

Abstract Submitted
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Biophysical Image Processing of the Mandible Bone SOO HYUNG LEE, SEO HYUN PARK, JAE JUNE LEE, Choice Research Group — The mandible is the largest, strongest and lowest bone in the face, forming the lower jaw and holding the lower teeth in place. Also it is one of the most commonly fractured facial bones. Early detection of such fractures is important since early reduction helps improving outcomes. CT scanning or MRI inspection is often required to identify intact bone before surgery. The purpose of the present research is to assess the diagnostic ability of magnetic resonance imaging for mandibular fracture and osteomyelitis. In this paper, through comparison with conventional techniques, different proposed filters were applied on the full K-space in order to find a most efficient filter, which can be used to produce best MRI image of the affected area. These findings can establish practical MRI diagnostic criteria in relation to treatment and clinical outcome.

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