

**NOT FULLY CENTRED FEMORAL HEAD
AFTER CLOSED REDUCTION IN CHILDREN
WITH DEVELOPMENTAL DYSPLASIA OF THE
HIP:
IMMEDIATE RE-REDUCTION IS NOT
NECESSARY**

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INTRODUCTION

MRI standart for prove of reduction in dislocated hips treated by closed or open reduction and retention by spica cast

Is a perfect centration of the femoral head in the acetabular socket necessary?

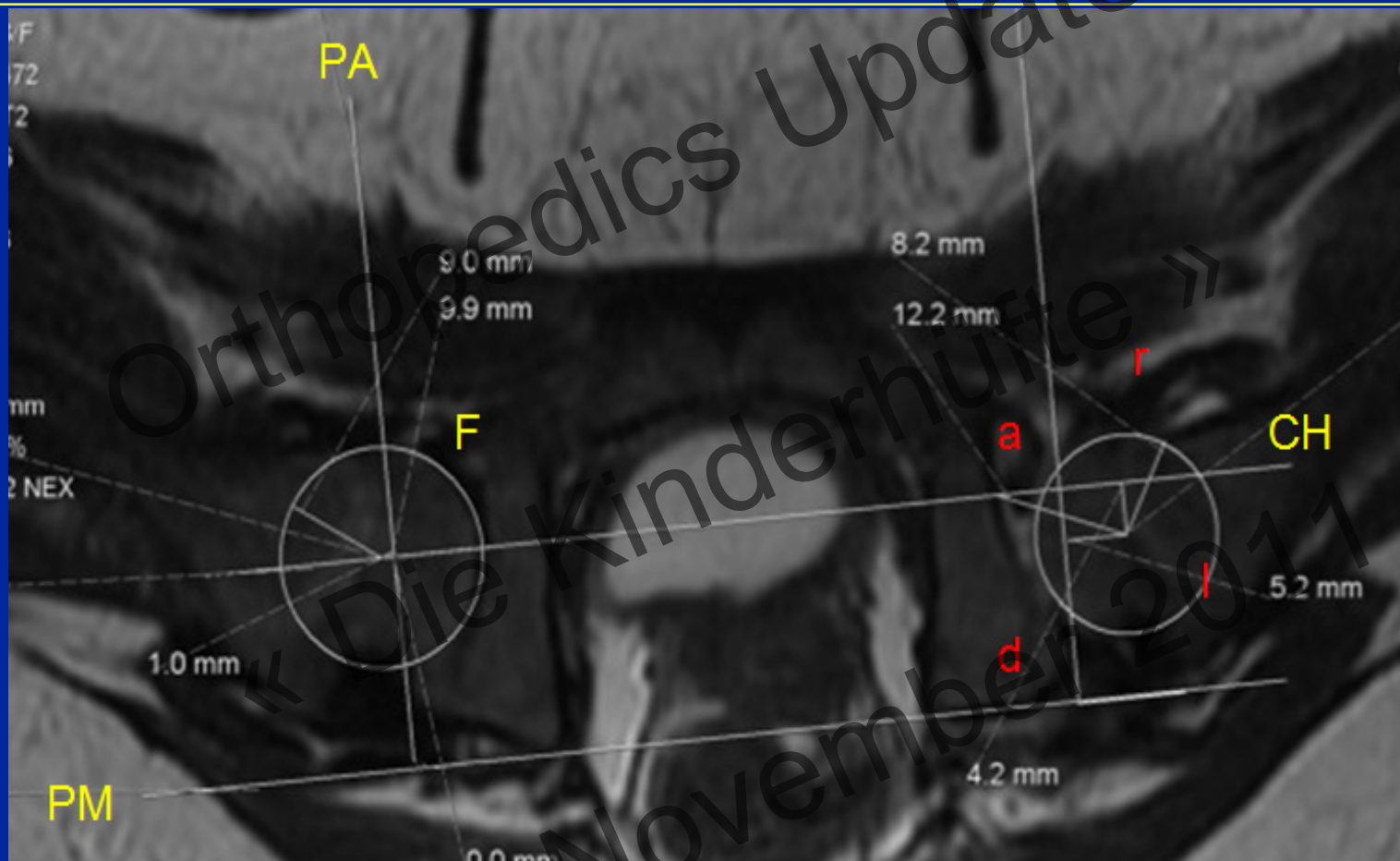


MATERIAL AND METHODS

- Retrospective study
- 2005-2010
- DDH
- Closed reduction and hip spica cast
- Treatment protocol:
 - Spica cast (MRI after reduction and 2 weeks)
 - Düsseldorferschienne
 - Pavlik Bandage
- Follow up till ultrasound normal



