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Radiographic evidence of cranial bone mobility.

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Abstract

The purpose of this retrospective chart review was to determine if external manipulation of the cranium alters selected parameters of the cranial vault and base that can be visualized and measured on x-ray. Twelve adult patient charts were randomly selected to include patients who had received cranial vault manipulation treatment with a pre- and post-treatment x-ray taken with the head in a fixed positioning device. The degree of change in angle between various specified cranial landmarks as visualized on x-ray was measured. The mean angle of change measured at the atlas was 2.58 degrees, at the mastoid was 1.66 degrees, at the malar line was 1.25 degrees, at the sphenoid was 2.42 degrees, and at the temporal line was 1.75 degrees. 91.6% of patients exhibited differences in measurement at 3 or more sites. This study concludes that cranial bone mobility can be documented and measured on x-ray.