

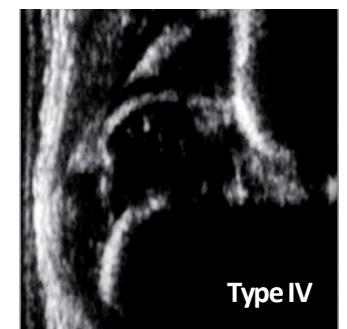
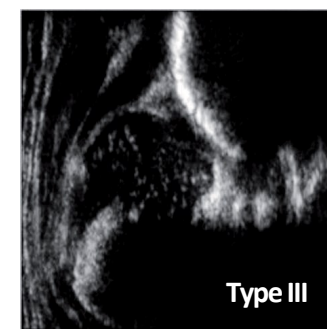
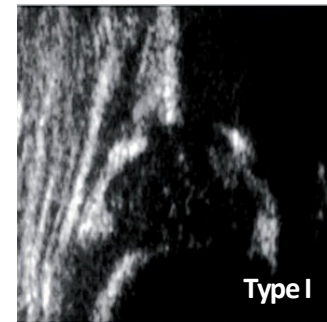
# HIP ULTRASOUND SCREENING - Graf's method



Insufficiently developed hip joints (dysplasia) is the most common disease of the musculoskeletal system in children. An ultrasound examination of the hip joints immediately after birth can detect these deficiencies and prevent them through immediate treatment.



Early ultrasound screening with the appropriate treatment could have prevented this damage to the hip. The examination is completely painless, free of any radiation exposure and other harmful effects.



## PREVENTION PROGRAMME DEVELOPMENTAL DYSPLASIA AND LUXATION OF THE HIP

Hip		Classification according to Graf	Bony Acetabulum Alpha Bony Angle	Acetabulum Rim	Cartilaginous Acetabulum Beta Cartilaginous Angle	Age	Note	Therapy	Baby System <sup>®</sup> Products
Left	Right								
		<b>TYPE I</b> normal hip	good $\alpha \geq 60^\circ$	Ia angular Ib smoothed	covering Ia $\beta < 55^\circ$ (thin, well-covering) Ia $\beta > 55^\circ$ (large base, thin covering)	any age		Prevention (from birth to ultrasound scanning)	▪ 1a-4a Washable Diaper FILTRAS
		<b>TYPE IIa (+)</b> developmentally immature, adequate to age	sufficient with respect to age $\alpha = 50-59^\circ$ (sufficiently well-developed - see scanmeter)	rounded	covering	0-12 weeks		orthopaedic examination	N/A
		<b>TYPE IIa (-)</b> developmentally immature, maturity deficiency	abnormal $\alpha = 50-59^\circ$ (insufficiently well-developed - see scanmeter)	rounded	covering	> 6-12 weeks		orthopaedic examination	▪ 301-302 Corrective Nappy ▪ 600-602 Dynamic Harness ▪ 202A-202 Soft Nappy
		<b>TYPE IIb</b> late ossification	abnormal $\alpha = 50-59^\circ$	rounded	covering	> 12 weeks		orthopaedic examination	▪ 301-302 Corrective Nappy ▪ 600-602 Dynamic Harness
		<b>Exception: TYPE II</b> in case of late ossification	abnormal	angular	covering (exogenous because of late ossification)	any age		orthopaedic examination	N/A
		<b>TYPE IIc</b> (decentring hip) IIc stable/IIc unstable	severely abnormal $\alpha = 43-49^\circ$	rounded/flat	slightly covering $\beta < 77^\circ$	any age		orthopaedic examination	▪ 400-403 Corrective Salopette ▪ 600-602 Dynamic Harness
		<b>TYPE D</b> hip about to decentring $\beta > 77^\circ$	severely abnormal $\alpha = 43-49^\circ$	rounded/flat	compressed $\beta > 77^\circ$	any age		orthopaedic examination	N/A
		<b>TYPE IIIa</b> decentred hip $\alpha < 43^\circ$	insufficient $\alpha < 43^\circ$	flat	cranially compressed, without alteration of the cartilaginous roof (absence of echogenicity)	any age		orthopaedic examination	N/A
		<b>TYPE IIIb</b> decentred hip $\alpha < 43^\circ$	insufficient $\alpha < 43^\circ$	flat	cranially compressed, without alteration of the cartilaginous roof (absence of echogenicity)	any age		orthopaedic examination	N/A
		<b>TYPE IV</b> decentred hip $\alpha < 43^\circ$	insufficient $\alpha < 43^\circ$	flat	caudally compressed, proximal perichondrium with horizontal or lowering course	any age		orthopaedic examination	N/A