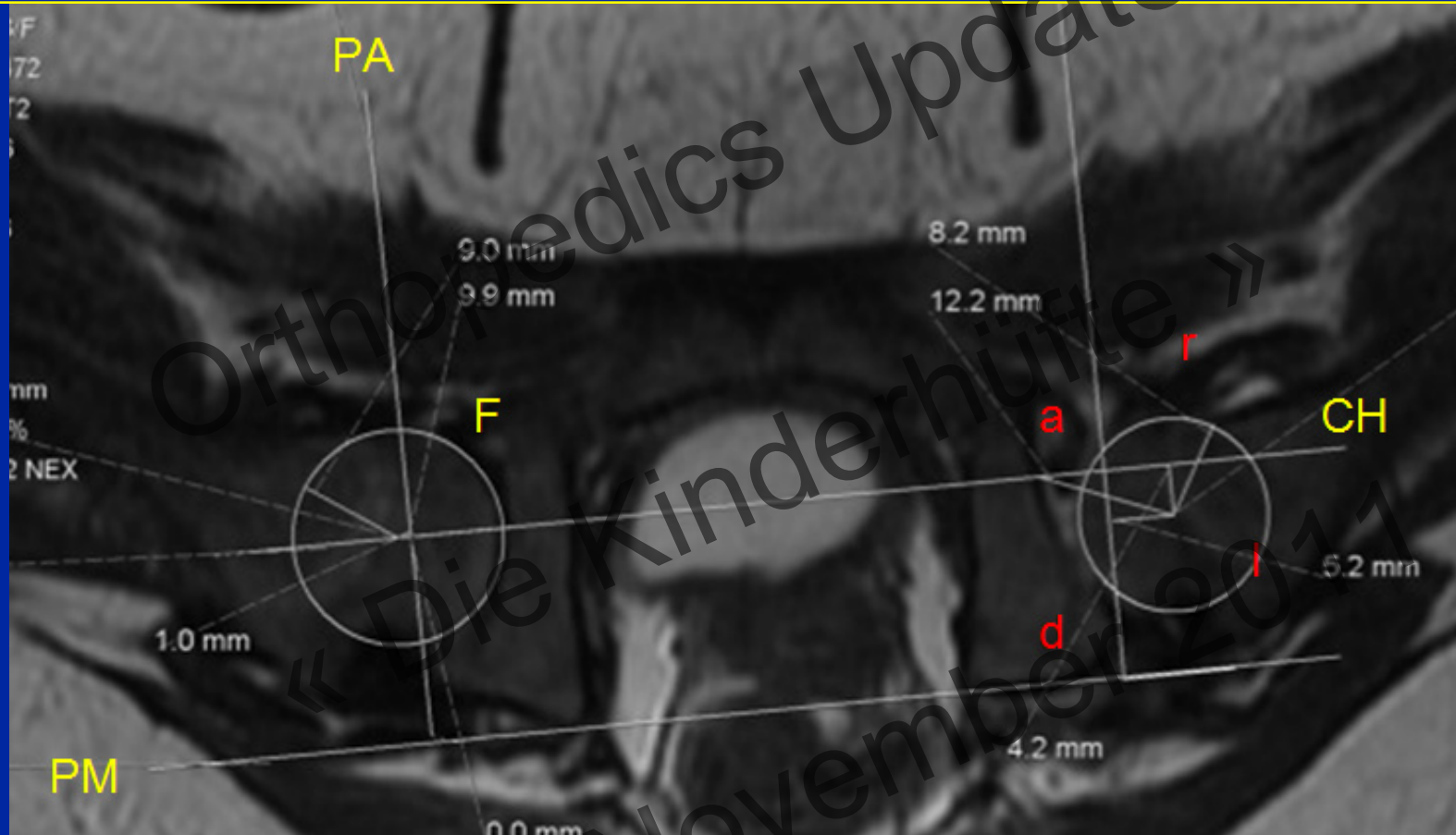
T2 WEIGHTED AXIAL MRI



- F:** Femoral head
- PM:** Posterior pelvic margin
- PA:** Posterior rim acetabulum
- CH:** Parallel line to **PM** through **F**



