A 3D mathematical model for planning ostectomy on long-bone angular deformities


Abstract

In this paper we propose a 3D mathematical model for planning a corrective ostectomy on bones with angular deformities. Angular deformity is usually treated with a surgery procedure called Center of Rotation of Angulation (CORA) which uses 2D radiographic images and without considering rotational deviation. Our proposal is based on a 3D computed tomographic imaging technique which allows us to develop a 3D mathematical model without contraints based on radiographic projections.

References


KEYWORDS Corrective osteotomy, CORA, angular deformation, 3D imaging

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