ULTRASONOGRAPHY IN THE DIAGNOSIS AND MANAGEMENT OF INFANT HIP DYSPLASIA

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Hip ultrasound is practical and reproducible method that has ability not only to visualize the unossified parts of the newborn hip but also to show movement of the femoral head within the socket. That is why it is useful method not only for making correct diagnose, but also for following the rapid changes of the infant hip undergoing treatment.

**Materials and methods:** In the period since February 2009 to February 2010, ultrasonography screening for hip dysplasia was performed on 150 babys.The babys was from 4 weeks to 6 months old, average 3 months.We used VIVID 7, GE ultrasonograph with excellent visualisation. There were 3 babies with luxation(left hip in all three cases) and 12 babies with hip dysplasia. One of the babies with hip luxation was treated with Pavlik harms and two of them with non-sanguineal reposition and plaster.All dysplasia hips were treated with Wickert orthosis.During the process of treatment we always used ultrasonograf for following the process until complete healing was managed.

**Results:** In all cases of dysplasia we managed excellent results- complete normalization of the hips within 4-8 weeks of treatment with 2-3 control ultrasounds. Also in the cases with luxation the results were excellent, in one case the treatment was 3 months, and in two cases the treatment was 5 months. All cases in which the treatment started in the earlier age of the baby , the length of the treatment was conciderably shorter. All chek-ups until complete normalisation of the anatomical structures of the hip were preformed by using ultrasonogram, without using X-ray(except control X-ray after non=sanguineal reposition).

**Conclusion:** Hip ultrasound is excellent method for diagnosing and management of infant hip dysplasia and shoud be considered as golden standard.It is reproducible, harmless for the baby and uses precise classification system (Graf system) which shows the correct patho-anathomical situation of the boney and cartilage socket and leads to accurate treatment.The normal development of the hip joint is most rapid in the first few months of life, so an early diagnosis with appropriate effective treatment is essential for good outcome.