

**CASE STUDY: HISTOPATHOLOGICAL STUDY OF EXTREMITY  
BONE TISSUE IN MONITOR LIZARD (*Varanus salvator*) SUFFERED BY  
METABOLIC BONE DISEASE (MBD)**

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**ABSTRACT**

A Female monitor lizard, three-month-old with 1.2 kg body weight from poor breeding in the Banyuwangi district has been paralyzed for three days and a diagnosed with metabolic bone disease. Euthanize and necropsy performed to observed microscopic images of bone tissue. Bone samples taken from seven limb bones namely scapula, humerus, radius, ulna, femur, tibia, and fibular. The microscopic observations showed excessive osteoclast cell activity in the compact tissue, in the field of view also found cartilage tissue that was not supposed to be between mature compact bone tissue, some cartilage tissue containing adipose in it. This causes the compact bone to lose bone density and make the lizard bone structure to be difficult to regenerate properly so that the growth of monitor lizards is inhibited, this causes make the lizards difficult to walked or paralyzed.. From the examination of calcium and phosphorus in the blood found an imbalance between the content of calcium and phosphorus.

**Key Words :** *Varanus salvator*, Metabolic Bone Disease (MBD).