

Congenital hip disease in adults.
Morphological variations of low and high
dislocation

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We have previously described
three types of CHD in adults:

- dysplasia
- low dislocation
- high dislocation

The Hartofilakidis et al. CHD Classification system

- JBJS 70-B, 1988
- JBJS 78-A, 1996
- JBJS 80-A, 1998
- Orthopedics No 23, 2000
- JBJS 86-A, 2004

Co-authors

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- Th. Ioannidis
- N. Zacharakis

Comments on Our Classification System

- The Hartofilakidis et al. classification system eliminates the need to quantify the displacement

Angliss and Bourne, *Current Opinions in Orthopaedics*,
1996

- We are using the Hartofilakidis et al. classification system because it is a simple and effective classification

Harris W, in: *The Adult Hip*,
edited by J. Callaghan, A. Rosenberg and H. Rubash,
1998

Comments on Our Classification System

- At Wrightington Hospital we use the Hartofilakidis et al classification because it describes the acetabular pathology more precisely

Bobak, Wroblenski et al, JBJS Br, May 2000

- The classification that we find more practical is that of Hartofilakidis et al.

Jaroszynski et al, JBJS-Am, Feb 2000

An Instructional Course Lecture, AAOS

Comments on Our Classification System

- The most practical classification system for CHD is that of Hartofilakidis et al. For this reason we favor this classification system over others

Bulent Erdemli, J. of Ankara Medical School, Vol 25,
2003

- A classical article concerning the acetabular deficiencies in CHD was published by Hartofilakidis et al. in JBJS-Am in 1996

Eskelinen, JBJS-Am, March 2005

This is our first report on the morphological variations of low and high dislocation aiding the clinical use of our classification system

Low Dislocation

The femoral head articulates with a false acetabulum that partially covers the true acetabulum to a varying degree

Low Dislocation - Morphological Variations

A. Coverage $1/3$



B. Coverage $1/2$



C. Coverage $2/3$



High Dislocation

The femoral head migrates superiorly and posteriorly to the true acetabulum to a varying degree and either articulates with a false acetabulum or moves freely within the gluteal muscles

High Dislocation

Morphological Variations

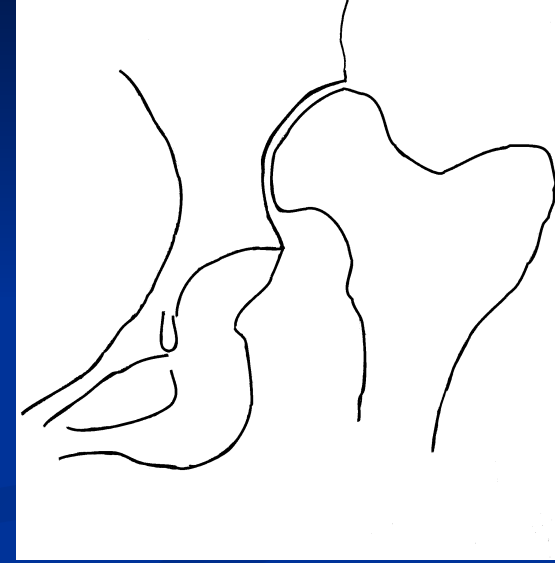
A. With false acetabulum

B. Without false acetabulum

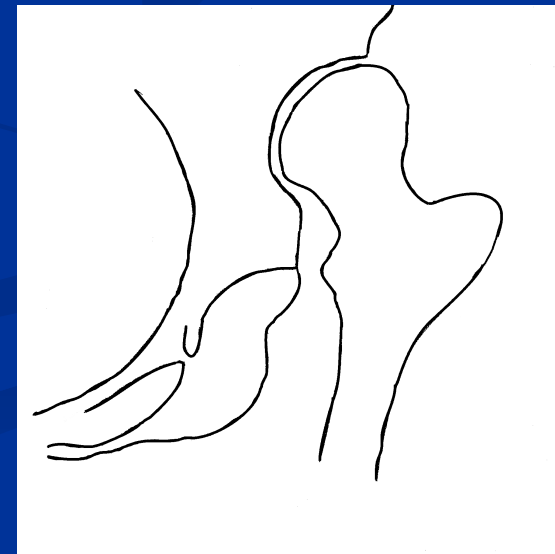
High Dislocation - Morphological Variations

