Eradicating developmental dislocation of the hip: a national program in Romania using the Graf method of ultrasound examination

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Undiagnosed subjects with developmental dysplasia of the hip will load the healthy system with incalculable supplementary costs due to the spontaneous evolution to developmental dislocation of the hip which requires extensive and costly surgery.

The aim of this newsletter is to present the situation in Romania, the cost evaluation of treatment and the effect of a program for early diagnosis of developmental dysplasia of the hip followed by a course of treatment aimed to cure the patients by the age of 3 months. Currently in Romania the exact incidence of developmental dysplasia of the hip is unknown. In the textbook of paediatric surgery edited by Professor M. Vereau in 1960, the incidence of this malformation was estimated to be 1.2%, on average with European statistics.

In order to achieve the goals of this program, Graf’s method of hip ultrasound must become a screening-test for the prevention of the developmental hip displacement.

A well-organized structure must exist in our country. Every county must have a network organized by the County Division of Public Health comprising: neonatologists, radiologists and orthopaedic surgeons (pediatric orthopedists, pediatric surgeons and orthopedists and traumatologists involved in pediatric orthopedics). In every maternity unit and in at least one Department of Radiology and one Department of Orthopedic Surgery of every County there should be a doctor with the required training. The physicians will be trained by the best experts from abroad and within the country and will receive certificates of participation and graduation.

The managers of hospitals and the Directors of the County Division of Public Health, with support from the Ministry of Health, will provide the necessary ultrasound equipment (linear probe, machine support, and child support) for each Maternity, Radiology Department, and Orthopedic Surgery Department of every County Residence Center.

The reference center will be the Department of Pediatric Surgery from “M.S. Curie” Emergency Hospital for Children, Bucharest, where there are professionals that are able to resolve questionable and difficult cases both in ultrasound diagnosis and surgical point of view.

The evaluation procedure will be as follows: all newborns in Romania, about 200,000/year, will be evaluated by sonography (Graf’s method) in maternity units as a screening test. Patients with hip dysplasia will be referred to the trained orthopaedic surgeon who will reevaluate the case together with the radiologist. Questionable and difficult cases will be directed for a proper diagnosis and treatment to the Department of Pediatric Surgery from “M.S. Curie” Emergency Hospital for Children, Bucharest. Each maternity, radiology and orthopedic department will have a hip ultrasound register that will be cen-
tralized at the reference center. The data will be reported annually to the coordinator department of the Ministry of Public Health.

The introduction of this program will lead to the avoidance of an aggressive treatment for developmental dislocation of the hip, including hip endoprosthesis surgery. The most important result of this program will be the early diagnosis of this disease in the newborn period - 0-30 days -, but also the healing of dysplasia up to the age of 3 months. As a consequence the developmental displacement of the hip will be eradicated.

The costs of treatment regarding developmental dislocation of the hip in Romania are estimated at a total of 24,000,000 Euros annually. A summary of the calculation of the cost in the treatment of developmental hip displacement shows the real and undeniable benefits resulting from the implementation of this National Program.

“Early diagnosis and proper treatment of developmental dysplasia of the hip may lead to the eradication of the developmental dislocation of the hip” – will no longer be a sentence in a chapter of a book, but a reality.