

Ska vi revidera höftuppföljningen i  
CPUP?



Gunnar Hägglund

# The natural history

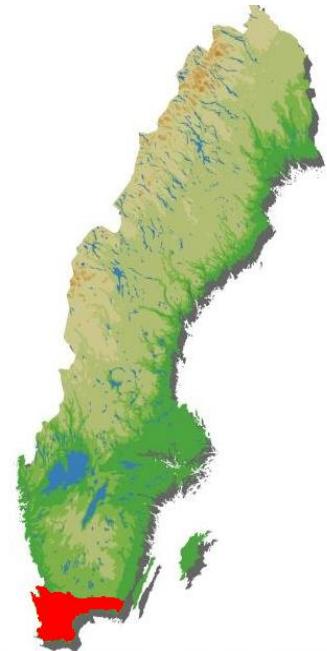
15% of the total population of children with CP develops hip dislocation, if not prevented

# The natural history

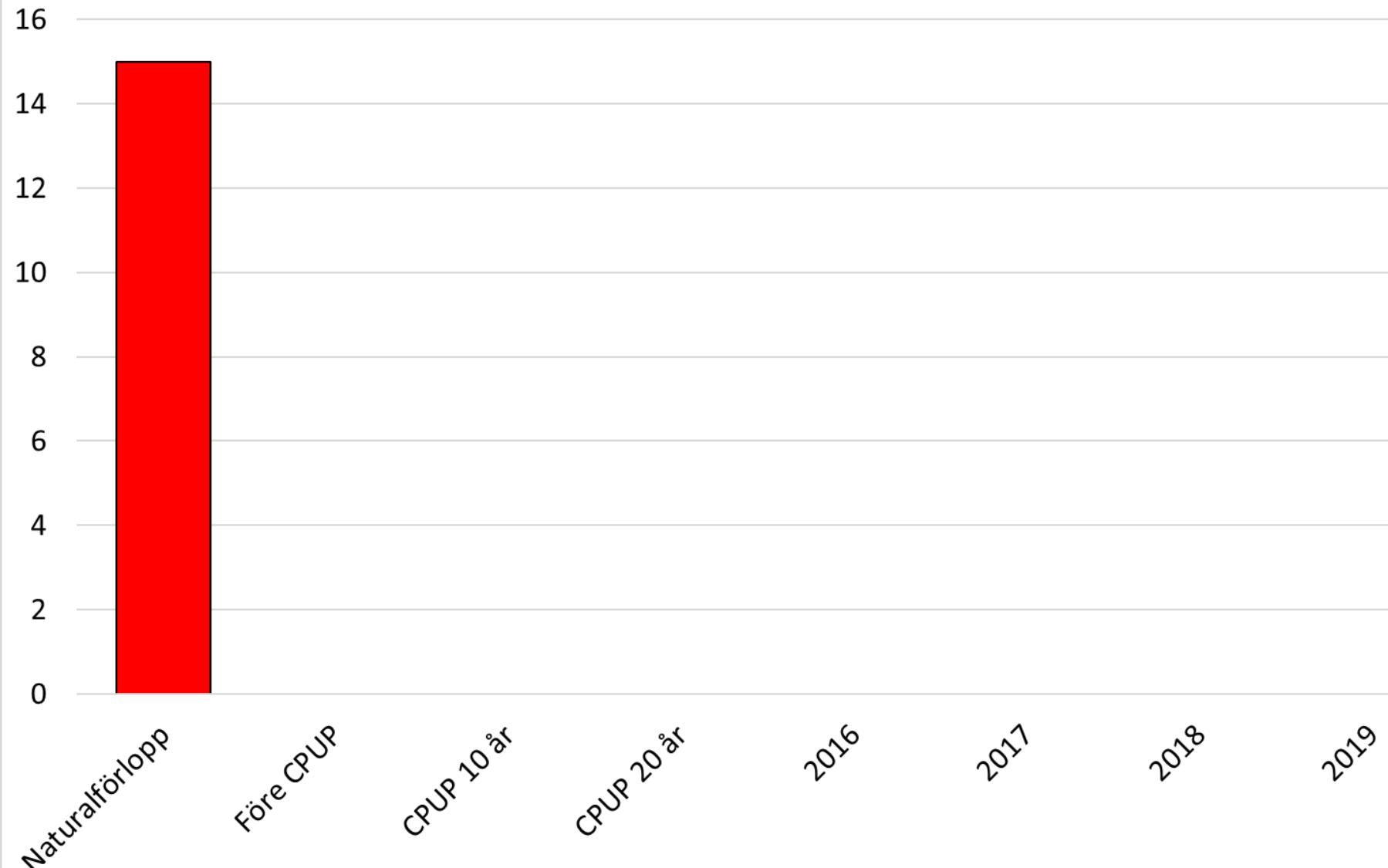
50% of children at GMFCS level V  
develops hip dislocation, if not prevented

# 1994 - 2006

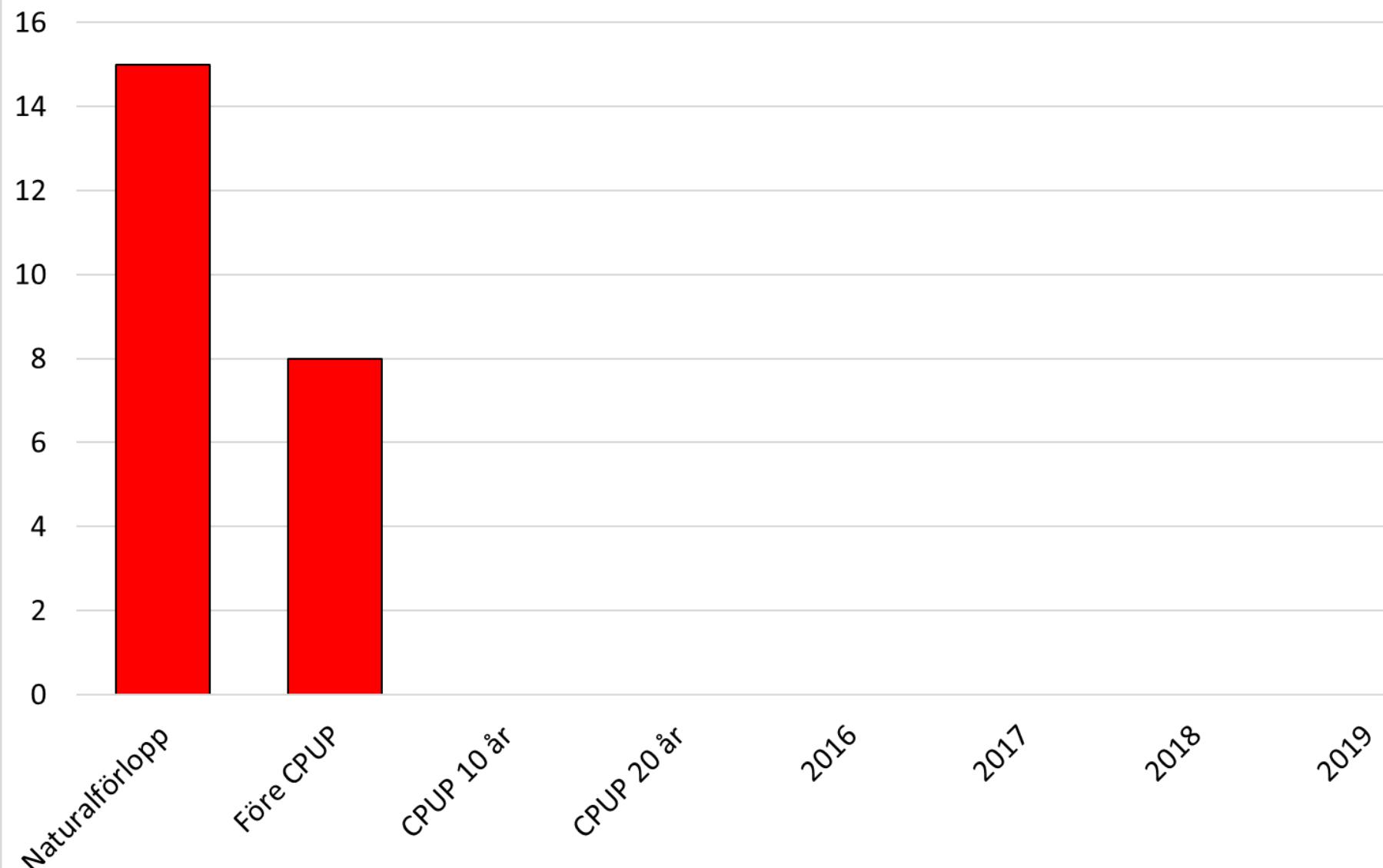
Uppföljning baserad på CP-subtyp  
och ålder.



