Developmental hip dysplasia in a 104-year-old patient

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DESCRIPTION

A 104-year-old woman was referred to the emergency ward with a painful pelvis; the result of an unfortunate fall in the middle of the night. The on-call general practitioner visited her for an emergency consultation and suspected a fractured pelvis. On arrival at the hospital a full physical examination was performed, revealing only pelvic tenderness. A plain radiograph showed no evidence of fractures ([figure 1](#)). The most remarkable finding was a considerable dislocation of both hips with deformed femoral heads. The acetabuli were both severely dysplastic, with probably neoacetabuli formed at the iliac wing. We transferred the patient to a rehabilitation facility, after a short admission at the hospital. She was unable to regain mobility and eventually passed away due to cachexia.

The spectrum of developmental dysplasia (DDH) of the hip ranges from a mild unstable or subluxatable hip joint to a highly unstable or permanently dislocated hip. It occurs in newborns when the femoral head loses contact with the acetabulum due to 'mechanical' factors. The abnormal contact may lead to a dysplastic acetabulum and sometimes to formation of a neoacetabulum when the joint is

not reduced. Treatment today consists of reduction by means of splinting or sometimes surgery at a young age.^{1 2} DDH is an important risk factor for developing premature osteoarthritis of the hip, often requiring total hip arthroplasty.³ Krych *et al*³ describe that satisfactory results of total hip arthroplasty can be obtained even in patients with Crowe type IV DDH; however, often with a greater number of (severe) complications due to difficult anatomy and the need for osteotomy.

Had our patient been diagnosed in her youth, she possibly would have received a tenotomy of the adductor muscles of the thigh, often resulting in limited mobility; a treatment we would conceive as 'brutal' nowadays.⁴ In retrospect, our patient was maybe lucky not to be treated when she was young.

Learning points

- ▶ Developmental hip dysplasia occurs in 4/1000 children.
- ▶ Patients with osteoarthritis of the hip often have mild dysplasia as a contributing cause.
- ▶ Diagnosis and treatment at a young age can prevent (early) osteoarthritis.

Contributors All authors attributed equally in the treatment of the patient and in writing and reviewing the manuscript.

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Figure 1 Plain radiograph showing dislocation of both hips with dysplasia of the acetabuli, accompanied by severe deformation of the femoral heads and probably neoacetabuli formed at the iliac wing.

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