Structural Microscopic of Mandible Bones in Ovariectomized Rats with High Ratio Phosphate/Calcium Feeding

Abstrak:
This experiment was conducted to study the microscopic structure of mandible bones in ovariectomized rats with ratio phosphate/calcium feeding. Fifteen female Sprague Dawley rats 7 weeks old were randomly divided into 3 groups as follow group I control (non-ovariectomized rats), rats in group II and III were ovariectomized. Phosphate/calcium diet were fed with ratio of 2 to 1 (K1, K2) and 6 to 1 (K3). After 12 weeks the rats were sacrificed. The mandible bone were collected and processed for microscopic examination with trichrome staining. The results showed that structurally the osteoporosis occurred in mandible bone of group K2 and K3. It could be concluded that estrogen deficiency condition (ovariectomy) and high ratio phosphate/calcium ration caused osteoporosis in mandible bones.

Keyword:
Osteoporosis; ovariectomy; high ratio phosphate/calcium feeding