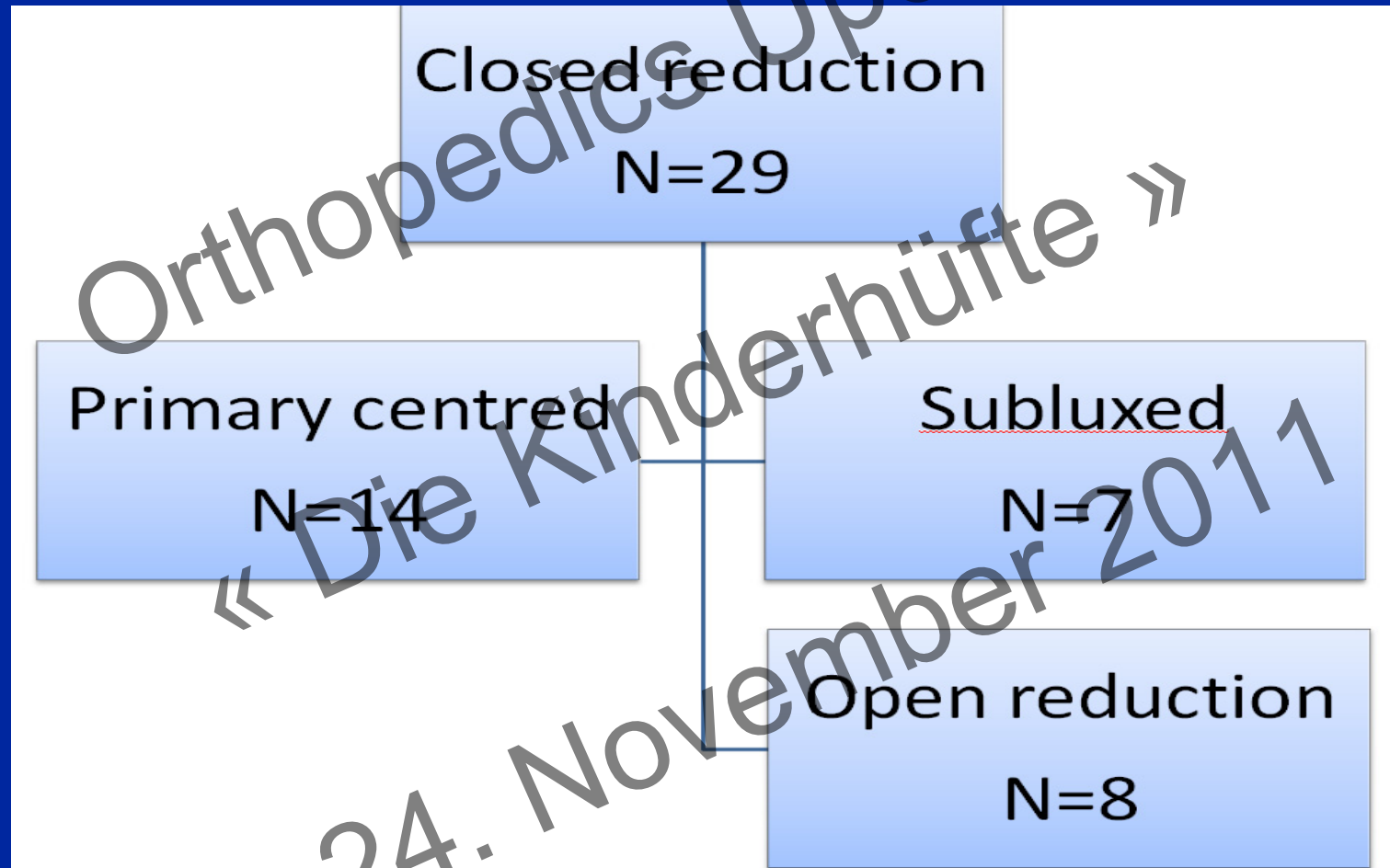
MEASUREMENT



- r:** Radius of femoral head
- a:** Centre of F to intersection of CH with acetabulum
- l:** Lateral distance centre of F to PA
- d:** Dorsal distance centre of F to CH



RESULTS



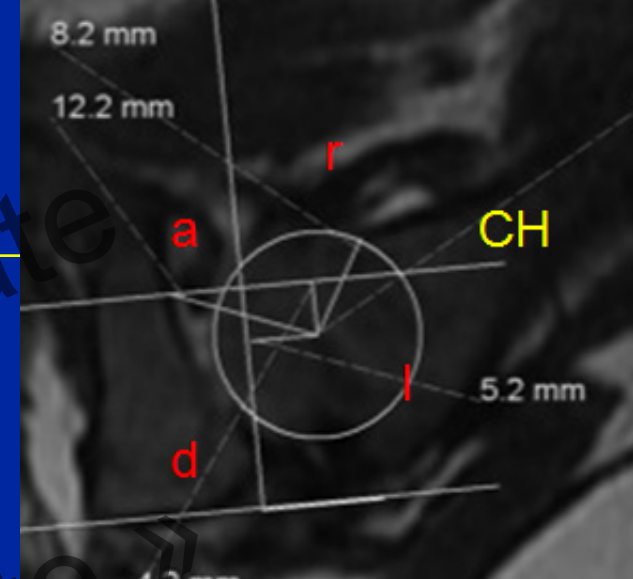
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RESULTS