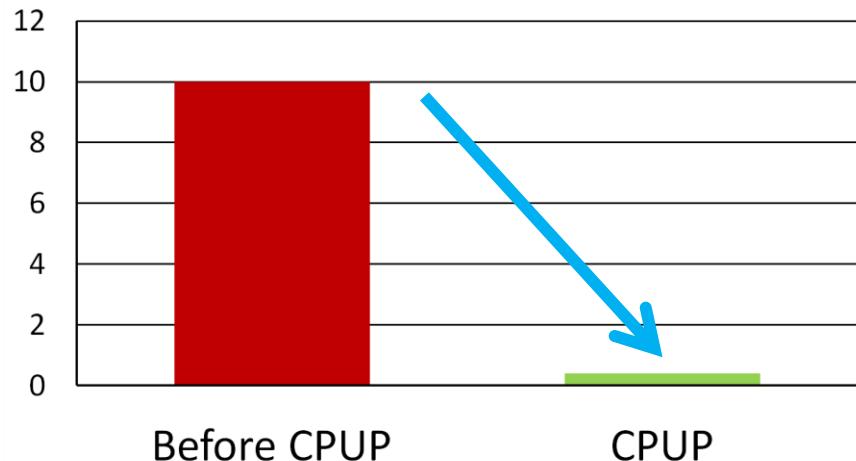
## **Andel höftluxationer (%)**



## Andel höftluxationer (%)



## Hip dislocation



### ■ CHILDREN'S ORTHOPAEDICS Prevention of dislocation of the hip in children with cerebral palsy

20-YEAR RESULTS OF A POPULATION-BASED PREVENTION  
PROGRAMME

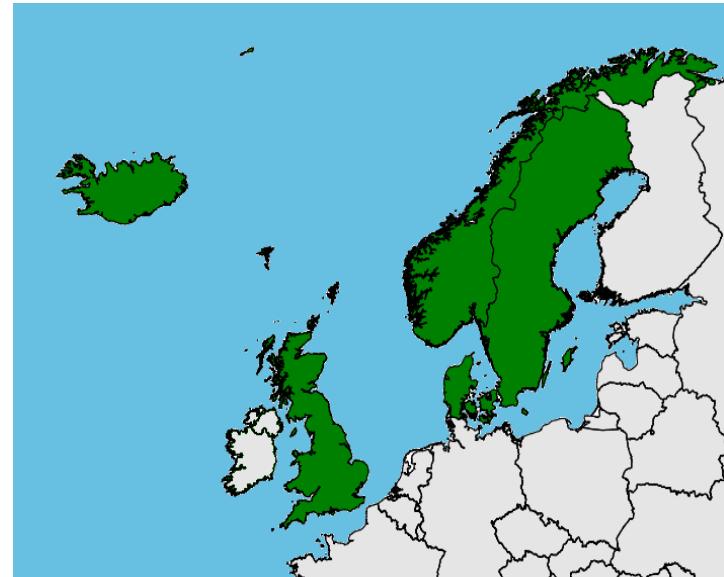
**Bone Joint J 2014; 96-B:1546–52.**

G. Häglund,  
A. Alriksson-Schmidt,  
H. Lauge-Pedersen,  
E. Rodby-Bousquet,  
P. Wagner,  
L. Westbom

*From Lund  
University, Lund,  
Sweden*

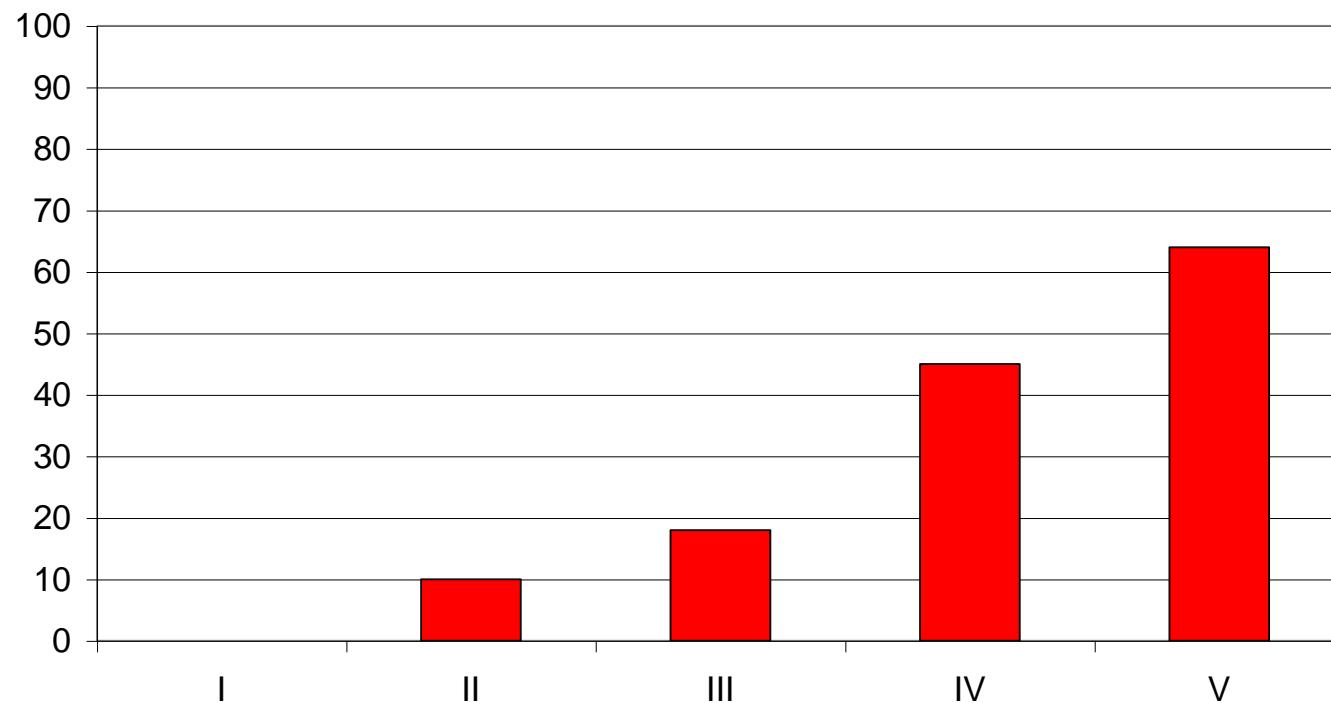
# FU 2006 -

Uppföljning baserad på GMFCS och  
ålder.



