

SUMMARY

Effects of Ovario-hysterectomie on Concentrations of Zinc, Copper, Calcium, Phosphorus

Four-teen mongreal bitches, aging between four and five, clinically helthy dogs used in this study. Dogs were taken from the dog hous of Aydın municipialty. Operated dogs were not in eostrus cycle. Blood was collected from vena cefalica lateralis. Prior to operation, ten days and 30 days following the operation blood was collected from the dogs. Blood in serum tubes were centrifuged at 3000 g for ten minutes and sera was kept at -20°C until the measuring of parameters. Analyses were performed according the recommendations of manufacturer (Randox, UK, Crumlin).

Statistically significant differences were observed in concentrations of zinc, copper and calcium. Concentrations of zinc prior to the operation was $166.37 \pm 13.03 \mu\text{g/dl}$. At the tenth day of operation levels of zinc increased to $247.42 \pm 21.37 \mu\text{g/dl}$. seviyesine çıktığı görüldü. At the 30th day of operation this remercable increase, however, decreased to $170.99 \pm 7.55 \mu\text{g/dl}$. Ten days later after the operation levels of copper increased from $77.10 \pm 7.52 \mu\text{g/dl}$ to $107.81 \pm 7.43 \mu\text{g/dl}$. This value decreased again at the 30th day of operation to $68.98 \pm 6.86 \mu\text{g/dl}$. At the 30th day of operation levels of calcium increased from $11.25 \pm 0.48 \text{ mg/dl}$ to $15.53 \pm 0.95 \text{ mg/dl}$. Contrary to this significant alteration no significant difference was observed in the value of blood calcium taken at the 10th day of operation. Concerning the phosphorous concentrations no differences was observed.

In conclusion, ovario-hysterectomie alters the concentrations of serum zinc, copper and calcium significantly.

Key words; Dog, Ovariectomy, Zinc, Copper, Calcium, Phosphorus