

Significance of Bone Histomorphometry

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Abstract

Bone histomorphometry allows quantitative study of bone architecture, microstructure, bone remodelling by providing insights of Cellular changes.

Keywords: Bone Histomorphometry; Open Source; Image j; Trainable Weka Segmentation; Bone j; Bone Area; Fracture Healing

Subject's bone histomorphometry

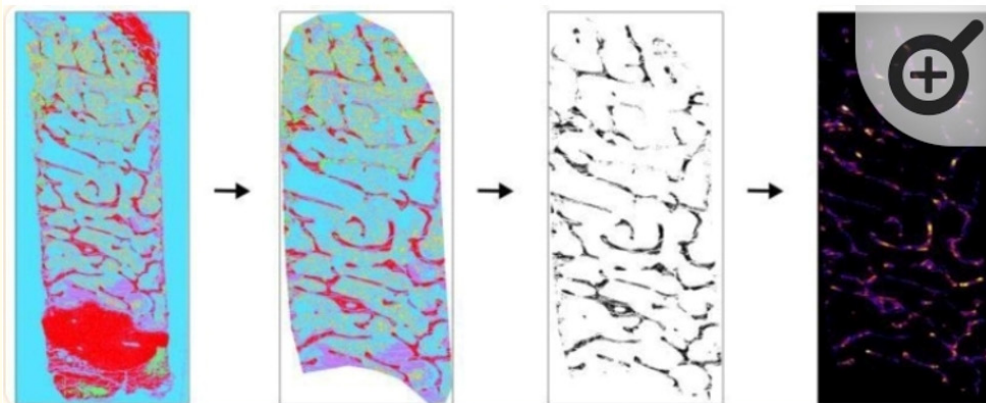


Figure 1: It shows overview of auto segmented images A) shows the mineralized bone matrix [1] red and nonmineralized bone matrix green colour B) Movat pentachrome [2] stain classified image depicts ossified tissue as red, osteoid as green, cartilage [3] as magenta, bone marrow as yellow, and background class as [4] turquoise. (C) Osteocalcin classified image depicts Osteocalcin positive as red, bone as green, and background as magenta [5].

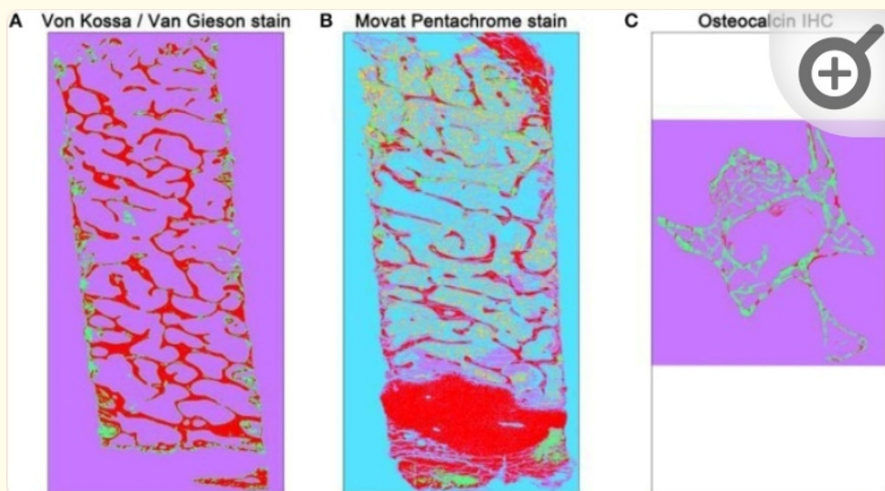


Figure 2: It shows application of Bone J measurements [6] of TB, TH and Tb. Sheep [7] iliac crest biopsy was used to obtain Tb.Th .Sp (left and right) [8] .The cortical bone and cartilage area was cleaned out to measure trabecular parameters [9] . Trabecular bone appear black [10].

Discussion

- Significance of bone histomorphometry
- Bone analysis
- Cortical bone analysis.

Conclusion

Significance of bone histomorphometry is to analysis Tb, Th and sp and cortical bones.

Conflict of Interest

Author declares there is no conflict of interest.

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