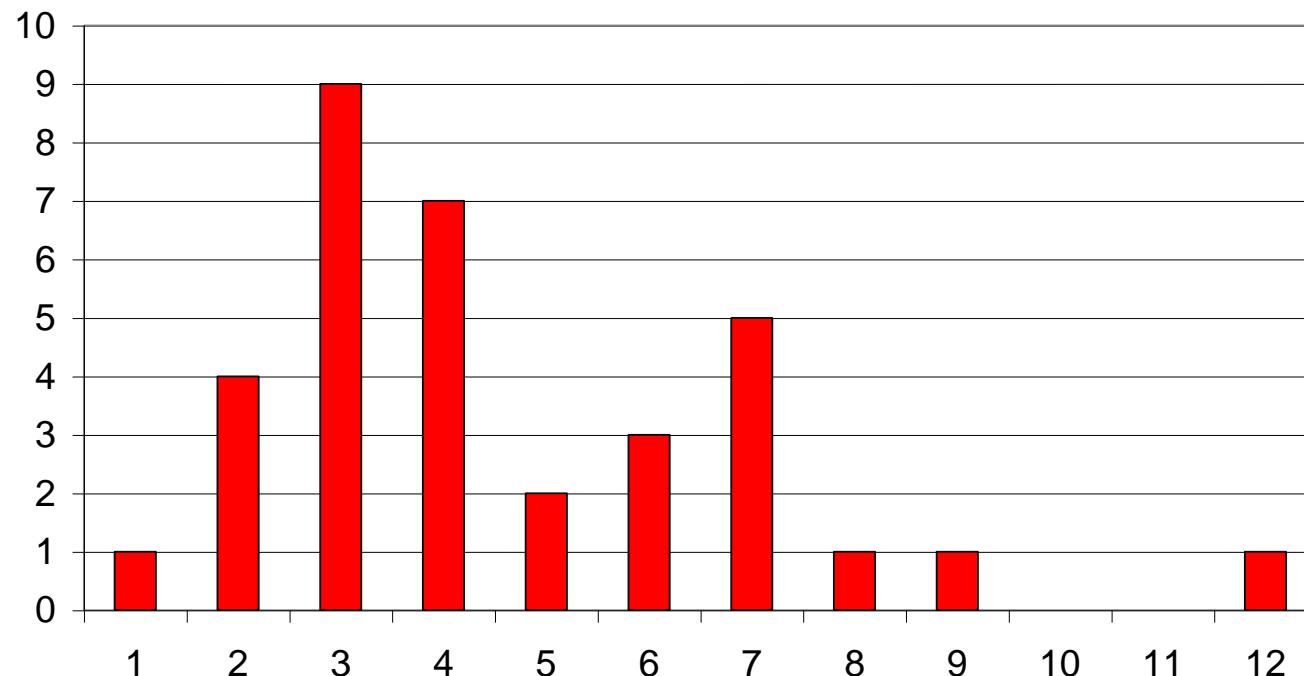
# Risk factors for hip displacement:

