

## **Developmental Dysplasia of the Hip (DDH)**

### **What is it?**

Developmental Dysplasia of the Hip is the medical term for instability, or looseness, of the hip joint.

### **Who does it typically affect?**

Although it is commonly diagnosed in babies and young children, Developmental Dysplasia of the Hip also affects adolescents and adults. It is more common in girls and firstborn babies.

### **How many people does it affect in a population?**

1 in every 100 babies are treated for Developmental Dysplasia of the Hip.

### **What are signs? How do I know if my baby has it?**

Signs of DDH include:

- Reduced hip movement
  - Leg length difference
  - Asymmetric skin creases
  - Abnormal walking pattern
  - Delayed weight bearing through hips (ie difficulty crawling, kneeling or standing)
- Special tests performed by doctor or nurse (Ortolani /Barlow tests)

### **What are the causes?**

The exact cause or causes of Developmental Dysplasia of the Hip are not known. Ligament laxity is thought to be a contributing factor. Positioning in the womb also has an impact on DDH. Babies who were in the breech position on or after 36 weeks gestation are at increased risk. Genetics plays a role but is not a direct cause of DDH. Hip dysplasia is approximately 12 times more likely when there is a family history of DDH. Other factors that contribute to an increased risk of DDH include: female sex, firstborn babies, multiple births, larger babies, reduced fluid around the baby and post-natal positioning.

### **What are the treatment options available?**

Once the diagnosis of DDH is confirmed, your baby will be assessed by the orthopaedic team. Depending on the age of your baby at time of diagnosis and the severity of the hip dysplasia, the team may recommend a Pavlik harness or abduction brace to hold the hip in the socket until the ligaments go back to normal and to allow time for the socket and bone to grow to their proper shape. Other possible treatment options include surgery and/or application of a Spica cast for a period of time.

### **How can Physiotherapy help?**

Your Chartered Physiotherapist can help by applying the Pavlik harness or abduction brace and monitoring your child while in the harness/ brace. Chartered physiotherapists can also assist in diagnosis of hip dysplasia by assessing children with risk factors and identifying those that need further investigations. Your Chartered physiotherapist can help monitor your child's development whilst in the Pavlik harness and after the brace he removed.

**How effective is treatment?**

Overall effectiveness of treatment depends on how soon the treatment is started and the severity of the DDH. Some studies show the success rate of the Pavlik harness can be between 50%-97% depending on the severity of the DDH (2). Generally delayed diagnosis and treatment is associated with worse outcomes.

**What steps can be taken to reduce pain/discomfort/ alignment issues?**

Your Chartered physiotherapist will give you advice on how to care for your child in the Pavlik harness or brace.. This can help minimise discomfort and assist correct alignment.

**Day to day advice on management? What can I do at home?**

Improper swaddling increases the risk of hip dysplasia and hip dislocation (3).  
“Hip healthy” slings or baby carries can also help decrease the risk of DDH (1).

**What is the treatment time/process?**

The orthopaedic team recommend treatment times depending on the severity of the DDH and the treatment method of choice. Treatment times can vary between different orthopaedic teams.

**References:**

1. [www.https://hipdysplasia.org/](https://hipdysplasia.org/)
2. Mostert AK, Tulp NJ, Castelein RM. Results of Pavlik Harness Treatment for Neonatal Hip Dislocation as Related to Graf's Sonographic Classification. *Journal of Pediatric Orthopaedics* 2000; 20(3):306-310
3. .Mahan, S., Kasser JR, Does swaddling influence developmental dysplasia of the hip? *Pediatrics*, 2008. 121: p. 177-8