Comment on: ‘Abortion for mis-mating in dogs – efficacy, safety and tips’
C&T No. 5043, Pg 30, Dec 2009 by Mark Kelman, Virbac Animal Health

Alizin® (aglepristone) has been used for a number of years in Europe but has only recently become available for veterinary use in Australia and New Zealand. However, despite my still limited personal experience with this drug, I am in agreement with Mark that it is the safest and most effective drug available for the treatment of mis-matings in bitches that result in an unwanted pregnancy. Obviously there are other unregistered drugs available for the termination of pregnancy in bitches including prostaglandin (PGF-2α; both natural and synthetic derivatives) and progestin inhibitors. However, these drugs can have a number of side effects and efficacy depends on the stage of pregnancy at which it is administered.

Regardless of what treatment is used for pregnancy termination in the bitch, it is most important to diagnose that the bitch is actually pregnant before treating her for misalliance as it has been shown that only 40% of bitches presented for misalliance were actually pregnant (Feldman et al., 1993) – which means that 60% of bitches will be treated unnecessarily if pregnancy diagnosis is not confirmed. I therefore only treat after a pregnancy diagnosis has been made after an unwanted mating. As Alizin® is most efficacious (>99%) before Day 22 after mating, it is unfortunately not possible to confirm pregnancy diagnosis if using Alizin® in this period (as confirmation of pregnancy is most accurately determined by an abdominal ultrasound carried out at 28 days of gestation¹). Other methods of pregnancy diagnosis at this early stage such as abdominal palpation and measurement of the hormone relaxin are also possible but are not as sensitive or accurate as an abdominal ultrasound. I will also mention here, while on the topic of early pregnancy termination, that treatment of a mis-mating with multiple injections of oestrogen derivatives on certain days just after a mating has been observed is not recommended. This is not only because the bitch may not be pregnant but because of the side effects of such a treatment (bone marrow suppression, predisposition to pyometra) and the debatable efficacy of this treatment regime.

It is important to confirm pregnancy from an unwanted mating prior to Day 40-45 of gestation¹, that is, prior to foetal ossification, as undesirable effects such as uterine contractions and expulsion of foetuses can occur with termination of late pregnancy. Technically, treatment with Alizin® after this time would be considered as an induction of premature parturbation rather than an early abortion. Therefore, the optimal time for diagnosis and treatment of a misalliance with Alizin® is prior to 35 days of gestation¹ (though Alizin® is registered for use up to Day 45 after mating). This will not result in foetal expulsion and usually only a minor mucoid vaginal discharge is noted.

As the efficacy of Alizin® at this time is 94% it is important, as Mark discussed, to always follow up 7-10 days after treatment with a repeat abdominal ultrasound to confirm there are no viable foetuses remaining. It is also important to remember that measurement of progesterone initially is not helpful in determining that luteolysis has occurred as Alizin® is a progestrone-receptor blocker thereby displacing progesterone and thus increasing blood progesterone concentrations. An initial increase in blood progesterone concentrations after treatment with Alizin® (unlike PGF-21 treatment) is seen before a decline 2-3 weeks later.

Other ‘side effects’ sometimes seen after termination of a pregnancy with Alizin® (and also other abortificants) that I have experienced include a shortening of the inter-oestrous interval caused by premature luteolysis and shortening of the luteal phase (however, there have been reports showing shortening of the anoestrous period may also be involved) and symptoms of pseudopregnancy caused by an initial rapid rise in prolactin after treatment. If the inter-oestrous interval becomes shortened for less than 4 months, this can be associated with a decreased fertility at the next heat in some bitches.

Just as an aside, I have also used the anti-progesterin, Alizin®, for treatment and management of a number of other reproductive cases in both bitches and queens including pyometra (in combination with antibiotics), induction of partuition, prior to an elective C-section and treatment of feline fibroadenomatosis. Others have also described its use with canine endometritis cases, benign canine vaginal tumours and treatment of diabetes mellitus and acromegaly caused by long term progestagen administration. In my personal opinion, Alizin® is a welcome addition in the therapy and management of a number of small animal reproductive problems including mis-mating.

¹ Gestation length is determined as the number of days after the LH surge

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