## Gross Motor Function (GMFCS)

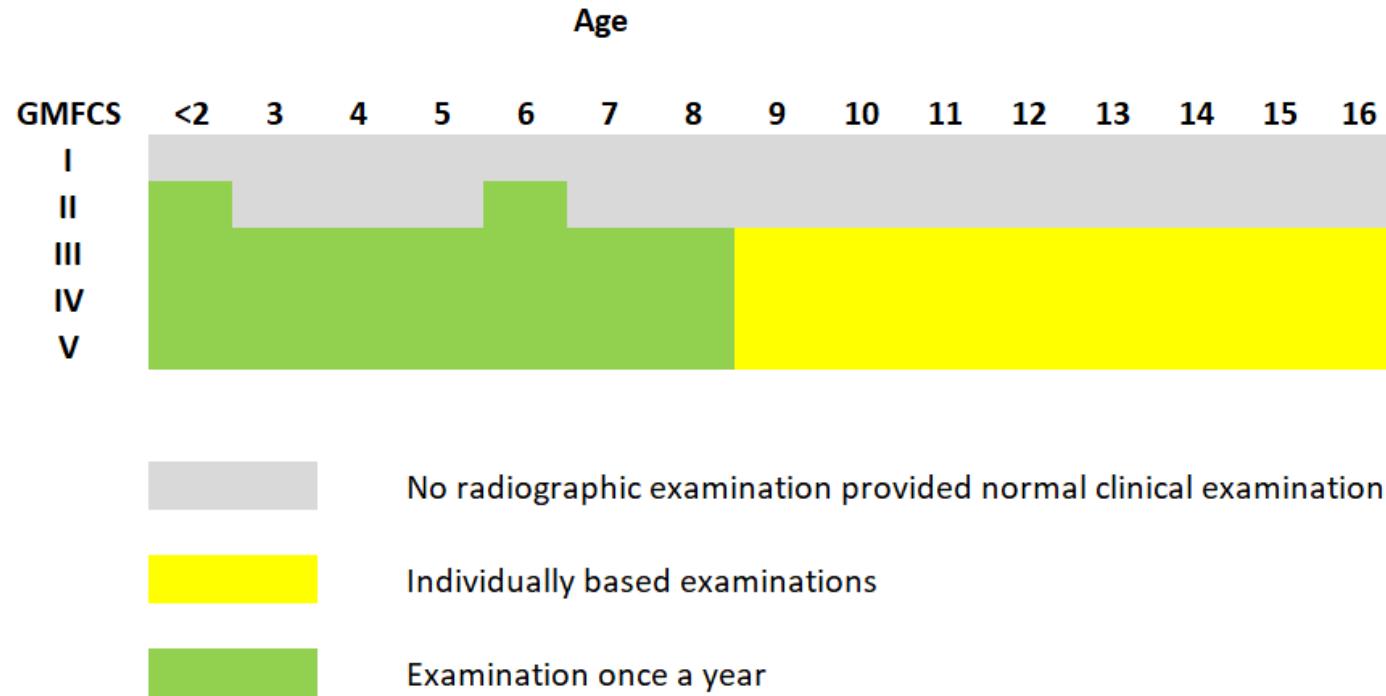


# Risk factors for hip displacement:

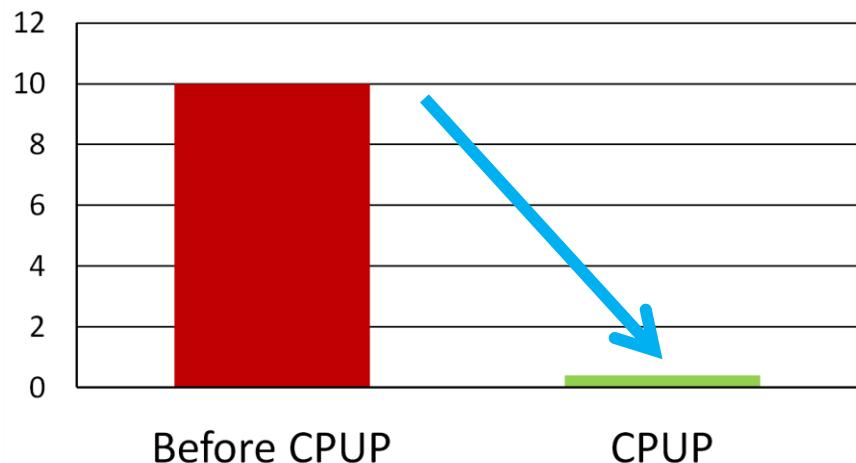
Age



# The Scandinavian guidelines for radiographic hip examination



## Hip dislocation



### ■ CHILDREN'S ORTHOPAEDICS Prevention of dislocation of the hip in children with cerebral palsy

20-YEAR RESULTS OF A POPULATION-BASED PREVENTION  
PROGRAMME

**Bone Joint J 2014; 96-B:1546–52.**

G. Häglund,  
A. Alriksson-Schmidt,  
H. Lauge-Pedersen,  
E. Rodby-Bousquet,  
P. Wagner,  
L. Westbom

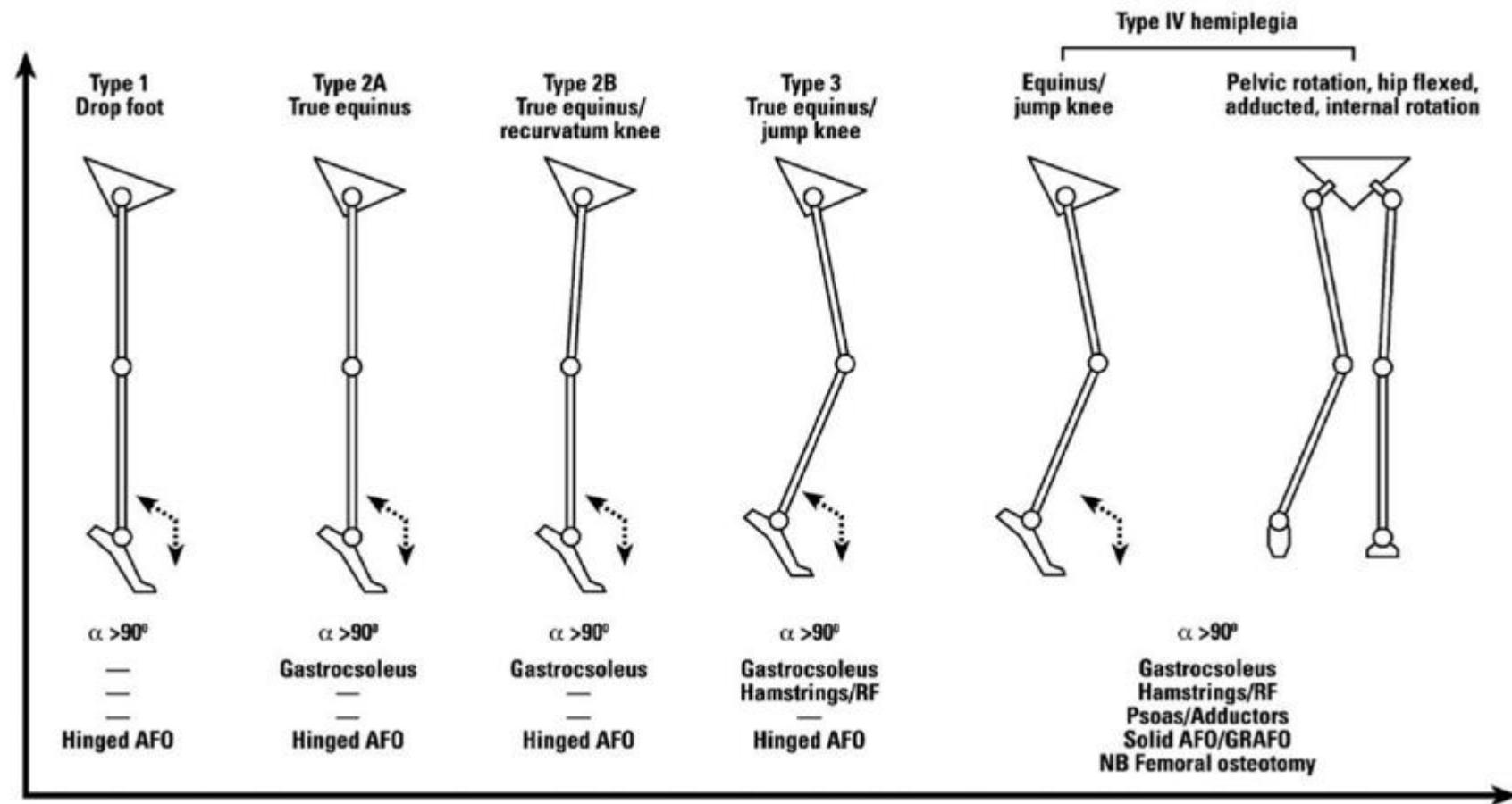
*From Lund  
University, Lund,  
Sweden*



## Eventuella förändringar

1. CP-hemiplegi Winter IV
2. MP eller PAMP?
3. Ändrade röntgenintervall?

# CP-hemiplegi Winter IV



# MP eller PAMP?

1. CP-hemiplegi Winter IV
2. MP eller PAMP?
3. Ändrade röntgenintervall?

Acta Orthopaedica 2018;89:652-655

## Pelvic obliquity and measurement of hip displacement in children with cerebral palsy

Gunnar HÄGGLUND<sup>1,2</sup>, Mikael GOLDRING<sup>1</sup>, Maria HERMANSON<sup>3</sup>, and Elisabet RODY-BOUSQUET<sup>1,4</sup>

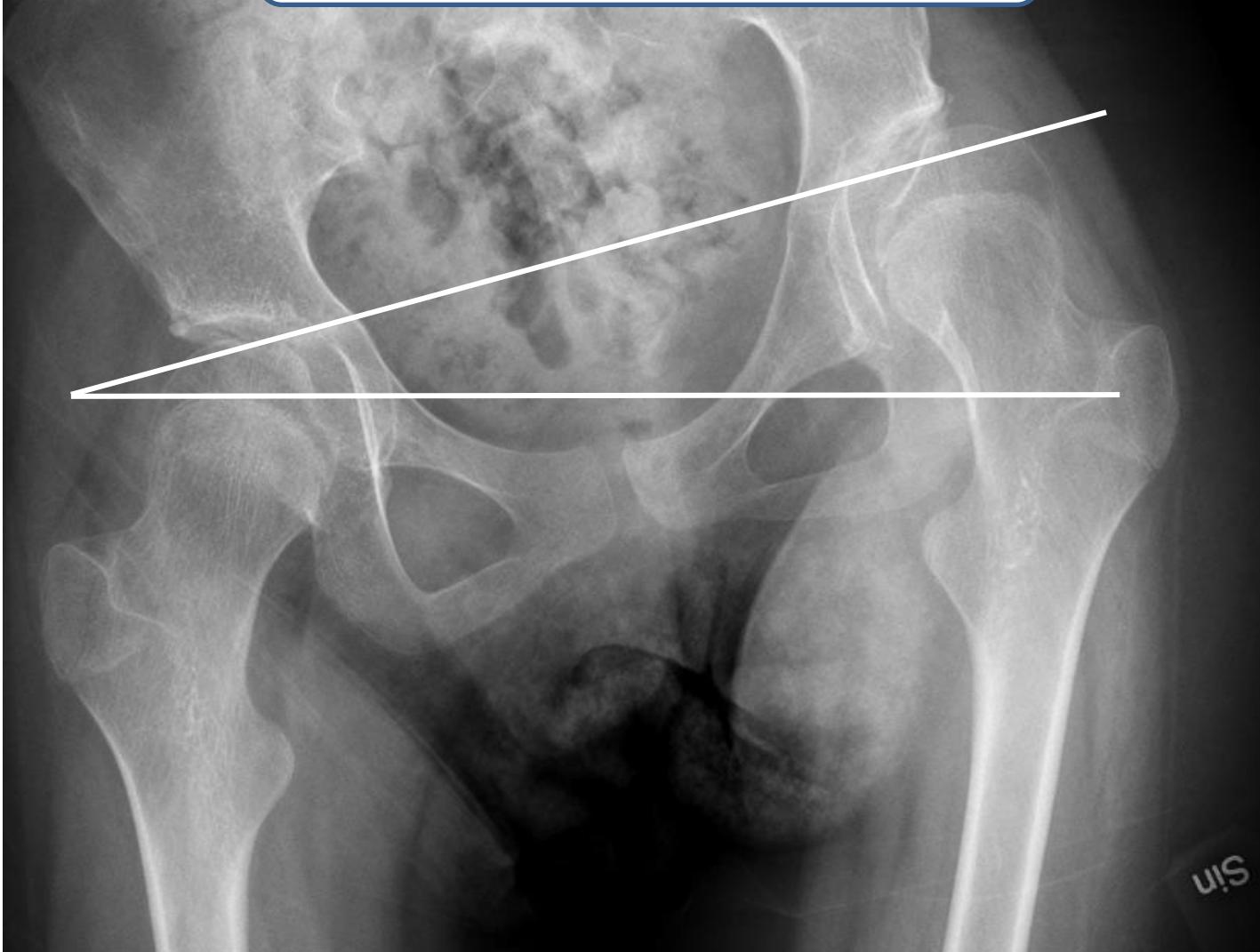
<sup>1</sup> Department of Clinical Sciences, Lund University, Lund; <sup>2</sup> Department of Orthopaedics, Skane University Hospital, Lund; <sup>3</sup> Department of Surgery, Sahlgrenska University Hospital/Östra, Göteborg; <sup>4</sup> Centre for Clinical Research, Uppsala University, Region Västmanland, Västerås, Sweden  
Correspondence: gunnar.hagglund@med.lu.se  
Submitted 2018-05-10. Accepted 2018-07-23.



