

A COMBINATION OF CABERGOLINE AND TWO CLOPROSTENOL INJECTIONS FOR THIRD QUARTER GESTATION INTERRUPTION IN THE BITCH

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In the bitch, non-surgical termination of unwanted pregnancy is a reproductive problem of veterinary practice. Safety, effectiveness, number of parenteral injections and time to response should be considered when designing a pharmacological protocol for this purpose. A synergistic effect for dopaminergic agonists and prostaglandins has been suggested to decrease serum progesterone, the main hormone in gestation maintenance. Pregnancy termination with these combined protocols has been reported to be more rapid to achieve as gestation ages. Thus, rapidity of effectiveness should be weighted against the production of abortion of more or less developed fetuses. Third quarter pregnancy interruption would offer an intermediate good option to initiate termination in a quite rapid and owner acceptable way.

Either, cabergoline and cloprostenol are one of the most potent and safest representatives of dopaminergic agonists and prostaglandins, respectively. To assess the efficacy and safety of a combined protocol of PO cabergoline and 2 SC cloprostenol injections to terminate third quarter pregnancy in female dogs, 23 pregnant (35–45 from mating) bitches were randomly allocated to one of the following groups: CA&CL ($n = 13$) cabergoline 5 $\mu\text{g}/\text{kg}$ (2.5 $\mu\text{g}/\text{lb}$) PO q 24 h during 7 or (if pregnancy was not terminated by day 8) 12 days and cloprostenol 1 $\mu\text{g}/\text{kg}$ (0.5 (g/lb) SC on days 1 and 3 or CTRL ($n = 9$) which did not receive any treatment. All the bitches were clinically followed up for 12 days. Clinical suspicion of pregnancy interruptions were ultrasonographically confirmed. If no clinical signs were externally visible, ultrasound examination was carried out on days 8 and 12. In 12 out of the 13 CA&CL bitches abortion was confirmed 5 ± 0.6 days (mean $\pm$ S.E.M., range 2–9) after initiation of treatments. The remaining treated bitch and all the CTRL ones had no aborting signs and both ultrasound examinations revealed normal gestations. Side effects (vomiting, nausea and hyperventilation) were mild and appeared in three of the CA&CL bitches. Abortion was followed by a 5–8 days vulvar discharge in all the cases. Nine out of the 13 treated bitches required a total of 3 visits to the clinic to achieve pregnancy termination, while in the other 3 responding animals only 1 additional visit was necessary.

It is concluded that this combination of PO cabergoline and two cloprostenol applications appeared as a practical, safe and efficient abortifacient protocol, between days 35 and 45 after mating, that could be used in outpatients.

Keywords: Abortion; Bitch; Prostaglandin; Cabergoline