

Principles of Pavlik Harness Treatment for Hip Dysplasia

Treatment Initiation

- 1 Treatment is generally, but not always, started before age 6 months
- 2 A clinical examination is necessary prior to starting treatment
- 3 An ultrasound is recommended prior to starting treatment

Application and Follow-Up

- 1 A health-care professional should apply the harness at the start of treatment
- 2 A health-care professional should check that the harness is applied correctly at each clinic visit

Complications

- 1 If femoral nerve palsy occurs, treatment should be temporarily discontinued until return of nerve function and then reinstated

Weaning

- 1 There is a role for weaning (night-time use only)
- 2 Weaning (night-time use only) may be instituted once the hip is normal on ultrasound*

End of Treatment

- 1 At the conclusion of treatment hips should be assessed via ultrasound or radiograph for normality*
- 2 As long as the harness is tolerated, there is no maximum length of Pavlik harness treatment

*According to the AAOS AUC, normality on ultrasound is defined as an alpha angle of $\geq 60^\circ$ and femoral head coverage of $>45\%$ and normality on radiographs is defined as IHDI grade I.

Pavlik Harness Treatment by Severity of Hip Dysplasia

Stable Dysplastic Hip

- 1 Treatment should ideally begin at, but not before, 6 weeks of age
- 2 The harness may be worn 23 hours/day at the outset of treatment
- 3 A clinic visit should occur every 2-4 weeks to check and adjust the harness and assess for complications
- 4 The hip should be monitored via ultrasound every 4-6 weeks
- 5 Treatment should be continued until the hip is normal on ultrasound*, and for a minimum of 6 weeks

Dislocatable Hip

- 1 Treatment should ideally begin before 7 weeks of age
- 2 The harness may be worn for 23 hours/day at the outset of treatment
- 3 A clinic visit should occur every 2-4 weeks to check and adjust the harness and assess for complications
- 4 The hip should be monitored via ultrasound every 2-4 weeks
- 5 Treatment should continue until the hip is normal on ultrasound*, and for a minimum of 8 weeks

Dislocated Hip (Reducible or Irreducible)

- 1 Treatment should start immediately following diagnosis, ideally before 7 weeks of age
- 2 The harness should be worn 24 hours/day until the hip is reduced, at which point it may be worn for 23 hours/day
- 3 The hip should be monitored weekly for reduction via clinical examination without stress maneuvers
- 4 The hip should be monitored weekly via ultrasound until it is reduced
- 5 Once the hip is reduced, a clinic visit should then occur every 2-4 weeks to check and adjust the harness and assess for complications
- 6 Once reduced, hip progress should be monitored via ultrasound every 2-4 weeks
- 7 If hip reduction is not achieved within 3-4 weeks as determined by clinical examination and ultrasound, treatment should be abandoned
- 8 If hip reduction, determined via ultrasound, is achieved within 3-4 weeks, harness treatment should continue until the hip is normal on ultrasound*, and for a minimum of 8 weeks

*According to the AAOS AUC, normality on ultrasound is defined as an alpha angle of $\geq 60^\circ$ and femoral head coverage of $>45\%$ and normality on radiographs is defined as IHDI grade I.