AN ACCURACY OF DETERMINING
THE PARAMETERS OF THE HIP JOINTS
OF CHILDREN BASED ON IMAGES
OBTAINED BY USING X-RAY

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ABSTRACT This article presents aspects of assessing of the accuracy of determining of the parameters of the child hip joints for measurements of selected anatomical angles and indices. A developed computer program that uses image processing algorithms, has been the basis of these measurements. This program enables to identify of the skeletal system (on the basis of the necessary anatomical locations of the anatomical components), even in a worse visual parameters of X-ray images. The analysis of the measurement results performed on the basis of digital radiographs of the hip joints of children in the anteroposterior has been presented. The above results have been compared to age norms available in the orthopedic literature.

Keywords: hip joint, image processing, measurements, anatomical angles and indices