A. With false acetabulum

A1 False acetabulum in contact with true acetabulum



A2 No contact between false and true acetabulum



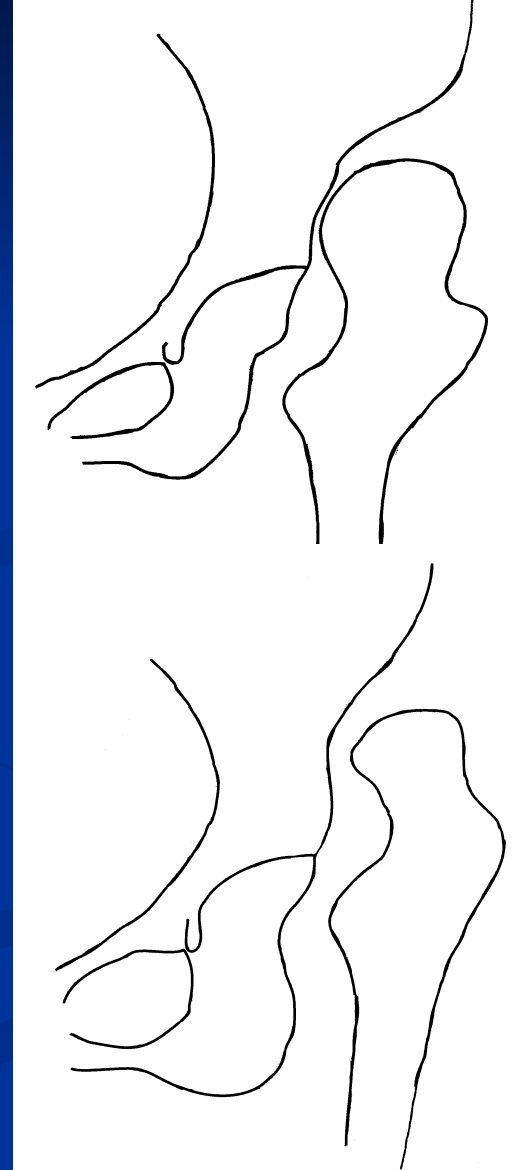
High Dislocation - Morphological Variations

