**Nev Davies - Reading Children’s Orthopaedic Unit**

**Information for Families**

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

**Stage 2 / Plan B: Treatment with Arthrogram, Examination under anaesthetic, Trial of Closed Reduction & Hip Spica**

**What is DDH? (Please also read the general information leaflet)**

The hip is a ball and socket joint. DDH is a spectrum of conditions ranging from a underdeveloped shallow hip socket through to a ball that is dislocated (out of the socket).

**Stage 2 – Treatment with Hip Spica ([Click Here : Steps Charity Guide : Hip Spica)](https://nevtheknee.co.uk/nev-davies-img/Hip-Surgery-and-Spica-Cast-Care-1.pdf)**

Stage 2 or Plan B is used for older babies who present over the age of 6 months and those who have failed treatment in a Pavlik Harness. ([See separate info sheet)](https://nevtheknee.co.uk/nev-davies-img/Caring-child-with-hip-spica_mar19.pdf)

**What does this involve?**

We need to get more information at this stage about the shape of the ball and the socket, and if there are particular structures blocking the reduction. To do this we inject some special dye (contrast) into the joint so we can see it in 3D, on a large X-ray machine in theatre. We can move the hip around in different positions and see if it will reduce or relocate into the socket without being too tight. Sometimes, but not always, we cut the small tendon on the inside of the leg through a tiny scar. (Adductor tenotomy). We then apply a pair of plaster trousers (hip spica) which works by keeping the hip in joint in a flexed (bent up) and abducted (outward) position and encourages the hip to develop into a normal shape.

This procedure is done under a general anaesthetic i.e. your baby is asleep. The anaesthetic doctor will come and meet you on the morning of the procedure to go through everything with you. It is very safe to have a general anaesthetic even in small babies.

**What are the outcomes?**

It is important to understand that this is still very much a trial and in some cases the hip will still not reduce into the socket. In this situation we do not put the plaster trousers on at all and move to Stage 3 / Plan C. Sometimes, despite getting the hip in with good, encouraging pictures during the procedure the hip can then pop out again and we go to Stage 3 / Plan C. (See additional information leaflet.)

**What happens if it is successful?**

Families stay the night to check all is well with the hip spica and a CT scan (3D detailed X-ray) is organised the next day to double check the hip remains in joint. We then see you in the outpatient clinics for check-ups and X-rays. Hip spicas last about 6-8 weeks before they need to be changed as your baby is growing. It also allows us to check the hips again under a day case anaesthetic. The 2nd Spica is usually kept on for a further 4-6 weeks. We may then use a removable brace for a period of time and monitor the progress of the hips in clinic both by examining regularly and getting X-rays.

**Are there any risks to this procedure?**

Rubbing and blistering – sometimes babies’ skin can be sensitive and rub under the plaster.

Avascualr Necrosis / Growth arrest – this is the complication we fear most, and it can occur if the hip is reduced but put under too much tension. The blood supply to the delicate part of the head and growth area can be disrupted and the head can become oval shaped instead of a sphere. If this happens further surgeries maybe needed.

Failure to get the hips in or hips that redislocate moves us on to Stage 3 / plan C (for more information see our separate information leaflet).

We will follow your child up in clinic regularly in the outpatient clinic until we are happy the hip is developing normally both clinically and radiographically (x rays).