

**Case Report**

# **Unusual Presentation of a Chronic Native Hip Dislocation Sustained in Adulthood**

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## **Summary**

We report a case of a 52-year-old man who presented to the emergency department with a native hip dislocation. This was found to be a chronic dislocation secondary to multiple sclerosis and he was treated conservatively after discussing benefits and risks of all options including surgery. There are many reports of atraumatic native hip dislocations in children with cerebral palsy or neuromuscular conditions; however, we believe this is the first case in the literature describing such a dislocation in an adult secondary to multiple sclerosis.

## **Case Presentation**

A 52-year-old Caucasian male undergoing routine pelvic X-ray in a community hospital was found to have a dislocated left native hip. He was transferred to the local emergency department for urgent orthopaedic review due to the presumed serious nature of his injury.

The patient was found to be comfortable and well, denying any history of trauma. On elaborating the history of the injury, the patient explained he has suffered several months of severe leg spasms with recurrent episodes of 'clicks and clunks' where he suspects the hip joint was dislocating. The spasms are painful but there is no resting pain of the hips or legs between episodes. This prompted his GP to request a routine X-ray of the pelvis, which was delayed by four weeks due to a severe urinary tract infection suffered by the patient during the time of the initially appointed radiograph. The patient denied any acute worsening or change of his symptoms, and suggested that this left hip dislocation may have been present for several months.



*Figure: Radiograph*

The patient has a background of severe progressing Multiple Sclerosis (MS) with features including rapidly worsening weakness and paraesthesia of both lower limbs and the right upper limb. He suffers frequent muscle spasms which can be painful. He lost the ability to walk independently 12 months prior to this presentation, and has been bed or chair bound since. He has a long-term catheter in situ. He uses the services of carers who perform hoist transfers and aid with care needs, but lives in his own home alone.

On examination, both hips were flexed to approximately 75 degrees and deviated to the right with significant hypertonia. Both knees were similarly flexed. The patient was able to minimally dorsiflex both ankles and passive movement of both lower limbs was limited and painful due to muscle contractures. Both lower limbs were essentially insensate, and this was long-standing for months. No overlying skin damage was present around either hip; however, the patient did have chronic sacral pressure sores. The legs had no vascular compromise, being equally well perfused with good colour and palpable pulses.

The patient was counselled by a senior arthroplasty surgeon regarding treatment options including surgical options such as excision or replacement arthroplasty. However, given the chronic nature of the injury, the patient's level of function, and the insensate and therefore pain-free nature of the injury the majority of the time, it was agreed with the patient that the safest management was to treat conservatively.

## **Discussion**

There is no debate that native hip dislocation is usually an orthopaedic emergency in adults, owing to the high-energy mechanism of injury usually sustained to produce such an injury. It warrants emergent relocation under sedation, ideally within six hours of injury in order to avoid irreversible damage to the femoral head through Avascular Necrosis (AVN) and/or chondrolysis. Adverse events seen after native hip disloca-

tion can include post-traumatic arthritis, sciatic nerve palsy and AVN [1].

Atraumatic or low-energy native hip dislocation is rare in adults due to the robust nature of the joint. Most documented cases are found to involve children with chronic dislocation secondary to cerebral palsy [2,3], with a lack of cases detailing this problem in an adult population. Hip dislocations in adults with multiple sclerosis have been documented however these all involved total hip replacements and not native hips [4].

Since there are no published reports in the literature of painless chronic hip dislocation in adults with multiple sclerosis, there are no published management guidelines. If the patient is in pain and surgical intervention is appropriate, we recommend considering Girdlestone's procedure (excision arthroplasty) or Castle's procedure (proximal femur resection with soft tissue interposition) [2]. Both have been performed in children and young adults with chronic native hip dislocation secondary to cerebral palsy, [2] however Castle's procedure has been shown to have much better success in alleviating pain in long-term follow-up [3,5]. Conversely, patients with painless dislocations secondary to muscle spasticity have been managed conservatively with no surgical input required [5].

In the case presented here, the pain-free nature of the dislocation indicated that continued conservative management with monitoring for skin breakdown is a valid approach as long as the patient remains comfortable.

### Learning Points

- Though rare, chronic hip dislocation of a native hip should be considered as a possible complication of severe multiple sclerosis
- Surgical treatment options should only be considered after taking into account a patient's functional baseline and symptoms
- It is reasonable to conservatively manage a chronically dislocated hip in certain circumstances and this decision should be made in conjunction with the patient

### References

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