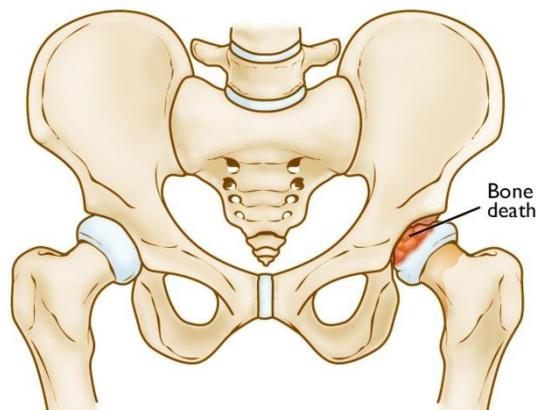


# Patient Information Leaflet

## Perthes Disease

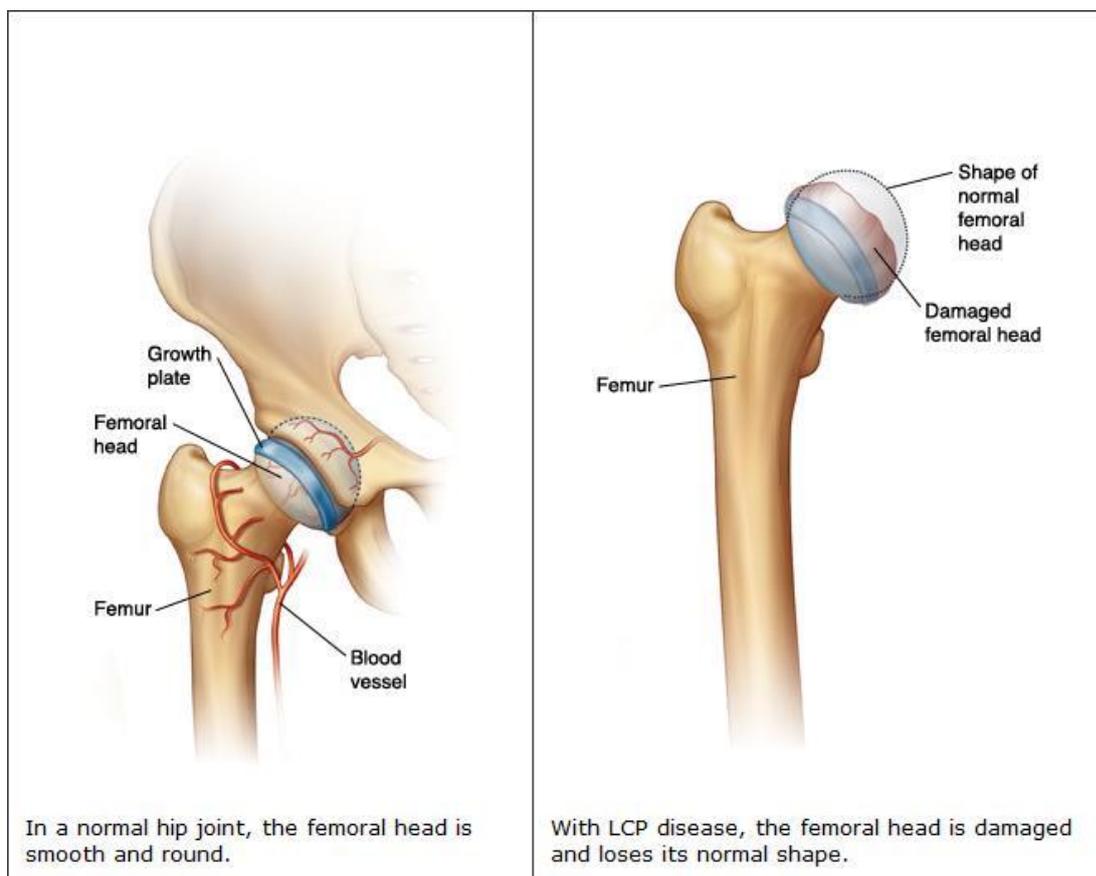


University Hospitals Plymouth NHS Trust  
Paediatric Physiotherapists  
Derriford Road  
Plymouth  
PL6 8DH  
Tel: 01752 432430  
[www.plymouthhospitals.nhs.uk](http://www.plymouthhospitals.nhs.uk)



## What is Perthes disease?

Perthes disease occurs in a part of the hip joint called the femoral head, which sits inside the hip socket (acetabulum). The exact cause is unknown but it occurs due to a loss of the blood supply to the femoral head. As a result, the bone cells in the affected area die; the bone softens and can then fracture or become misshapen. The amount of bone damage can vary from mild to severe.



A child with Perthes disease is usually otherwise well. Over several months the blood vessels regrow, and the blood supply returns to the bone. New bone tissue is then made so the femoral head reforms and regrows. This is similar to how bone reforms and regrows after any normal fracture or break to a bone. However, with Perthes disease it takes longer.

## **Who does it affect?**

- ⇒ Usually children aged between 4 and 12 years old.
- ⇒ Boys are four times more likely to be affected than girls.
- ⇒ Every year, about 1 in 10,000 children are affected.
- ⇒ It usually only affects one hip, but both hips are affected in about 1 in 7 children .

