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PAINFUL HIP IN CHILDREN: CAN ULTRASONOGRAPHY GIVE A SAFE GUIDELINE FOR THE DIAGNOSIS AND AVOID UNNESSESARY TESTS?

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The purpose of this study is the evaluation of the usefulness of ultrasonography as the primary diagnostic tool in cases of children presenting a painful hip. Within the period between 1/3/01 until 1/3/02 (12 months), 55 children, presenting limping because of a painful hip, were examined clinically and by ultrasound. Their ages varied from 2 years to 14 years. In all cases an ultrasonographic study of the hip was performed, using linear ultrasonography, measuring the anterior capsule distance (ACD) and imaging the anatomical structures of the hip. Fourteen hips were examined radiographically as well because of significant sonographic findings. Characteristically two cases of Legg-Calve-Perthes diseases, one case of septic arthritis, one case of osteomyelitis of the neck of femur and two cases of Slipped Upper Femoral Epiphysis were initially diagnosed by ultrasound and subsequently confirmed radiologically. In the rest of the cases an increase of the ACD was confirmed varying from 3mm to 9mm compared to the contralateral hip and the diagnosis of transient Synovitis was given. However in eight hips a radiological study was additionally performed because of clinical doubts, but proved to be negative. All these hips were followed up for one year without any further complications/recurrences. Overall radiography was avoided in 41 hips (74.5%). Conclusion: ultrasonography as a first step diagnostic method is safe, non-invasive quick and reliable in the evaluation process of a painful hip case and may eliminate unnecessary and potentially harmful investigations.