

EVALUATING THE EFFECTIVENESS OF ULTRASOUND IN DETECTING DEVELOPMENTAL DYSPLASIA OF THE HIP (DDH) IN INFANTS UNDER 6 MONTHS

Narzikulov Shojahon Farxodovich
Samarkand State Medical University

The study aims to assess the efficacy of ultrasound sonography in diagnosing different forms of hip dysplasia in infants under the age of 6 months and to investigate the correlation between the identified pathology and potential risk factors.

Material and methods: In order to achieve this objective, a total of 120 participants within the 0-6 months age range were examined, along with a control group consisting of 30 healthy infants. The diagnostic assessments were conducted using an ultrasound machine equipped with a linear probe (2-5 MHz frequency), specifically the "Toshiba XARIO-200," following the Reinhard Graf method.

Results of the investigation revealed three distinct groups:

Group 1: Children with Immature Hip Joint In this category, 93 children, constituting 77.5% of the total participants, exhibited ultrasound indicators corresponding to Type II according to the Graf classification. Further subtypes were identified:

Group 2: Children with Decentered Femoral Head This group comprised 20 children, accounting for 16.67% of the total participants. These children exhibited Type III (subluxation) according to the Graf classification, with two subtypes, A and B. Subtype B required an extended treatment duration and fixation due to the need for additional time for the reverse restructuring of cartilage tissue before ossification processes could commence. The alpha angle ranged from 50-43°, and the beta angle ranged from 59-77°.

Group 3: Children with Complete Hip Dislocation Seven children, representing 5.83% of the patient population, fell into this group. Clinically diagnosed with "complete joint dysplasia," the angles alpha and beta were not determined, and the femoral head was significantly displaced either upwards or downwards relative to the acetabulum. Managing this condition required careful intervention.

Conclusion. The main advantages of the methods are the absence of radiation exposure, speed, non-invasiveness, the possibility of repeated studies, as well as higher efficiency compared with classical radiography in the case of children aged 1-6 months.

Key words: Ultrasound, hip joint, DDH, hip dysplasia