- N=6 (N=1 lost for f-up)
- All hips Typ Ia or Ib¹



	Normal hip	Normal hip 2 weeks	Pathological hip	Pathological hip 2 weeks
r	8.8	8.7	8.13	8.21
a	10.6	10.3	12.21	10.28
r/a	0.83	0.84	0.66	0.81
l	2.83	2.14	5.58	2.54
d	0	0	2.03	0.86

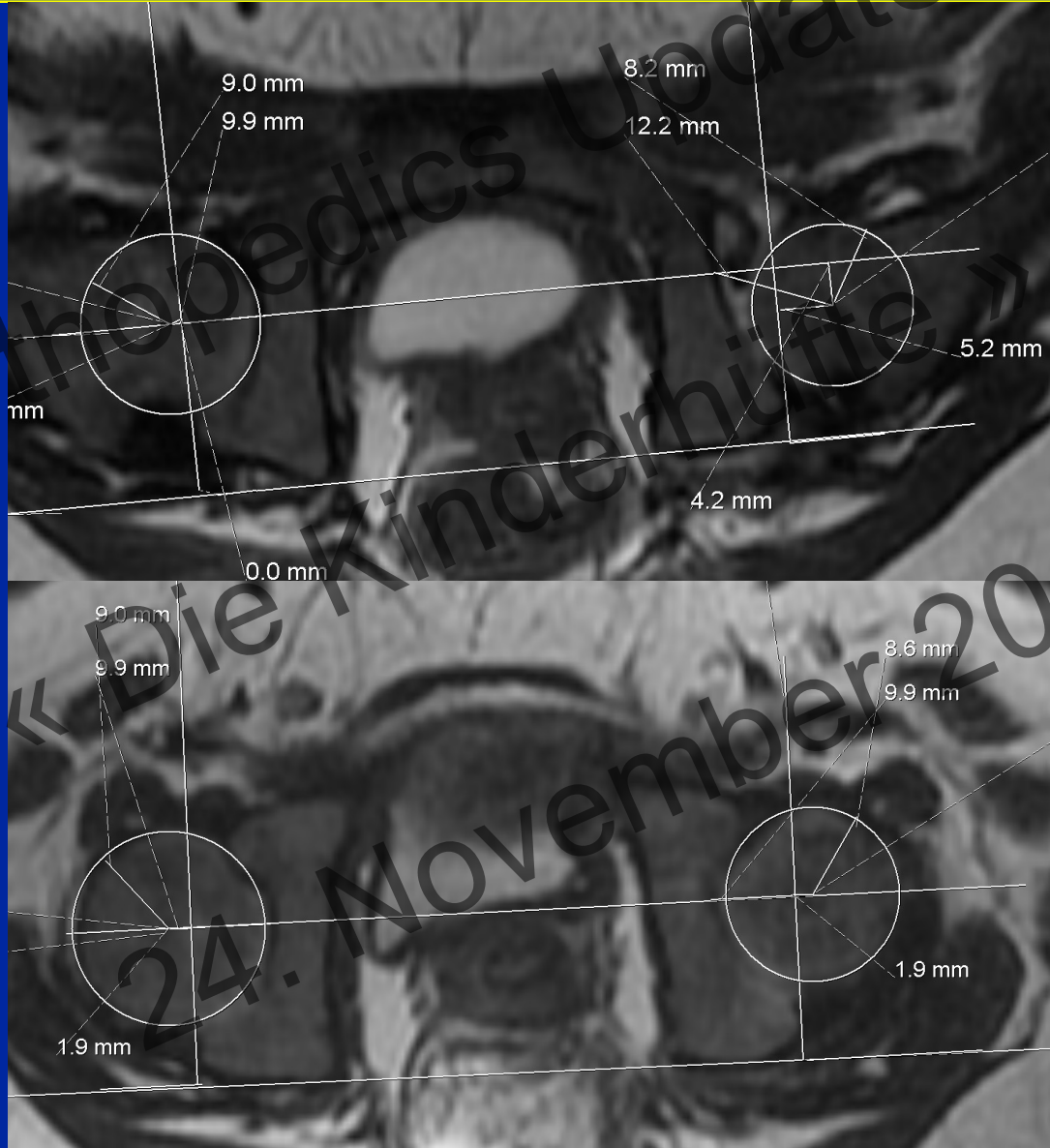
1: Graf.R, Arch Orthop Traumat 97:117-133; 1980



