with influence to make four months the normal time for neutering. While some cats do not reach sexual maturity until older than six months, many do and neutering prior to sexual maturity is crucial to prevent/reduce

the risk of unwanted kittens. Often, owners let their kittens go out after vaccination when they are still unneutered. They do not recognise the signs of oestrus and have no idea when the kitten herself becomes pregnant. Business-wise, neutering at four months also makes sense because kittens are not lost to the practice in the no man's land period between vaccination and neutering – a booking can be made at the final vaccination to neuter the kitten a few weeks later.

The group is asking vets to be proactive in encouraging all cat owners to have their cats neutered and for the practice to put forward four months as the norm for neutering pet cats.

One of the barriers to neutering is the myth that cats should have one litter. The RSPCA survey (Box 1) found most of these "one litter" cats are then neutered, although some became caught in the cycle of weaning and subsequent pregnancy as owners didn't know when to neuter in this situation. Vets are encouraged to help dispel this myth in their discussions with clients with new kittens and to proactively encourage neutering before the first season.

Cut number of unneutered cats entering population from rescue Rescue organisations must not be the source of unneu-

not be the source of unneutered cats entering the cat population. However, waiting until four months of age to neuter means keeping more kittens in rescue facilities for longer, with the accompanying drain on resources and additional health and welfare risk to kittens

Owners also do not want to wait to take kittens. To this end. many cat charities are neutering kittens at eight weeks before they go to new homes. Many thousands of kittens have been neutered in this way and there is evidence to show, done properly, it brings no added risks to the cats (indeed, they recover more quickly) and a large number of benefits in terms of population control, thus less suffering in the general cat population. The CPCG believes the aim should be that no kitten or cat

should be that no kitten of cat should leave rescue unneutered. Obviously this has many implications for how charities function and they need to plan for this both operationally and financially, but it is a principle that makes sense and is achievable.

This will require vets working in rescue facilities, or those working with rescue organisations, to develop their neutering and anaesthetic skills to take into account the smaller kittens. However, it has been undertaken for many thousands of kittens without problem (see later).

Encourage neutering of cats owned by those who do not usually go to the vet Many organisations have used a voucher system to encourage owners to neuter at reduced prices, but there is not a great deal of evidence as to how

successful it is. It requires follow up, and resources may be better used in a different way The capacity for charities also depends on how much vets help and charge. The group is pooling information on vouchers and ways to assess their effectiveness during this process, and also discussing how to get into communities and take the right approach. Getting to this group of cat owners can be problematic and expensive, and will not be covered in this article as it is under discussion, but is one of the biggest issues to consider.

Veterinary support

Parts one and two of this three-part approach are achievable and charities are asking vets in practice for their support. They realise many vets, both individually and as part of a practice, undertake welfare work and neutering for rescue organisations. They also understand charities are not the only ones struggling in the economic climate. Practices are often caught in the middle of this and feel pressurised to help. Perhaps there are other ways of working - the group will discuss ideas and would welcome input from practices or individuals who may want to help, but find it difficult in the normal grind of making a living. Any ideas can be emailed to justine.pannett@rspca.org.uk

Four months

The group is asking that all practices support the fourmonth plan by asking all staff (especially front-of-house and telephone-answering staff) to support this. Cats Protection publishes a list of practices willing to neuter at four months old (see www.cats. org.uk/early-neutering). However, even neutering at four months has raised concerns. A small pilot survey by PDSA in its practices asked why the practice did not recommend four months as the norm. Common concerns included: • physical size/too immature; • tradition/habit;

increased anaesthetic risk;
harder dosing, such

as analgesia; • not trained to do midline/earlier neutering; and • belief it leads to a higher incidence of uri-

nary tract problems

The benefits to cats

There is an extensive body of literature where the effects of earlier neutering (less than six months) have been evaluated (see references). These studies suggest: • There is no increased surgical or anaesthetic risks. The surgical procedure is shorter and recovery times are quicker. There are no significant adverse developmental effects - this includes the fear earlier neutering results in a smaller urethra and increased risk of FLUTD, which has been shown to be clearly untrue in many studies. Earlier neutering may have beneficial effects including a reduction in the risk of abscesses, sexual behaviour, urine spraying and aggression. Females spayed prior to









Figure 1. A queen with a uterine prolapse. The queen had been in labour for more than 24 hours. The cat made a full recovery from an emergency spay. Elective neutering is the safer alternative to this type of emergency associated with breeding. Figure 2. Pregnant cat uterus. Figure 3. Later termination of pregnancy. Figure 4. Early neuter of a female kitten. Figure 5. Early neuter uterus and uterine horns. Figure 6. Kittens in recovery.

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six months have a greater than 90 per cent reduction in the risk of developing mammary carcinoma compared to intact queens. Some other health benefits have been suggested by certain studies, including a lower risk of asthma. FLUTD and gingivitis although more work is needed to confirm these observations Earlier neutering may result in a delay in growth plate closure of long bones, but this does not affect adult size and has not been associated with adverse consequences. Neutering is a risk factor for obesity in cats, but studies have failed to show a difference between earlier neutered cats and those neutered later.

