

CHARACTER OF ALVEOLAR BONE OF ALBINO RATS RECEIVING HYDROGEN CYANAMIDE

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ABSTRACT

The present investigation was carried out to study the effect of hydrogen cyanamide, a plant growth regulator, on the histology, histochemistry and density of alveolar bone of albino rats. This agrochemical was administered to the experimental animals orally in a dose of 30 nig/kg body weight twice weekly for a period of 2 months. Then the control and experimental animals were sacrificed and the right halves of their lower jaws were prepared for histological and histocnemical study of alveolar bone supporting the incisor ;ind first molnr. The other hnlvrs were ii'.cci for density measurements of alveolar bone using direct digital radiography. Results indicated that hydrogen cyanamide induced resorption of bone and resulted in bone rarefaction or osteoporosis. Also, it decreased the level of alkaline phosphatase enzyme activity in osteocytes of alveolar bone. The bone density was significantly reduced secondary to hydrogen cyanamide administration.

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