

**Getting straight with orthopaedics** – A resource for schools – 2008

# Perthes disease

This condition affects the hip/s in growing children and there is no known cause. It is much more common in boys than girls, and usually occurs in children aged between four and ten years.

The most common symptom is limping that may become more persistent over 18 months to two years, or even longer. Pain may develop in the hip, groin or knee. When the child is examined, there are generally signs of restricted hip movement. Limping may impact on the child or young person's ability to keep up with their peers.

Treatment aims to reduce pain and stiffness and prevent deformity. It is designed to keep the leg bone (femur) in the correct position in the pelvic socket so it can heal correctly. This may include using:

- Slings and springs (at hospital or home – a traction arrangement that rests the hip joint and keeps it in the right position for healing).
- A broom-stick plaster.
- Osteotomy, where metal pins or plates are used to stabilise the bone.



Children or young people with Perthes disease are otherwise healthy but may be frustrated by physical restrictions (especially when this affects their mobility) as treatment can take from 18 months to two years. For some children, pain management may be required initially and during treatment. Physiotherapy exercises may also be recommended.

Providing your student with a range of inclusive activities may reduce their frustration and anxiety, and may improve their self-image. You may also notice your student has difficulty concentrating due to fatigue. It is important that education opportunities are maintained throughout the recovery process given the length of time this takes.

Positive planning for school absences may improve your student's ability to manage their learning.

Your student may:

- Experience pain, so it is a good idea to allow appropriate use of time out to rest.
- Need to practise physiotherapy exercises at school.
- Not participate in school sport unless parental permission has been provided, based on recommendations by the treating team.
- Participate in swimming programs except if they are in plaster, and for a period of time after surgery.



## Broom-stick plasters

Broom-stick plasters are used in certain conditions like Perthes disease to position the legs and align the hip joint. Plaster casts are placed on each leg and these are attached to a broom-stick to form a triangular A-shape between the ankles and hips. They are applied under general anaesthetic by the orthopaedic surgeon.

While in broom-stick plasters, the hip is held in the correct position to encourage healing. The plasters are usually removed after six weeks, and around 50 per cent of children only require one set of broom-stick plasters. However, if the healing of the bone has not finished, a second or third period in broom-sticks may be recommended.

### Implications for education

These should be read in conjunction with the General advice for school inclusion section of *Getting straight with orthopaedics: A resource for schools, 2008*.

Your student may:

- Require supervision, especially when moving from one place to another. A volunteer, a parent or integration assistant (school support officer) may be needed to assist your student. Families and the schools need to decide if they have the capacity to deal with the extended care needs of these children and young people.
- Find access through doors and around school grounds, spaces for break periods and engagement in class activities quite a challenge. This will require careful planning.
- Need safe access to a suitable toilet (preferably a toilet for the disabled). This may require considerations such as:
  - Manual handling issues
  - Equipment (commode or urine bottle)
  - Environmental modifications or adaptations
  - Privacy.
- Use of a wheelchair and ramps may be needed around the school.
- Need respectful peer support. Your student may feel embarrassed about their appearance.
- Experience concentration difficulties as a result of fatigue.
- Experience frustration due to limited mobility.

## Osteotomy

An osteotomy refers to a cut through the bone that is normally used to realign bones and joints. It is also used before lengthening bones (see Limb reconstruction). The bone is normally held in a new position with a metal plate and screws. Plasters might be used after surgery for about six weeks to provide extra support and protection.

This treatment is used for children and young people with conditions such as cerebral palsy or Perthes disease. Osteotomy may also be used to correct the alignment of bones in legs and arms.

Weight bearing is generally restricted for the first six weeks, and then gradually introduced as the bone heals and recovery improves. The orthopaedic surgeon will monitor this.

### Implications for education

These should be read in conjunction with the General advice for school inclusion section of *Getting straight with orthopaedics: A resource for schools, 2008*.

Your student may:

- Require a wheelchair at school, particularly if both legs have been operated on. Sometimes crutches are recommended. Physiotherapy will help to guide safe mobility.
- Not participate in school sport unless parental permission has been provided, based on recommendations by the treating team.

