

## **Incision choice in laparotomy : a comparison of two incision techniques in ovariectomy of rats.**

### **ABSTRACT**

The choice of surgical incision in the abdomen is determined by access for surgery. It has been suggested that utilizing a transverse or oblique rather than a midline incision may influence other parameters such as duration of surgery, recovery and complication rates. However, there is a little study as to whether a particular incision confers any advantage. The aim of the study was to determine whether a dorso-lateral incision or a transverse incision confers any advantage to the rats. Ninety five 16 weeks age female Sprague-Dawley rats were divided into two groups. Ovariectomy was preceded either by a single dorso-lateral incision (in the first group, n=45) or a single transverse lateral incision (in the second group, n=50). Animals in group A (vertical incision, n= 45) had a mean weight of  $259.11 \pm 20.31$  and those in group B (transverse incision, n=50) weighted  $254.20 \pm 20.31$  g, There was significant differences in the duration of surgery in the two groups ( $p < 0.001$ ). Although wound healing time for group B was slightly shorter than group A ( $9.46 \pm 0.973$  day vs  $9.78 \pm 1.380$  day); none of the distributions of wound length and healing percentage per day showed significant variation between these two groups. The success of a surgery procedure performed through an abdominal incision depends on careful selection of the incision site and proper closure of the wound. In comparison of these two types incision for ovariectomy of rat, the operation as conducted in group B (Transverse Incision) was technically easier, less time consuming and less wound healing duration.

**Keyword:** Ovariectomy; Incision technique; Vertical; Transverse.