



Physiotherapy & Kids

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From tiny dependent infants to independent adults there are a remarkable number of growth and development wonders.

Throughout childhood, growth of various tissues allows for the maturation of bone, nerve, and muscle systems leading to observable development or motor milestones. These milestones such as being able to hold the head upright, taking the first step and hopping on one foot are the result of increased strength, endurance, balance and motor learning.

The growing child eventually matures into an adult but a developing child's body should not be considered as a small adult. The presence of growth plates in bones, softer bones, growing cartilage and a proportionately larger head make the growing child different from the adult. These differences also make children more at risk for certain types of injuries that are specific to kids.

- The softness of kid's bones means that when they fall the bone will often bend and not break. Bone softness also allows a kid's bone to heal almost twice as fast as an adult bone.
- The growth plate is an area near the ends of the bone where the growth of the bone occurs. An injury in this area may change or stop the growth of the bone. A physiotherapist who treats children will be aware of this injury and will monitor closely the child's progress as the injury may require surgery.

As an infant develops into a child and then into an adolescent the common problems seen by a physiotherapist are quite different. These problems reflect the different developmental stages of the child.

In the first few years of a child's life parents often wonder if their child is growing normally. Parents may become very concerned if their child is not crawling or walking while many children of a similar age are able to do these skills. Seeing a physiotherapist trained in infant and child development milestones can help to identify when there is slow but normal development and when it is abnormal. The physiotherapist will then provide you with recommendations for treatment, further assessment or just assurance that nothing is wrong.

A common condition that affects infants is torticollis. In torticollis, there is a tightening of a neck muscle causing the head to be tilted and neck movement to be restricted. This will affect the infant's ability to look to the side and may make breastfeeding difficult. If identified within the first few months after birth and treated with a specific stretching program by a physiotherapist this condition usually resolves rapidly.

Another injury, which only affects children, is in the area where muscles/tendons connect to

bone. This is a specialised area of growing cartilage called an apophysis. An apophysis can become irritated by overuse during growth periods causing an apophysitis or tendonitis.

Common sites for this problem are below the kneecap, called Osgood-Schlatter's disease and at the heel of the foot, called Sever's disease. Treatment of these types of conditions usually involves rest, reducing aggravating activities and ice. If the condition persists for longer than 8-12 weeks further evaluation by a physiotherapist may be needed to help identify the cause, possible risk factors and provide appropriate treatment solutions.

The teenager is more at risk for leg injuries when hormones cause a sudden increase in strength and weight. Teenage girls are particularly at risk. Studies have shown that girls injure their anterior cruciate ligament (a ligament in the centre of the knee) at a rate 4 to 6 times higher than boys. Fortunately, training programs supervised by a physiotherapist help to reduce this injury risk and improve strength and athletic performance.

An assessment of your child prior to participating in sports will help to identify any postural dysfunctions and muscle imbalances that may contribute to your child being at risk for injury.

Adolescents often complain of knee pain. Often it is due to a condition called Patellar femoral pain syndrome. The main complaints with this condition are chronic dull knee ache that is aggravated by stairs and prolonged sitting. Posture, muscle imbalance and overuse all can contribute to this condition. If your child is complaining of knee pain lasting longer than 6 weeks, a physiotherapist can help to determine the cause of the knee pain and provide appropriate treatment.

A physiotherapist who is knowledgeable in the growth and development process from infancy to adolescence is a health care provider who can help identify abnormal growth and risk factors for injury. They then can provide treatment or advise on the best treatment for your child.