

Information for Patients
Obstetric Brachial Plexus Palsy
(Erbs Palsy)
Information for Schools Regarding
PE and Games Lessons
Physiotherapy Service

What is it?

The brachial plexus is a network of 5 nerves coming from the spinal cord in the neck into the arm. It is through these nerves that the brain sends electrical signals to the muscles and skin of the arm and hand. Each nerve supplies movement and feeling to specific areas in the arm and hand.

Obstetric Brachial Plexus Palsy (OBPP), otherwise known as Erbs Palsy, involves damage to these nerves. It occurs during birth if the baby's shoulder becomes stuck in the mother's pelvis after the delivery of the baby's head. At this stage it is very important for the baby to be delivered quickly to prevent brain damage from lack of oxygen. In order to free the shoulder, a variety of manoeuvres may be used and may result in damage to the nerves of the arm.

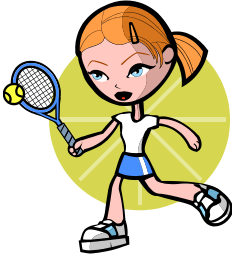
Injured nerves are unable to transmit the electrical signals from the brain and so the muscles that are controlled by these nerves will not work properly and the skin supplied by the injured nerves will lose feeling.

Although most nerves heal in time (sometimes needing an operation), children sometimes have ongoing weakness in certain muscles. They may therefore have limited movement of their arm and tightness of some muscles, depending on their recovery.

Suggestions for PE and Games Lessons

Students with OBPP should be encouraged to join in with PE, games and outside activities, even if the task has to be modified or adapted, aiming to progress their motor skills over time. They should be encouraged to include their affected arm wherever

possible in 2 handed activities, but would not be expected to gain the same level of dexterity with this hand/arm as the other one. When introducing new skills that require good dexterity it is advisable to do so gradually, and with sensitivity and differentiation as necessary, ensuring safety of the child and their peers.



These children may need extra time for dressing and undressing especially if their hand function means that managing clothes and fastenings is awkward. They may require help with clothing, footwear, buttons or shoe laces. Velcro or self-tying shoe laces may often be a useful option to encourage independence.

- **Balance / Running:** loss of spontaneous movement of the affected arm may hamper balance or running speed. The child may not be able to save themselves effectively should they trip and fall. Use crash mats when working above floor level to ensure safety.



- **Throwing and catching activities** may be modified by changing the size, weight or texture of the ball.
- **Lifting weights or carrying very heavy objects such as long PE benches** should be avoided to avoid the risk of damage to an unstable shoulder.

- **Hanging and climbing activities** should be avoided as there is an outside chance that the affected shoulder may dislocate.
- Activities needing a strong grip should be closely supervised. **Rackets, bats and hockey sticks** may need modifying with extra material wrapped around the handle if the child has a weak grip.



- **Swimming** is an excellent sport although some strokes need to be modified.



If you would like further information please contact the physiotherapist named below who will be happy to advise you.

Physiotherapist's name:

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Base:

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Contact telephone number:

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Reference:

Association of Paediatric Chartered Physiotherapists (2012) Obstetric Brachial Plexus Palsy: A Guide to Management