Fact sheet

Birth control in the bitch

Most responsible dog owners want to prevent unplanned breeding and the production of unwanted puppies. Most forms of birth control prevent the heat cycle of bitches, and so mating and conception does not occur. The cycle can be controlled permanently or temporarily. Pregnancy prevention is also possible after an unplanned mating has occurred.

Some basic reproductive facts

The reproductive cycle in bitches is very difficult from that in women. Bitches usually undergo oestrus cycling (also known as 'heat' or 'season') between one and three times every 12 months, although there is a degree of individual variation in this. Oestrus is the time at which mating, and hence pregnancy, may occur. Bitches usually develop a regular cycle and any alteration of this cycle should be taken seriously. Occasionally, various factors such as ill health, can act to delay or suspend oestrus cycling. Unlike women, bitches do not experience a menopause and usually continue to have seasons throughout life.

The first oestrus period (puberty) occurs between 6 and 12 months of age, when the bitch has reached 80% of her adult size. Large breed bitches may be older, eg 12-18 months, when their first oestrus period occurs. Sometimes, this initial oestrus is missed by owners as the physical signs may be subtle and not last for long.

How does a dog's reproductive cycle work?

The normal oestrus cycle lasts around 3 weeks in the bitch, and can be divided into a number of distinct stages:

Pro-oestrus usually lasts for around 9 days. In pro-oestrus the vulva becomes swollen with a red (bloody) discharge. Male dogs may show interest in bitches in pro-oestrus, but the bitch will not allow mating.

Oestrus also lasts around 9 days. The bloody discharge typical of pro-oestrus is reduced. This is the time when bitches will allow mating.

Dioestrus lasts around 45 days. After oestrus the same hormonal changes occur in the bitch whether or not she is pregnant. During dioestrus levels of progesterone rise. Dioestrus ends spontaneously in the non-pregnant state, and with whelping in the pregnant state. It is this part of the cycle that can result in a 'false-pregnancy'.

Anoestrus is the 3-4 month period between oestrus cycles. In this period the uterus shrinks down and repairs. The reproductive system is outwardly inactive during this time.

How can I prevent unwanted puppies?

There are 4 ways to prevent pregnancy in the bitch:

- Avoidance of male dogs whilst in heat.
- Neutering (spaying).
- Chemical prevention of the oestrus cycle.
- Chemical intervention after unintended mating.

Avoiding male dogs

This is a possible method of natural birth control. It relies on a firm understanding of the normal oestrus cycle on the part of the owner of an entire bitch. Extreme care must be taken during the receptive oestrus period. Not only are male dogs very resourceful at gaining access to bitches in heat, but the bitches themselves may stray during this period if they get the opportunity. Nevertheless, with responsible dog ownership on the part of owners of both bitches and male dogs, this should be a possible method of birth control. This method of birth control is often used by owners who wish to breed from their bitch at some time in the future.

Neutering (spaying)

This is the most common method of birth control in pet dogs, and is a permanent, surgical method of preventing oestrus cycling and therefore pregnancy. An operation known as ovariohysterectomy is usually performed, ie the ovaries and uterus are removed surgically. Ovariectomy (removal of the ovaries only) is a less common method of surgical neutering that is performed in some countries. In either case removal of

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the ovaries stops reproductive cycling and conception is impossible.

Surgical neutering is a major procedure but most veterinarians perform the procedure frequently, and the risk is relatively low. Most animals being neutered are young and fit. The procedure can safely be performed before puberty, (even in dogs as young as 6 weeks of age). Early neutering has an additional health benefit - it results in a diminished chance of mammary (breast) cancer occurring later in life.

Is there a contraceptive pill for dogs?

Chemical prevention of oestrus cycles

birth control can be employed using various drugs similar to natural reproductive hormones. The drugs are administered by injection or as tablets at specified intervals, and it is very important that veterinary advice is followed as regards the treatment programme. The drugs used can prevent or shorten oestrus cycles but many have potentially serious side-effects which should be discussed with your vet. This method is similar to human contraception, but the potential risks mean that it is not generally considered desirable for on-going, long-term birth control in pet dogs. It may be used as a short-term measure, or as a permanent measure only in dogs that for some reason cannot undergo conventional surgical neutering.

Is there a morning after pill for dogs?

If your bitch has been mated unintentionally contact your vet as soon as possible. Your vet will be able to discuss the options for terminating pregnancy if it occurs. Immediate treatment can be given (similar to the use of the 'morning after' pill in human females). All drugs used in the prevention of pregnancy have potentially serious side-effects and should be used as a last resort rather than a method of birth control.

If your bitch has been mated unintentionally your vet may advise neutering your bitch to prevent this and future pregnancies. If you want to breed from your bitch later, treatment should be delayed until pregnancy has been confirmed.

When should a bitch be neutered?

Bitches should be neutered when their reproductive tract is inactive (during the anoestrus phase). The best time is around two to three months after the end of the previous oestrus. There is more risk of bleeding if the operation is performed during oestrus, and the surgery is technically more difficult at this time. Early spaying of bitches helps prevent mammary (breast) cancer in later life.

What is pyometra?

This is a serious infection of the womb, seen most commonly in older un-neutered bitches. Bitches with pyometra are often very seriously ill and emergency treatment is usually required. Pyometra is best treated by surgical removal of the womb, but the risks of the operation are higher than those for routine neutering as the bitch is already sick. Medical treatment is usually only tried in valuable breeding animals.

What is false pregnancy?

False pregnancy occurs 'naturally' at the end of dioestrus. Some dogs have very exaggerated symptoms and may show:

- Poor appetite, lethargy and depression
- Nest building behaviour and 'adopt' toys
- Behavioural changes, including aggression
- Mammary development and milk production

Such bitches tend to have recurring false pregnancies at every oestrus and symptoms may last for weeks. Drug treatment can help during the false pregnancy, but the best solution is spaying after the false pregnancy has ended. If your bitch has suffered a false pregnancy discuss the options for treatment with your vet.

Conclusion

The reproductive cycle in the bitch is complicated and during this time your dog will undergo many hormonal changes which can alter her health and temperament. If your bitch is not neutered you should be familiar with all the natural changes in her cycle so that you can be alert to any signs of problems. If you do

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not plan to breed from your bitch discuss the option of permanent neutering with your vet.

If you want any other information on health issues concerning your dog please contact Unicorn Vets on 023 8034 3434 and we will be happy to advise you.

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