

# Treatment Challenges in An Unrecognised Pavlik Harness Disease

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## INTRODUCTION:

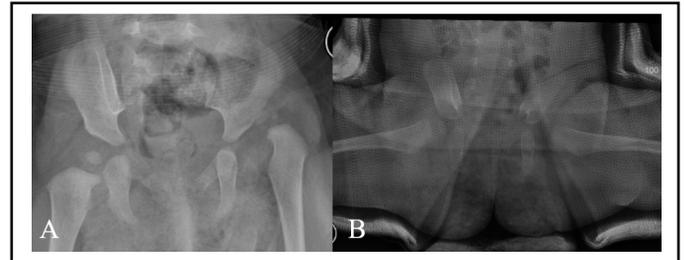
Pavlik harness disease happens as a complication of prolonged positioning of the dislocated hip in flexion and abduction leading to posterolateral acetabulum deficiency and difficulty of obtaining a stable closed reduction.<sup>1</sup> We present a case of Pavlik harness disease that has failed a series of treatment modalities and reflect on how we could have done better.

## REPORT:

A newborn baby girl had a positive Ortolani test for her left hip. She was treated with Pavlik harness at one month old. Two months later, while still on the harness, the left hip dislocated.

At five months old, closed reduction (CR) was done. However, the hip redislocated after hip spica was removed three months later. Another CR was performed at ten months old. The reduction was unstable that the hip had to be abducted 80 degrees with hip spica. Two weeks later the hip dislocated. The parents refused further treatment until the patient was 19 months old when she underwent another CR with Salter osteotomy.

Despite achieving a successful and stable reduction, four months following the surgery there was evidence of femoral head osteonecrosis. Currently at six years old, the patient has painless short limb gait with coxa vara, shallow acetabulum and 50% of the deformed femoral head uncovered. The parents were counselled for Pemberton osteotomy and femoral valgus osteotomy, however they defaulted follow up.



**Figure 1:** Radiograph at 5 months old. Before the first CR (A). After the first CR (B).



**Figure 2:** Radiographs at 6 years old.

## CONCLUSION:

Unsuccessful closed reduction after failure of Pavlik harness treatment should alert the surgeon of possible Pavlik harness disease following which open reduction should be considered. Extreme abduction should be avoided in hip spica to prevent osteonecrosis. In complicated cases, proper counselling is vital as prolonged treatment may exhaust the parents mentally and emotionally.

## REFERENCE:

1. Jones G, Schoenecker P, Dias L. Developmental Hip Dysplasia Potentiated by Inappropriate Use of the Pavlik Harness. *J Pediatr Orthop.* 1992;(12):722-726.