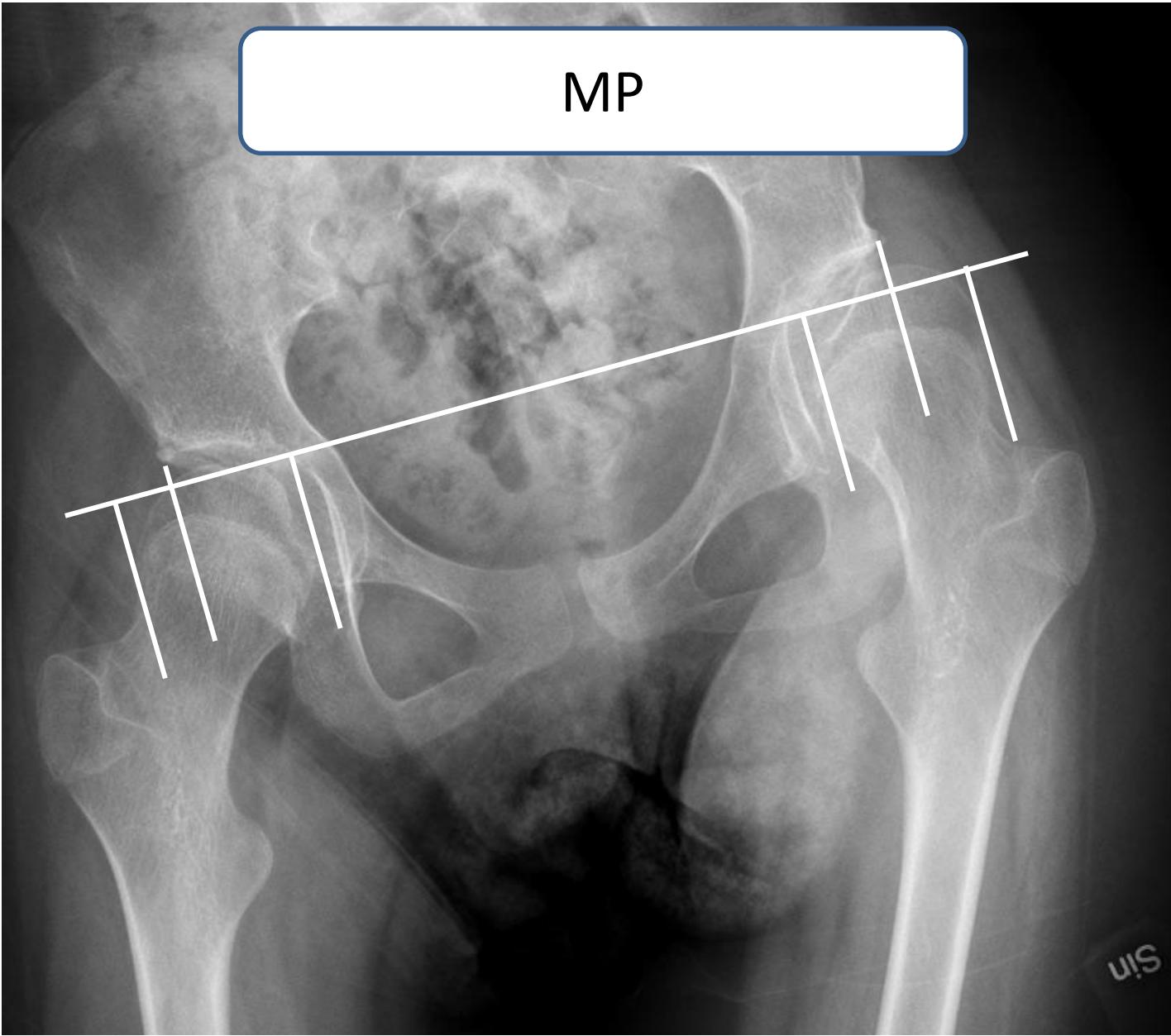
# Pelvic Obliquity



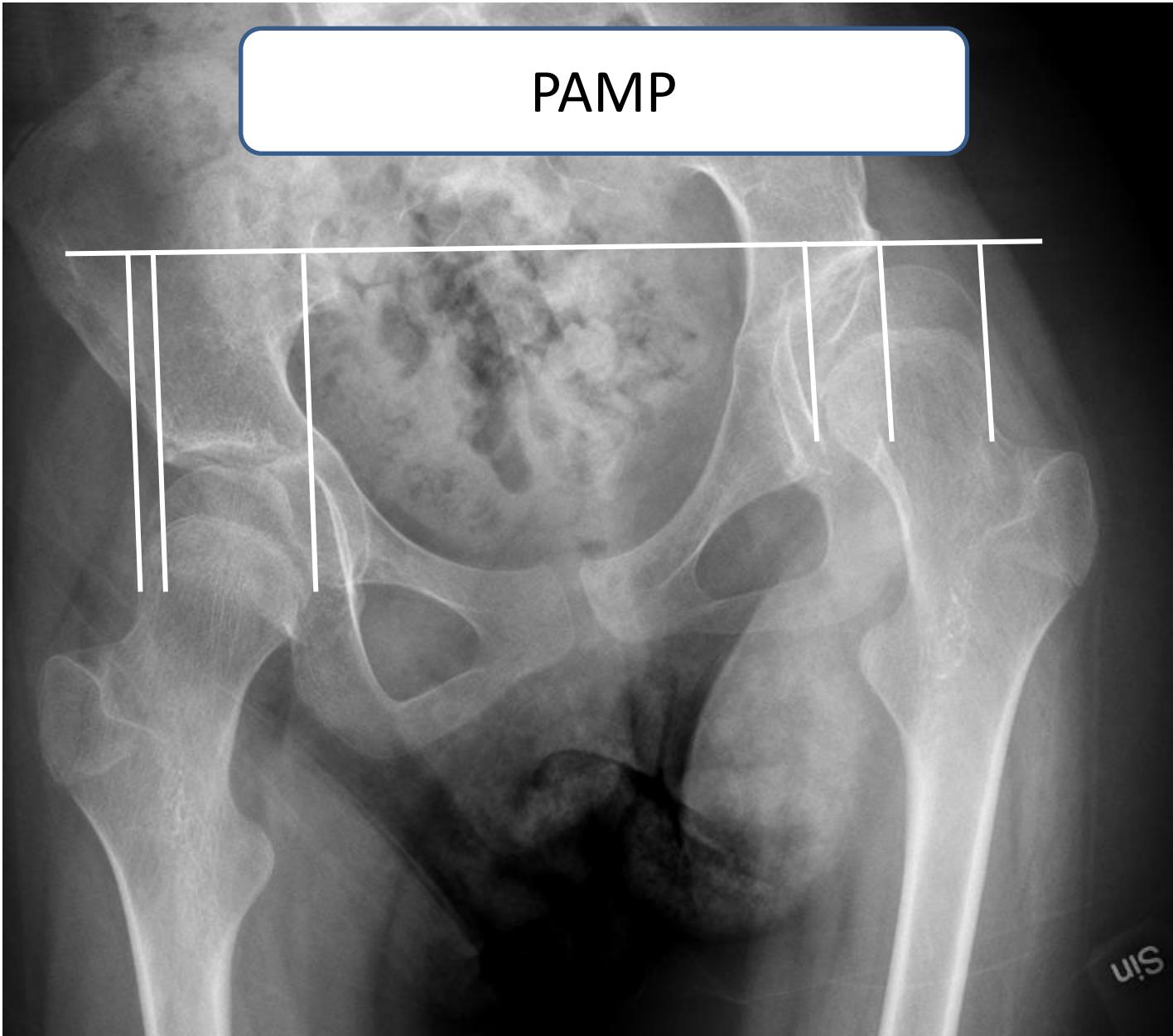
# Pelvic Obliquity



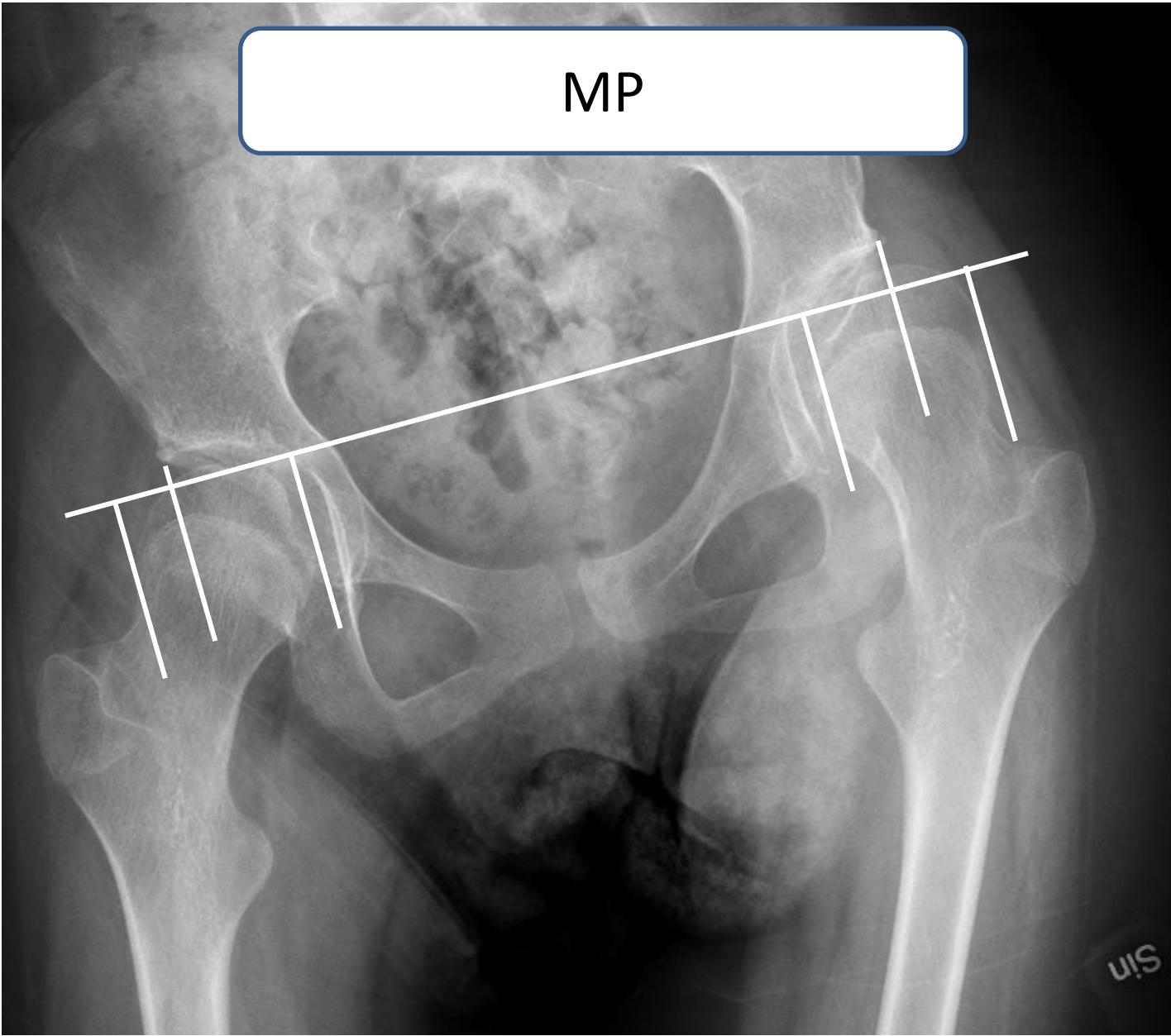
MP



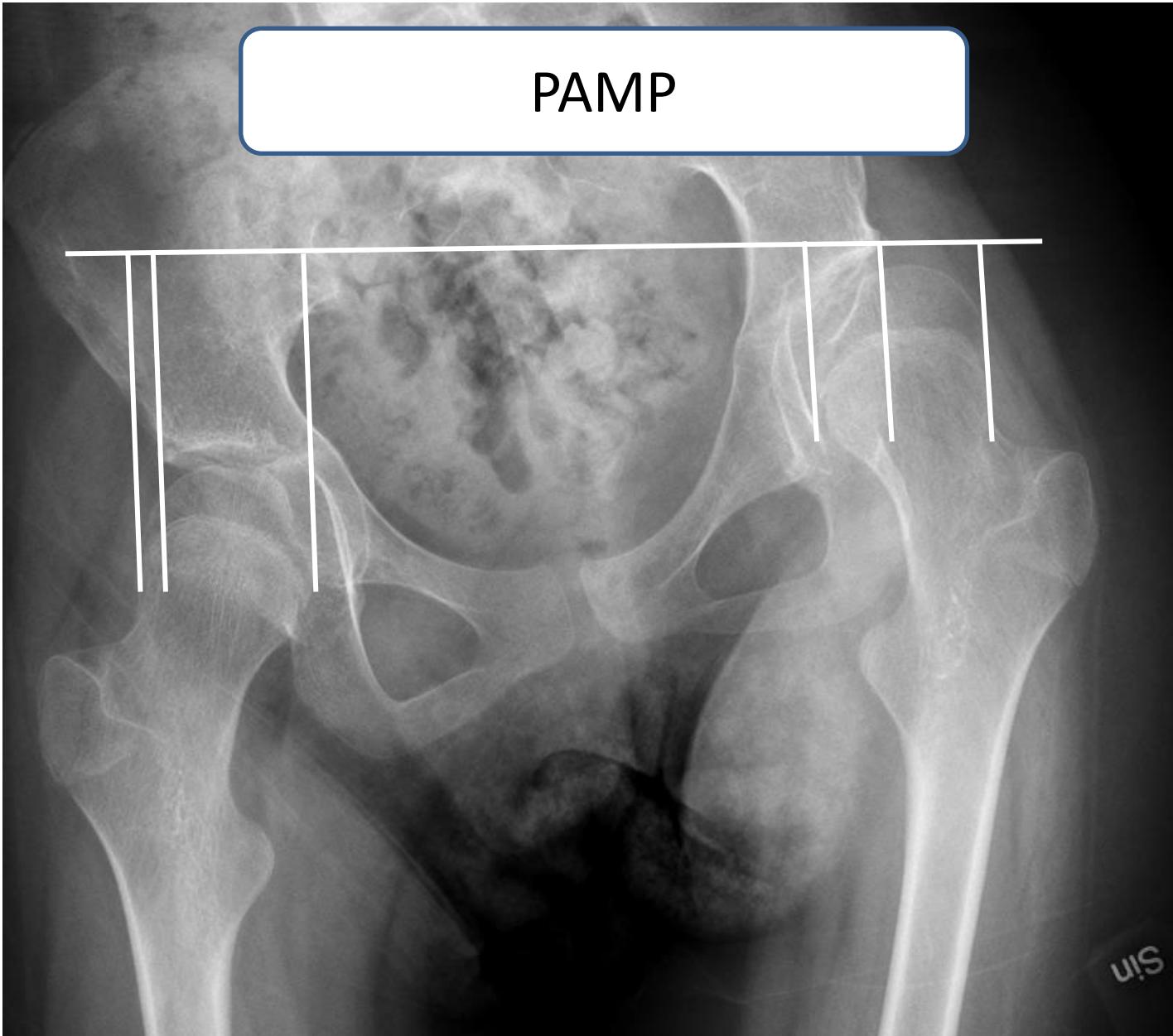
PAMP



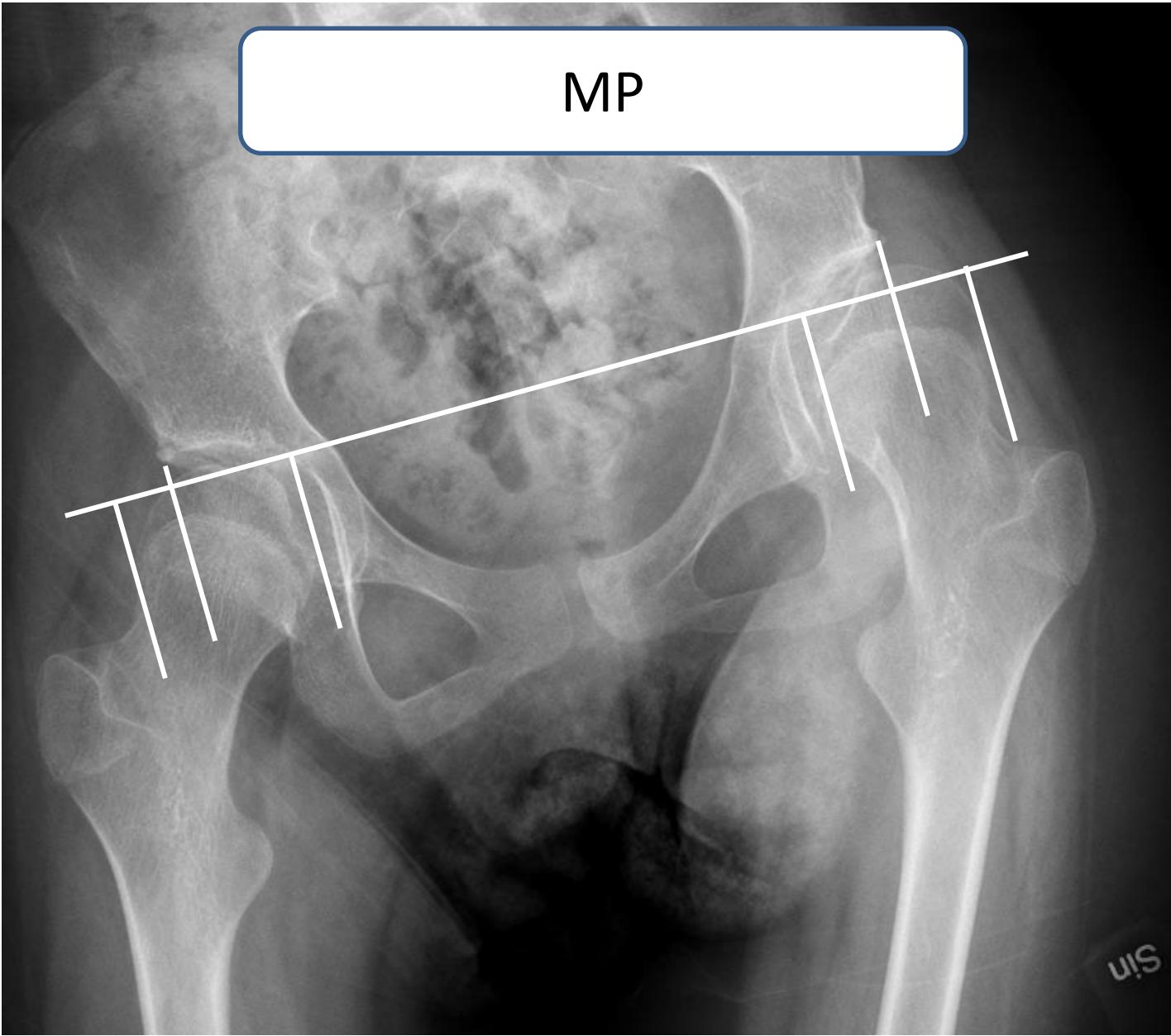
MP



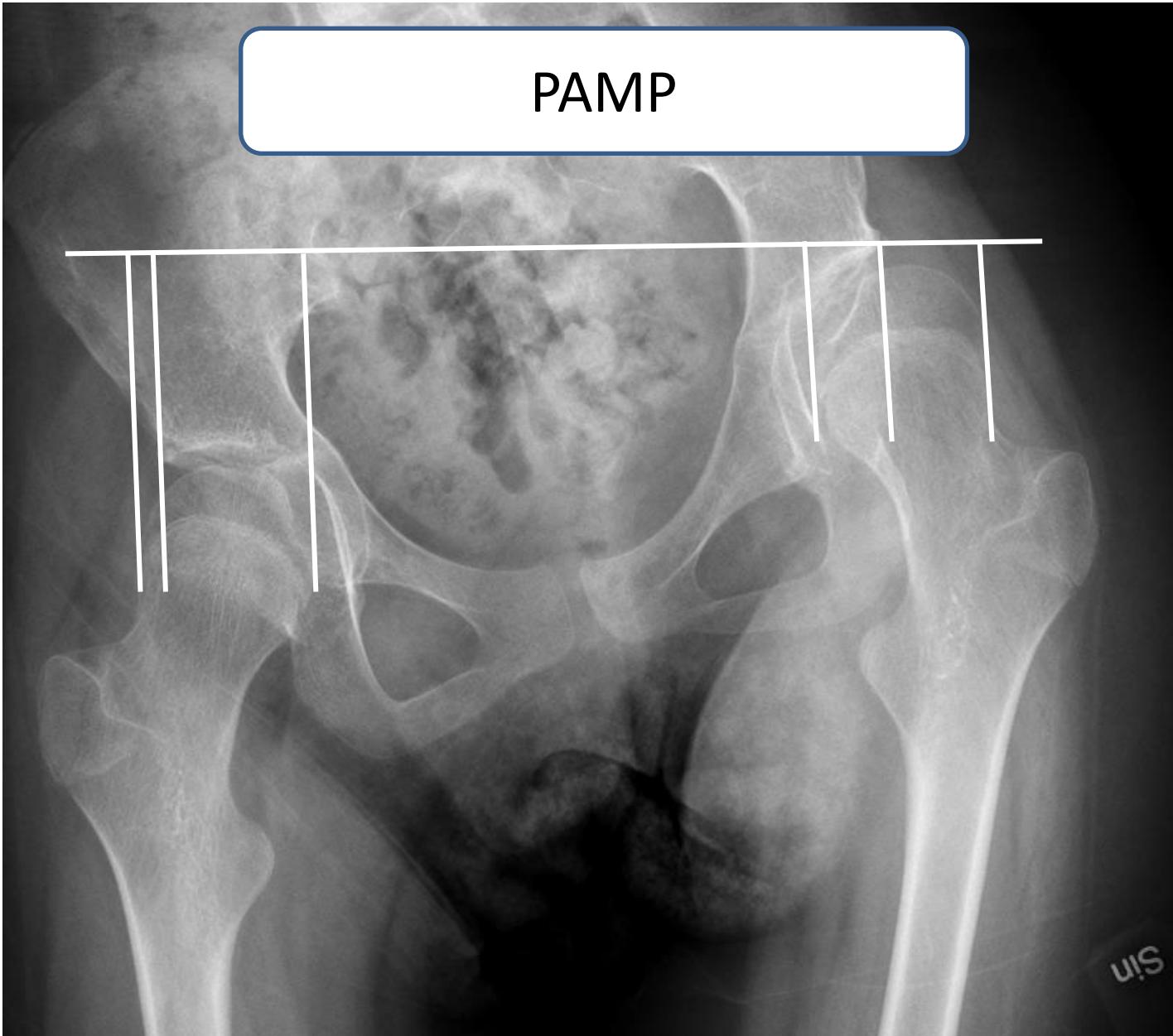
PAMP



MP



PAMP



# Ändrade röntgenintervall?

1. CP-hemiplegi Winter IV
2. MP eller PAMP?
3. Ändrade röntgenintervall?

## Development of hip displacement in cerebral palsy: a longitudinal register