Comparative Evaluation of Pentazocine and Tramadol as Pre-Emptive Analgesics for Ovariohysterectomy in Female Dogs

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Abstract: A comparative evaluation of Tramadol and Pentazocine as a pre-emptive analgesic in clinical cases of female dogs undergoing ovariohysterectomy was undertaken during this study. During the study, the following parameters were assessed viz., Rectal temperature (°F), Respiratory rate (breaths/min) and Heart rate (beats/min). Hematological and biochemical parameters viz., total erythrocyte count (TEC) (millions/cmm), hemoglobin (g %), otal leucocytes count (TLC) (thousands/cmm), differential leucocytes count (DLC) (%), serum creatinine (mg/dl), plasma protein (mg/dl), blood glucose (mg/dl) was estimated before the surgery and after administration of general anaesthesia and immediate postoperative periods of 0, 12 and 24 hr respectively. Mean Total Pain Score (MTPS) includes measurement of parameters like posture, vocalization, activity level, response to palpation and agitation at different intervals was calculated before surgery and after administration of general anesthesia and post-operative periods of 1, 2, 4, 6, 12hrs and 24 hrs respectively. Mean Total Pain Score (MTPS) was given for each parameter (Posture, Vocalization, Activity Level, Response to Palpation and Agitation) like 0,1,2,3. (maximum score will be given was 4.). Results were revealed in all three groups including control group. There were significant minor alterations in physiological, hematological and biochemical parameters. MTPS (mean total pain score) were revealed and found a significant alteration when compared with control group. In conclusion, Tramadol found to be a better analgesic and had up to 8hrs of analgesic effect and Pentazocine is superior in post-operative pain management when compared to Tramadol because this group of dogs experienced less surgical stress, consumed less anesthetic dose, they recovered early, and they had less MTPS score.

Keywords: dog, pentazocine, tramadol, ovariohysterectomy

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