Neutering rescue kittens at eight to 12 weeks

It makes sense if cat rescue organisations are urging everyone to neuter their cats, then cats and kittens leaving the rescue facility should also be neutered. There is evidence to show new owners expect this and are pleased to take on a kitten that has been neutered. Indeed, many breeders are also neutering kittens before they are rehomed to prevent them being bred from. For veterinary surgeons, this is a step beyond the fourmonth recommendation. If the practice or individual works for a charity, they may be asked to undertake neutering at between eight and 12 weeks of age so kittens can be homed and resources are not expended keeping them to 16 weeks. For many vets working in welfare, this is a norm.

However neutering kittens at this earlier age and seeing a smaller animal on the operating table can be quite frightening to begin with, but the literature and experience point to quicker recovery and safe anaesthesia, as long as simple procedures for anaesthesia and temperature control are adopted – see "Help stop teenage pregnancy! Early-age neutering in cats" by Alison Joyce and David Yates (freely available at jfms.com).

The RSPCA Greater Manchester Animal Hospital has neutered tens of thousands of cats. An increasing proportion of this work is in younger kittens - both owned and rescue animals. Using a quad anaesthetic combination of medetomidine, ketamine, buprenorphine and midazolam (unlicensed in combination; a free app called Kitten Quad helps calculation of doses), the procedure is quick and simple. Surgery carries a lower risk of morbidity in kittens and anaesthetic recoveries are superior to those seen in adults.

Steve Gosling, a vet from Wood Green who has also neutered many young kittens, said: "Initially, it is

unnerving to look at such a small kitten on the operating table. We worked down from four months old and now it is completely normal to operate on a 500g/ eight-week-old kitten. The quad injection works within two minutes so scheduling your op list is very flexible

"With a little attention to temperature control, we have much smoother recoveries than in older cats, and we haven't had any post-op complications in a year of doing these. Flank or midline spays are equally quick and simple. The castrations are a little more fiddly, but not beyond anyone. Once you overcome the mental barrier associated with the smaller animal, the benefits to the individual and population become clear."

Susie Hughes, manager of Manchester and Salford RSPCA branch, was initially sceptical about neutering kittens so young, but now feels "early neutering is one of the greatest gifts ever given to animal rehoming charities," adding that "the operation site is often so tiny it is barely visible, which means kittens rarely pay attention to it, and post-op wound complications are incredibly rare".

Student Victoria Roberts saw practice at the RSPCA and said: "I hope to take this important procedure into my first job where I will be recommending earlier neutering to my clients."

Andrew Sparkes, veterinary director of the International Society of Feline Medicine. said: "We have been campaigning for recognition of four months as the normal time for neutering for many years and applaud the work of the combined charities in trying to take this forward.

Veterinary surgeons undertake many complicated surgical procedures and commonly neuter smaller pets - adapting neutering procedures slightly to take into account the needs of smaller kittens could make a huge difference to the number of unwanted cats suffering from neglect and make a great contribution to cat welfare."

European specialist in small animal surgery John Williams concluded: "In addition to being technically less demanding, the scientific evidence backs the earlier neutering of kittens; there is no rationale to wait beyond four months." Some of the drugs mentioned in this article are not licensed for use in cats.

References and further reading

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Care charity for almost 20 years. Under her leadership, the char-ity now works with individuals every continent to improve the health and lives of both owned and unowned cats.

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Box 1 – RSPCA survey

IN 2012, the RSPCA commissioned research into the reasons why cat owners either do, or do not, neuter their cats. It found: 75 per cent of cats acquired as kittens

86 per cent of cats are neutered (to maintain a stable population, a female spay level of 92 per cent is necessary):

• 14 per cent of first litters are born to cats younger than six months old;

• 27 per cent of first litters are born to cats seven to 12 months old:

85 per cent of litters are unplanned;

 32 per cent of owners believe the one litter myth; • there is confusion about when a cat can get pregnant and when to neuter:

there is a belief among some that siblings will

not mate: and • owners do not know when to neuter their female cat after it has had a litter

In 2009, Murray et al published a paper on "Survey of the characteristics of cats owned by households in the UK and factors affecting their neutered status". They found:

of 660 owned female cats, there were 110

• 92 per cent of cats aged six months or more were neutered:

• only 66 per cent of cats aged six to 12 months were neutered; and

• "Research may help identify means for increasing the proportion of cats aged four to nine months that are neutered. Owners who plan to neuter their cat should be encouraged to have it done before it reaches sexual maturity to help reduce unplanned pregnancies and unwanted cats in the UK.

In 2013. Welsh et al published a paper entitled "Poor owner knowledge of feline reproduction contributes to the high proportion of accidental litters born to UK pet cats" and reported:

of 715 cat-owning households, 552 female cats had produced 128 litters;

proportion of accidental litters was 80 per cent; • 83.5 per cent believed the youngest a cat could get pregnant was five months

26.4 per cent believed a queen could not conceive until at least one year old;

• 49 per cent believed a female cat should have a litter before being neutered or were not sure; and • 38.8 per cent thought unneutered related cats



CLAIRE BESSANT has been chief executive of the International Cat and cat-focused groups on

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age is strongly associated with the owners' intended age of neutering, *Veterinary Record* doi:10.1136/ vr.101362.