study of 1,045 children

Philippe WAGNER<sup>1,3</sup> and Gunnar HÄGGLUND<sup>1,2</sup>

---

<sup>1</sup> Department of Clinical Sciences, Lund University, Lund, Orthopedics; <sup>2</sup> Department of Orthopedics, Skane University Hospital, Lund; <sup>3</sup> Centre for Clinical Research, Uppsala University, Region Västmanland, Västerås, Sweden  
Correspondence: philippe.wagner@regionvastmanland.se  
Submitted 2021-06-25. Accepted 2021-10-11.

MP (%) and MP velocity (%/year)

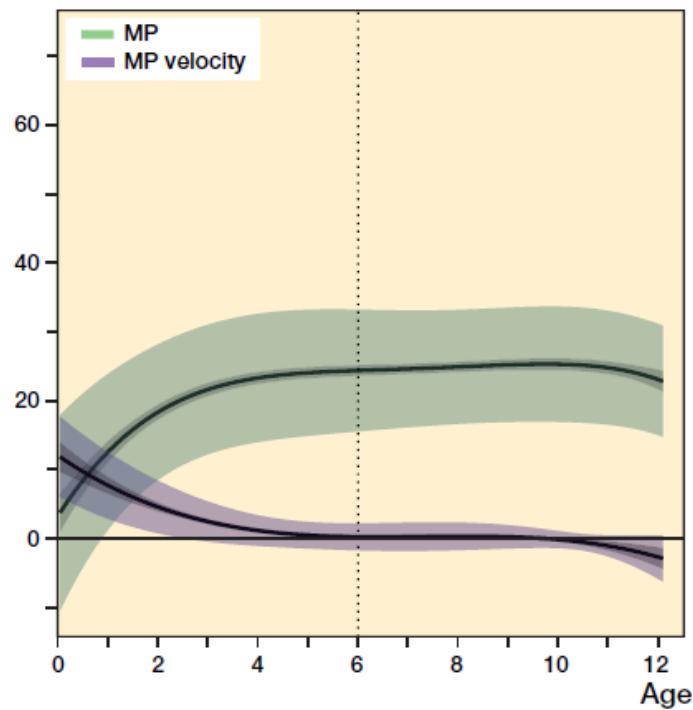


