

ILIOTIBIAL BAND CONTRACTURE AFTER USING THE PAVLIK HARNESS

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The Pavlik harness is widely used to splint unstable hips in the first months of life. Complications are well described: the hips may fail to stabilise; avascular necrosis may occur (Iwasaki 1983); minor problems of soreness and transient foot cavus may develop (Bradley, Weatherill and Benson 1987). The complication we describe has not, as far as we know, been reported previously.

Case 1. An eight-month-old boy with Pierre-Robin syndrome was found to have a subluxable right hip. There were no neurological abnormalities of his lower limbs and he was treated for seven months in a Pavlik harness. At completion of treatment deep stable reduction was demonstrated but there were bilateral hip flexion contractures of 40° with limitation of adduction in extension. Abducting the hips abolished the flexion contractures (Figs 1a and 1b) indicating that the primary contracture was of the iliotibial bands. Release of tensor fascia lata, its overlying fascia and the iliotibial band with its attached lateral intermuscular septum just distal to the greater trochanter resulted in correction of the hip deformity. The corrected position was maintained in splintage for several months and a full range of hip movement resulted.

Case 2. An otherwise normal six-month-old girl was found to have a dislocated right hip; unusually it was stable in flexion and dislocated only with extension. Treatment by splintage in a Pavlik harness for seven months resulted in stable reduction. However, she had developed bilateral flexion abduction deformities of both hips due to shortening of the iliotibial bands. The hips were stretched regularly and splinted in extension for several months. The contractures slowly improved and a full range of movement was regained.

Discussion. The clinical findings in our two children were similar to those described in patients with poliomyelitis. Both showed iliotibial band contractures following splintage of the hips in a Pavlik harness for over six months in a position which allowed the iliotibial band to shorten. They had no evidence of muscular weakness and



Fig. 1a



Fig. 1b

Figure 1(a). With the left hip fully flexed there is a flexion contracture of the right, but in abduction (b) this contracture is abolished.

their contracture seemed to have been caused by habitual positioning of the hip in abduction and flexion. It is surprising that such complications are not more common. Corrective splintage and stretching need perseverance if surgery is to be avoided.

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