B. Without false acetabulum

B1 Small displacement
of the
femoral head

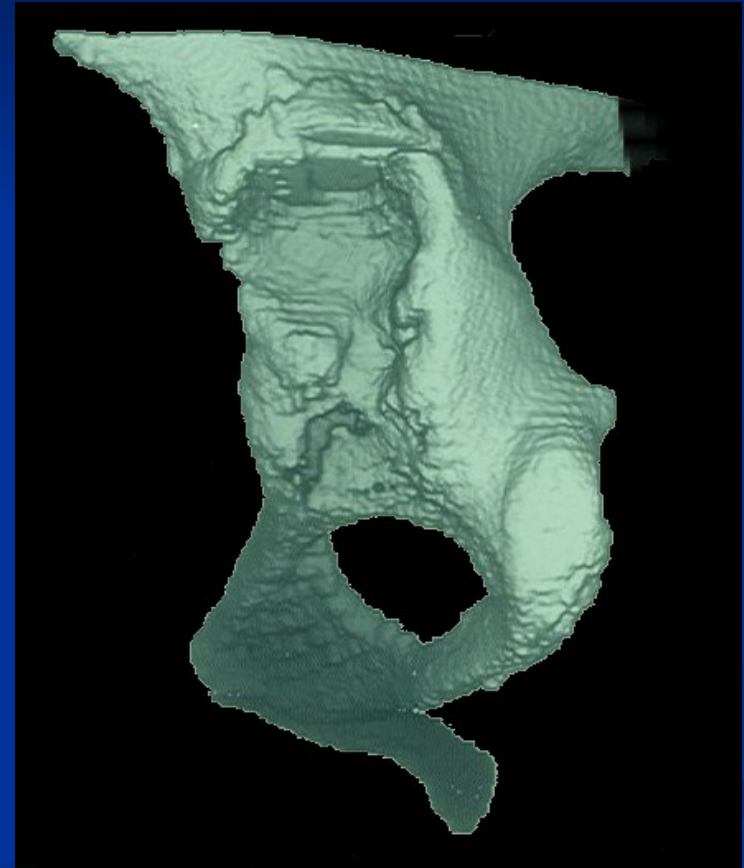
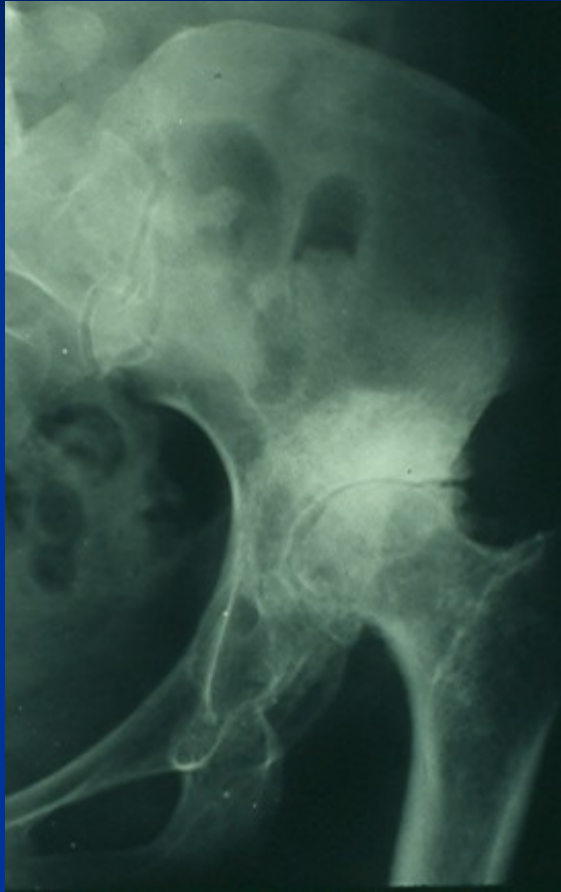
B2 Significant displacement
of the femoral head