Figure 4. Model describing the development of population mean MP and MP velocity in the 702 children who did not undergo preventive hip surgery. 95% CIs (dark) and 1 SD of individual variation (light) are shown. Vertical line shows point of MP velocity < 0.5%/year with 95% CI.

MP (%) and MP velocity (%/year)

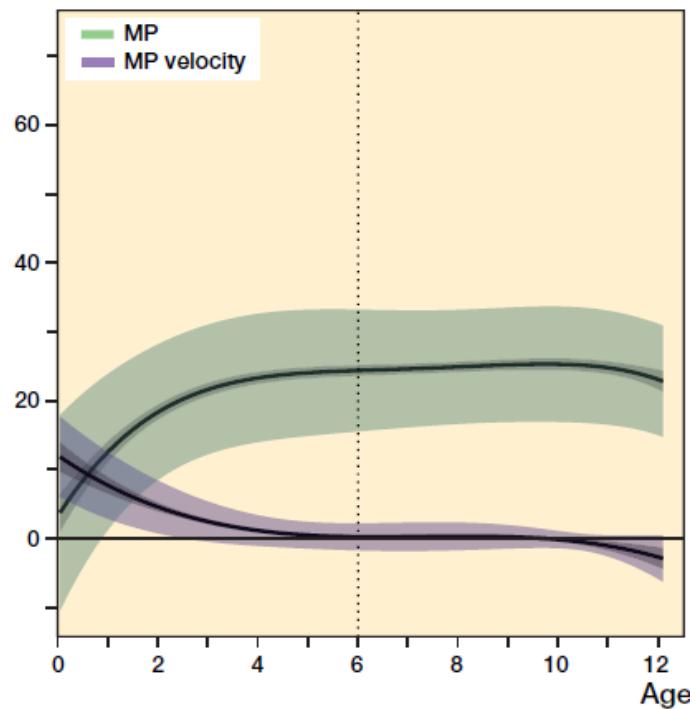


Figure 4. Model describing the development of population mean MP and MP velocity in the 702 children who did not undergo preventive hip surgery. 