## **Will my child need treatment?**

In many cases, the top of the thigh bone regrows and remodels back to normal, or near normal. The hip joint then returns to normal and is able to work as usual. However, this can take two or more years after the condition first starts. Even after this time, there may be some stiffness remaining in the hip and there is an increased risk of arthritis in later life. The aim of treatment is to promote this healing process and ensure the hip joint heals and regrows in the best possible condition.

## **Will my child need surgery?**

Orthopaedic surgeons usually recommend an observation approach for young children (under 6 years old) with mild disease, as it will usually heal well without a specific treatment. X-rays are taken to monitor the hip joint. Surgery may be considered to improve the shape and function of the hip joint, if it has not healed well.

## What are the symptoms of Perthes Disease?

The symptoms usually develop gradually over a period of time. The first indication that a child may have Perthes disease is when they develop a limp. The affected hip is often, but not always, painful. The symptoms may include:

- ⇒ Pain can be felt in the affected hip and also in the groin.
- ⇒ Referred pain can also sometimes be felt in the thigh and knee.
- ⇒ Limb shortening may occur in the affected side compared to the unaffected side.
- ⇒ Limping is often developed and can gradually become worse over a few weeks.
- ⇒ Stiffness and reduced range of movement occurs in the affected hip as the hip becomes more damaged. Hip flexion and abduction are the movements most affected.
- ⇒ Muscle wasting occurs as the affected leg can't be used normally and the muscle becomes weaker. You may notice that the affected leg appears thinner than the unaffected leg.

Flattened femoral head

Normal femoral head





**mild hip  
discomfort**



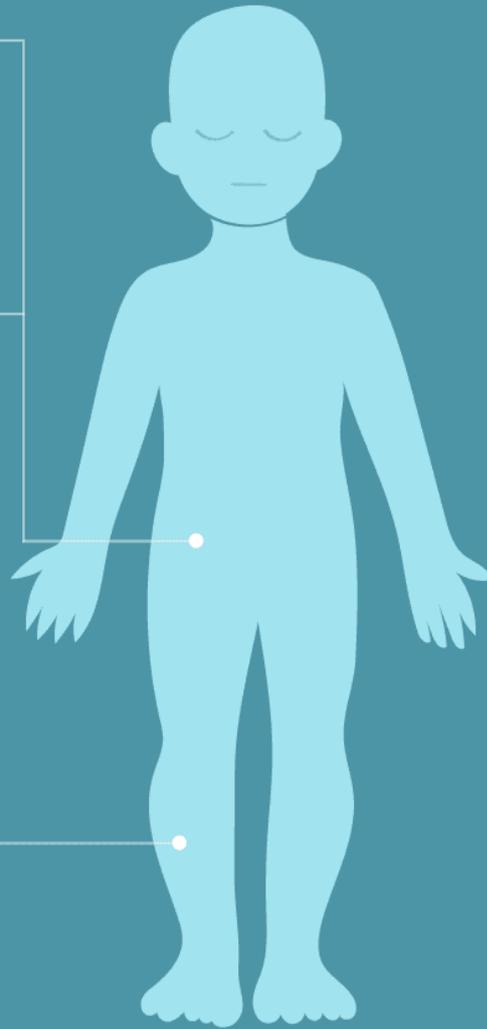
**decreased hip  
range of motion**



**limping while  
walking**



**muscle  
weakness**



## **What can help?**

- ⇒ Swimming and cycling are recommended as this keeps the hip mobile without putting pressure through the joint.
- ⇒ Horse riding has been shown to help improve range of movement and reduce symptoms.
- ⇒ Physiotherapy.
- ⇒ Pain relief may reduce pain, but you need to discuss these options with a pharmacist or GP.
- ⇒ Off load the joint with a walking aid, for example, elbow crutches.
- ⇒ Avoiding activities that lead to direct impact through the joint, for example, running, trampolining, jumping.

## **Physiotherapy**

Exercise is recommended to promote joint mobility and maintain strength. Your physiotherapist can guide you through the correct exercises to complete. Please see some recommended exercises overleaf.

Stop these exercises if you feel they are making your symptoms worse or bring on new pain. Please contact the physiotherapy department for more advice on the number at the back of this booklet.

## Exercises



**Hip Flexion Stretch:** Lying on your back. Bring the leg to be stretched towards your chest and hold onto the knee with both arms. Pull your knee towards your chin keeping your head on the floor. Hold for 30 seconds. Repeat 4 times on each leg.



**Squashed Frog Stretch:** Lying on your tummy get into a 'frog like' position with your legs. Feel the stretch on the inside of your legs. Hold for 30 seconds. Repeat 4 times



**Adductor Stretch:** Lying on your back with your knees bent and feet on the floor. Place the soles of your feet together and open your knees. Gently let your knees lower towards the floor. Hold for 30 seconds. Slowly return to the starting position. Repeat 4 times



**Bridging:** Lying on your back with your knees bent and feet on the floor. Lift your pelvis and lower back gradually off the floor. Hold for 5-10 seconds. Slowly return to the starting position. Repeat 10 times.



**This leaflet is available in large print  
and other formats and languages.**

**Contact: Administrator**

**Tel: 01752 432430**

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