The type with major deformity

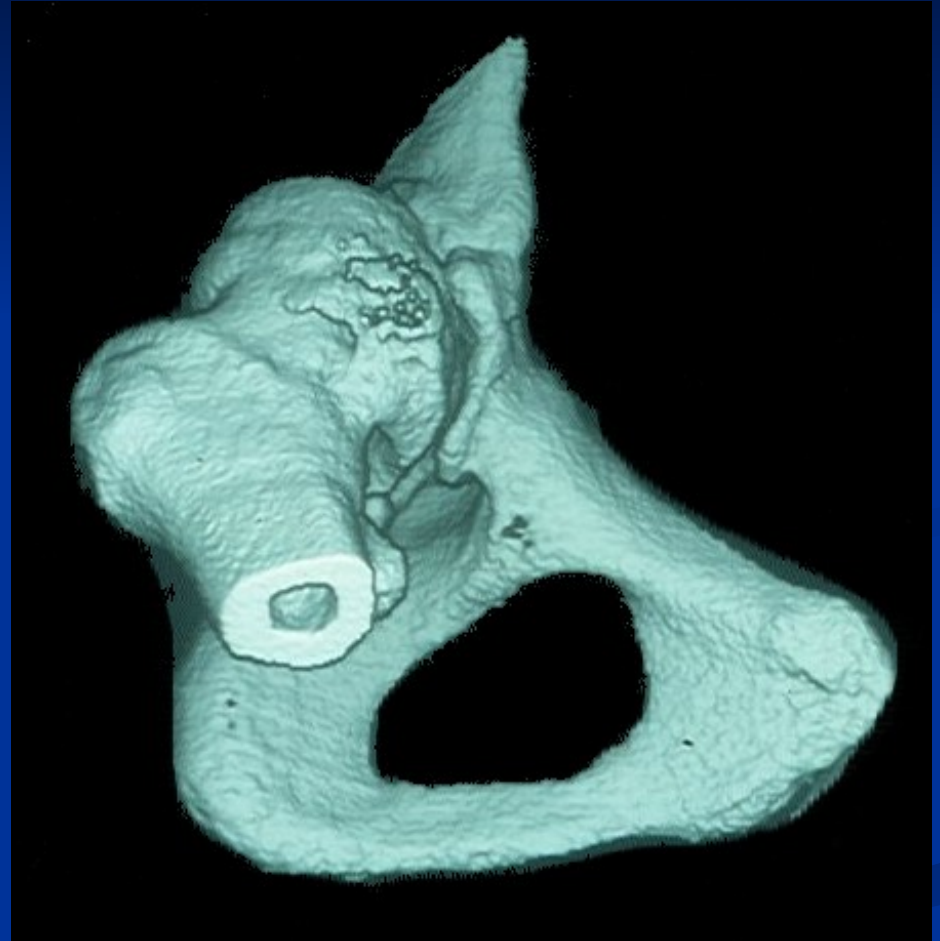


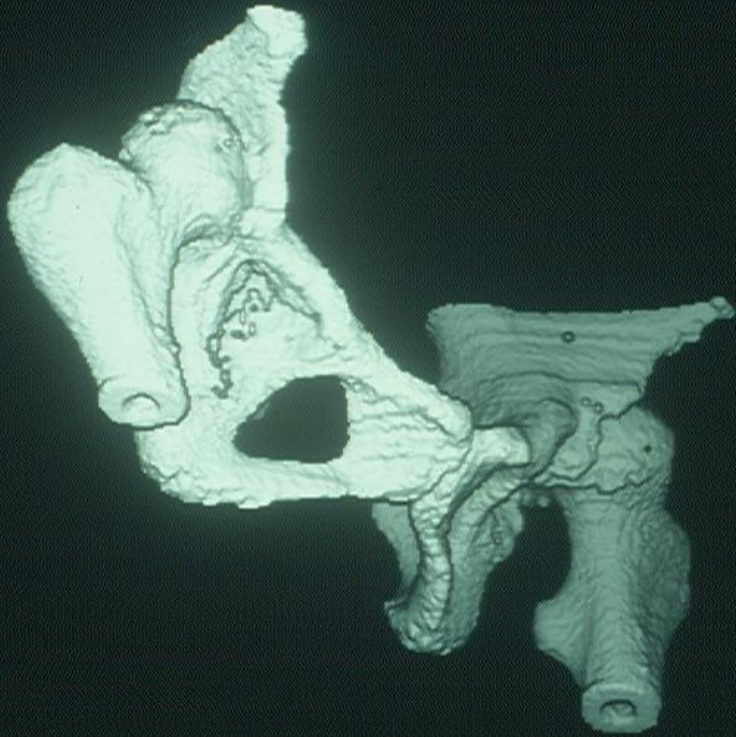
Case Presentation

Low dislocation - Coverage 1/3

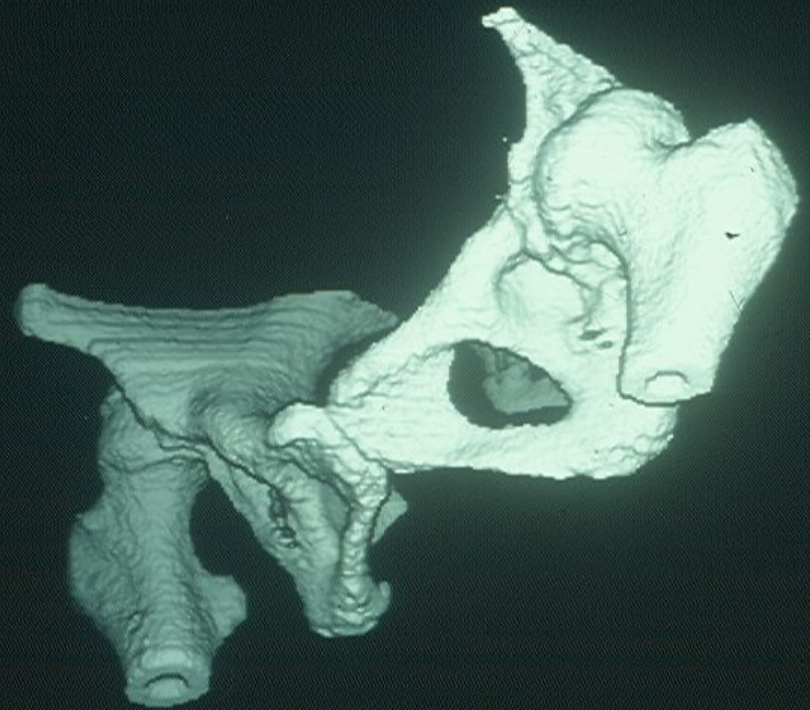


Low dislocation - Coverage 2/3





Right



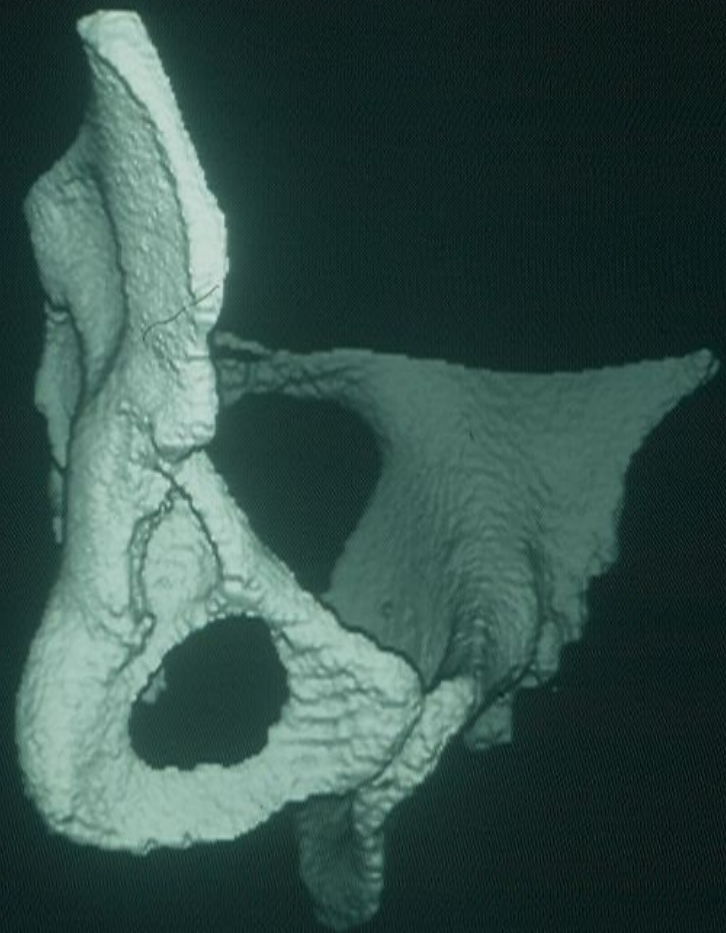
Left

High dislocation – A1

False acetabulum in contact
with true acetabulum

Low dislocation

Coverage 2/3



High dislocation – B2

Significant displacement of the femoral head without a false acetabulum

Summary

- We presented the morphological variations of low and high dislocation in congenital hip disease in adults
- Identification of morphological variations facilitates the use of our classification system