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# role of ultrasonography in diagnosis of congenital dislocation of the hip

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Early diagnosis of developmental dysplasia of the hip in newborns is essential if treatment is to be successful. Screening of newborns is inappropriate because developmental dysplasia of the hip has a high prevalence and significant morbidity and is treatable. Screening by clinical examination alone has shortcomings, and the use of sonography for screening has been proposed (Harcke H. T. 1994). Hip sonography enables an accurate and clinically relevant evaluation of hip maturation during the first days of human life. Experience has shown that an integration of hip sonography into neonatal screening programs is useful and necessary because clinical and even roentgenographic does not always establish a confirmed diagnosis of dysplasia (Schuler et al., 1990). Various sonographic techniques widely spread used. It's found by Haller J. that the area for ultrasound examination of the pediatric pelvis is best studied in transverse and longitudinal scans with the patient in supine position. In general, the best compromise between penetration and resolution is provided by a 7mm diameter, 5 MHz transducer with a short internal focus in neonates and small infants (Haller J. O et al., 1981). Dynamic and static sonography has become the imaging technique of choice in the diagnosis and follow up of developmental dysplasia of the hip. (Scholeskiet 01., 1993). 117 In Vienna Spiesing Hospital and Benha University Hospital, 600 infants "one week to 10 months" were examined by Hosny, sonographically. Examination and interpretation of the sonographic pictures were performed according to the principles and guidelines of Graf. Hips classified into 4 major sonographic types: Normal; delayed ossification; subluxation and dislocation. Type I: ex: angle > 60, bone roof contour is good, iliac promontory angular or slightly rounded and the cartilage roof is covering the head. Type II: ex: angle is 59-43, bony roof contour is satisfactory, iliac promontory is rounded and cartilage roof is covering the head. Type III: ex: angle 50°. Recommend "double diapering" to allow the parents to do something other than waiting; repeat examination after 4-6 weeks. 2- For dysplastic hip with no dislocation ex angle S; 49°, 13 72°,