95% CIs (dark) and 1 SD of individual variation (light) are shown. Vertical line shows point of MP velocity < 0.5%/year with 95% CI.

MP (%) and MP velocity (%/year)

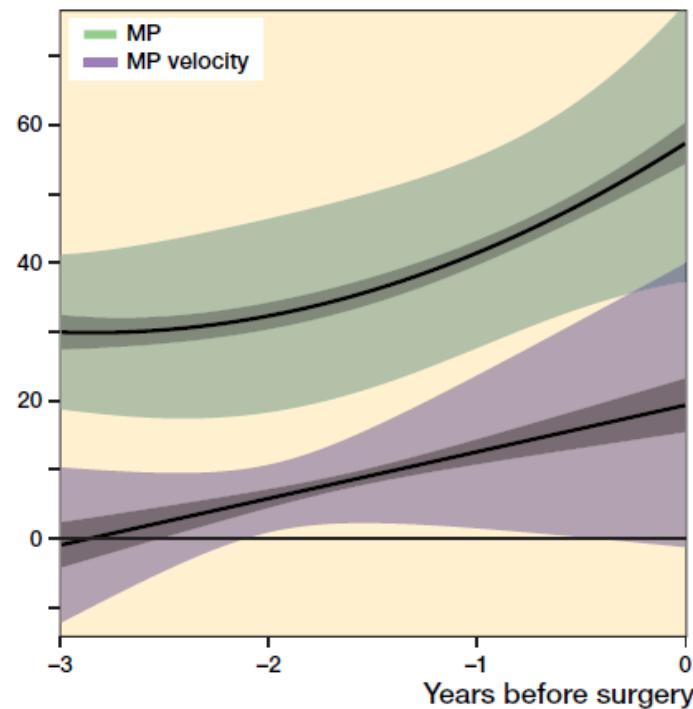


Figure 5. Model describing the development of population mean MP and MP velocity in the 343 children who underwent preventive hip surgery. 95% CIs (dark) and 1 SD of individual variation (light) are shown.



## Eventuella förändringar

1. CP-hemiplegi Winter IV
2. MP eller PAMP?
3. Ändrade röntgenintervall?