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1	<b>Title</b>	<b>Laparoscopic Versus Traditional Ovariectomy in Dogs</b>
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	<b>Abstract</b>	<p><b>Objectives:</b> To evaluate the laparoscopic ovariectomy (LAOVE) as an alternative technique for traditional open surgical ovariectomy (OVE) in dogs.</p> <p><b>Study design:</b> Experimental study.</p> <p><b>Animals:</b> Six adult intact female dogs aging between 8-30 months and weighing between 12-22 kg.</p> <p><b>Methods:</b> Dogs were divided into 2 groups: Group 1 (3 dogs), which had ovariectomy by traditional midline open technique (OVE), and Group 2 (3 dogs), which had two-portal laparoscopic ovariectomy technique (LAOVE). All surgical procedures were evaluated considering incision length, operative time, intra-operative and postoperative complications, and healing scores. Blood samples for measurement of serum cortisol concentration (as a stress or pain marker) were collected immediately before incision, 2 hrs and 24 hrs after surgery.</p> <p><b>Results:</b> No significant surgical complications occurred. The LAOVE technique mean operative time was significantly longer (<math>46.33 \pm 15.37</math> minutes) than OVE technique (<math>19.33 \pm 2.52</math> minutes). No significant difference was observed between groups for intra-operative complications. The group of OVE had significant higher mean serum cortisol level after recovery (<math>17.19 \pm 1.87</math> <math>\mu\text{g/dL}</math>) than LAOVE group (<math>12.28 \pm 1.97</math> <math>\mu\text{g/dL}</math>). Incision length and healing scores proved better following LAOVE.</p> <p><b>Clinical Significance:</b> The LAOVE is a safe alternative to OVE in bitches and offers a minimally invasive and less painful technique.</p>
	<b>Keywords:</b>	Laparoscopy, Ovariectomy, Evaluation, Traditional midline, Open surgery, Dogs
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