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COMPARISON OF PHARMACOLOGICAL METHODOLOGIES FOR TERMINATION OF PREGNANCY IN BITCHES

Effectiveness and adverse effects

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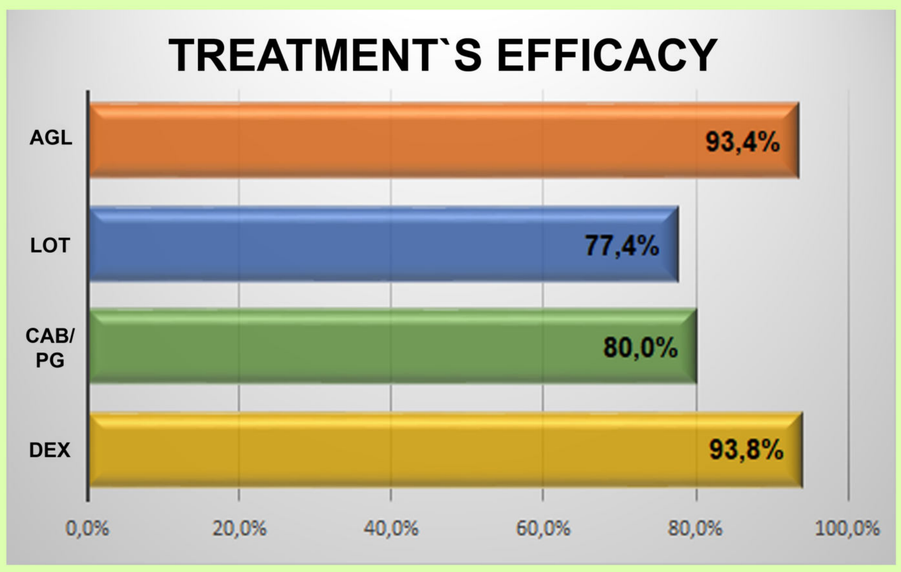
INTRODUCTION

The reproductive clinic requires that, in relation to possible events that imply unwanted pregnancies and that may involve situations that threaten the quality of life of pets, the intervention of veterinarians to evaluate the eventuality of interrupting the advance of pregnancy. For this, there are surgical and pharmacological methods, in recent years, have advanced substantially. Most of the methods currently proposed for the interruption of pregnancy in dogs and cats act by interrupting or interfering with the action of progesterone on the uterus and the adherence of the placents. The objective of the work was to determine the effectiveness and the different characteristics in their applicability and adverse effects of 4 diverse pharmacological protocols pharmacological to interrupt pregnancy in bitches.

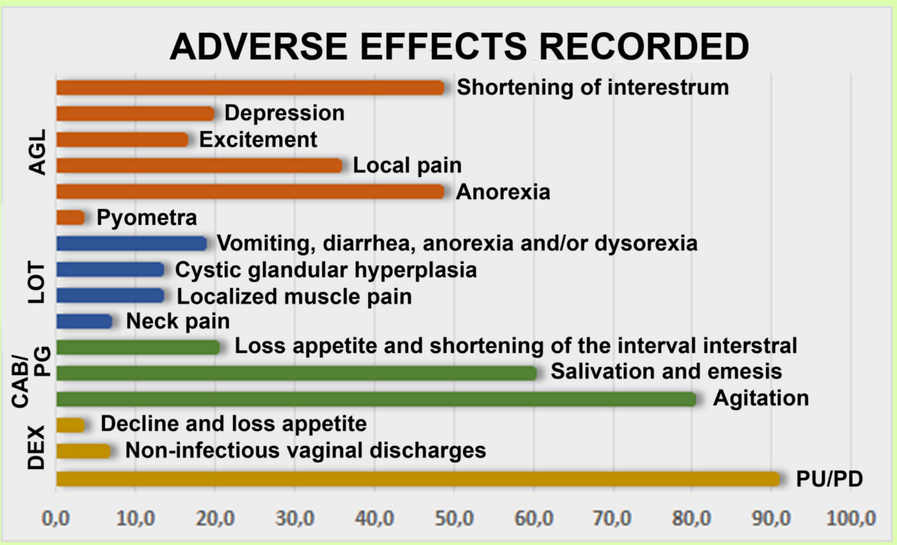
MATERIALS AND METHODS

In the Veterinary Reproductive Service of Uruguay (SRVI_UY), 129 non-sterilized female dogs of various breeds and crosses were received, and ages 4.5 ± 0.7 years (mean ± SEM) and weights of 16.7 ± 2.9 kg that had been copulated by males during reproductive cycle, and that for different reasons it was not desired to continue with the possible pregnancy, but to continue with the reproductive potential. All the animals attended the veterinary service 2 times/week for control and on other occasions, according to possible effects appreciated by the owners. In this work, the treatments were compared: corticosteroids/dexamethasone [1] (n = 32) every 12 hours at 200 ug/kg (DEX) for 10 days (30-32 gestation); dopamine antagonists and prostaglandins [2] (CAB/PG): cabergoline 5 ug/kg/day for 10 days, and cloprostenol injections 1 ug/kg, on days 1 and 5 (n = 35) (28 - 30 gestation); lotrifen [3] at a single dose of 2.5 mg/kg (LOT; n = 31) (7-15 gestation) and aglepristone [4] 10 mg/kg (n = 31) every 24 hours for 2 days (AGL) (25-35 gestation).

RESULTS and DISCUSSION



Graph Nº1 - Efficacy of the treatment pharmacological



Graph Nº2 - Effects Adverse in treatment pharmacological
PU/PD: polyuria/polydipsia during treatment and up to 7 days later.

The ideal contraceptive [5] would be one that, being highly effective, is free of side effects, non-disruptive of the animal hormonal cycle, easy to administer, interceptive and affordable. Under these precepts we can highlight DEX as very effective, non-hormonal and economical; AGL was highly effective and practical, yet expensive (P≤0.05) in their target compared to CAB/PG and LOT.

It is important to note that the LOT protocol determines its administration prior to ultrasound verification of gestational success, which is why non-pregnant animals can be treated. It is also important to consider that in most methods to interrupt pregnancy, it may be advisable to delay treatment until pregnancy is confirmed. More than 60% of bitches that had been unwantedly served were not pregnant [6], apparently more than half of the animals are treated unnecessarily.

CONCLUSIONS

The clinical management of cats and dogs presented for treatment for unwanted mating requires a good understanding of these protocols, possible modifications that may be made, expected effects adverse, the sources of the drugs involved, and the possibility of diluting or reformulating some of the drugs to facilitate accurate dosing in smaller animals. In most cases, these drugs are experimental and their use in small animals is not approved and from a legal point of view it is important to document the consent of the owner by having him sign a consent or release form.

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