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EXAMPLE



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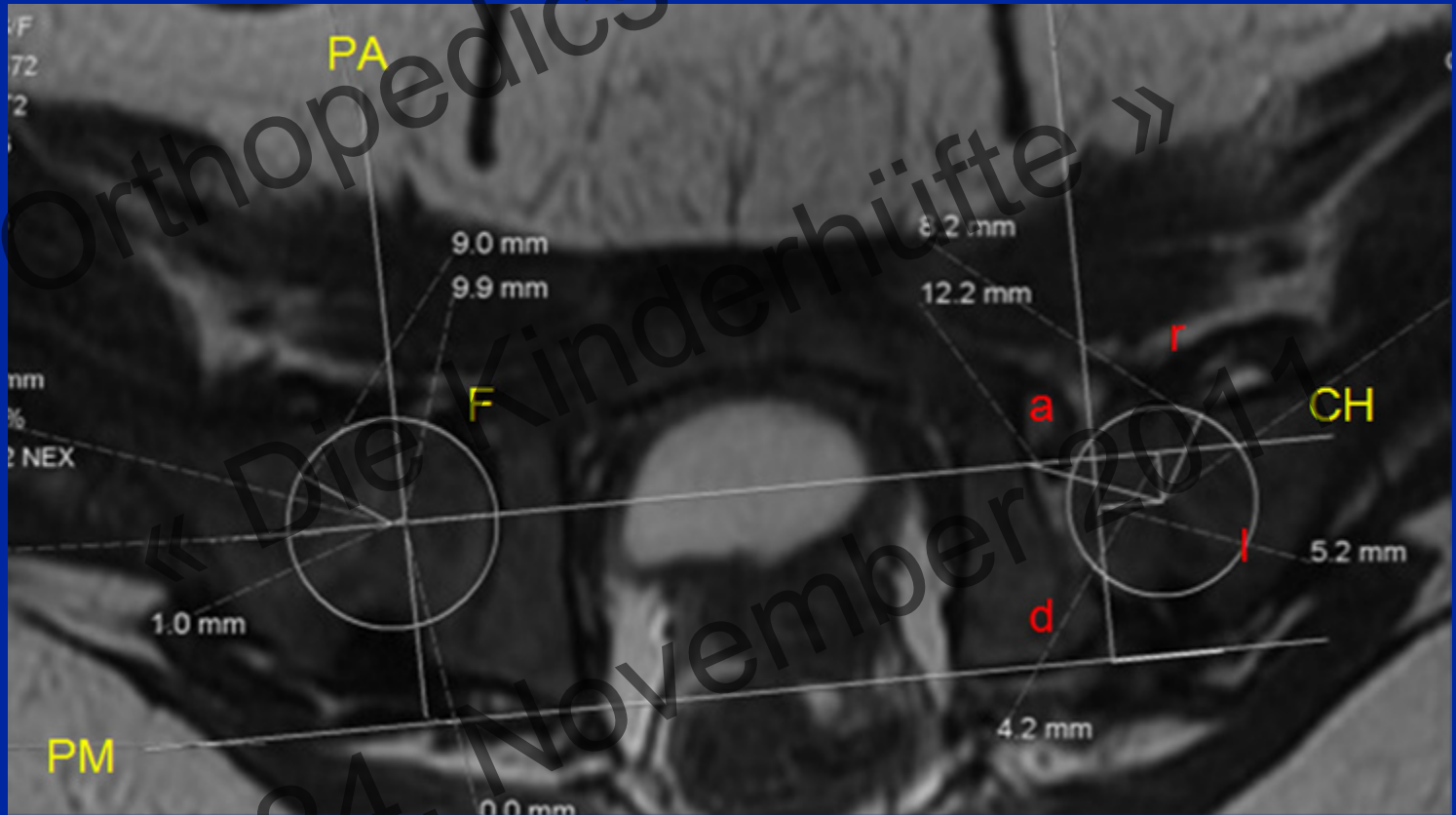
DISCUSSION

- Immediate re-reduction in subluxed hips not necessary
- Spontaneous reduction within 2 weeks
- Hips developed normal
- New MRI measurements helps to verify the reduction

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THANK YOU



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