

POSTER 2

Effect of Tamoxifen Citrate on the Reversible Control of Libido and Fertility in Male Dogs

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Tamoxifen citrate is a synthetic nonsteroidal type I antiestrogenic compound that competitively blocks estrogen receptors with a mixed antagonist-agonist effect. In a first report in beagle experimental dogs, tamoxifen was shown to have a transient negative effect on libido and testicular morphology and function without clinical or hematological side effects. It was, therefore, of interest to assess the efficacy of tamoxifen to control undesired libido and fertility in male dogs in clinical settings.

Nineteen 2- to 8-year-old dogs that lived with intact bitches were administered tamoxifen citrate (Tamoxifeno®, Filaxis) PO (2.5, 5 y 10 mg q24 h to < 15, ≥15 < 25 and ≥ 25 kg body weight, respectively). The males began their treatment the day (±2) of proestrus onset in the bitch (Group I, n=9), a week before proestrus (Group II, n=2), 2 weeks (±3 days) before proestrus (Group III, n=3) and 4 weeks (±5 days) before (Group IV, n=5). In all the cases, treatments were prolonged until diestrus and lasted 15 to 35 days.

Libido (absent, poor, moderate, normal) was assessed daily during the females' proestrus and estrus. All the bitches were examined by ultrasound for pregnancy diagnosis 3 weeks later. The frequency of animals achieving different grades of libido or pregnancy in each group was analyzed by (PROC FREQ, SAS®). The level of significance was set at $p < 0.05$.

Significant differences were found for libido among the treatment groups. All the dogs of Groups I and II (11/11) had normal libido while all Group IV dogs (5/5) had absent libido. Dogs of Group III presented poor to moderate libido. Dogs of Groups I, II and III had to be separated from females; one dog of Group II and one of Group III accidentally escaped and mated the bitch. None of these females nor the ones of Group IV became pregnant.

According to the results obtained in the present clinical trial, tamoxifen administered to male dogs one month before expected female's heat may represent a safe and efficient contraceptive compound in cases in which estrous cycle onset could be predicted. However, further work with a larger number of animals should be carried out before this pharmacological protocol could be widely indicated.