Infant and Childhood conditions

- Torticollis (tight neck muscles)
- Plagiocephaly (misshapen head – flat spot)
- Calcaneoequinovarus (club foot)
- Calcaneovalgus (turned out foot)
- Metatarsus Adductus (in toeing)
- Developmental Delay
- Cerebral Palsy
- Balance / Co-ordination difficulties
- Childhood musculoskeletal growth pain
- Knee pain in kids

Elizabeth has a special interest in Paediatrics. Elizabeth has worked at both the Mater Mothers Hospital and Mater Children's Hospital in Brisbane. She can give advice about babies with torticollis or misshapen head (flat spot) and turned feet. She can assess babies for developmental delay of their gross and fine motor milestones. Elizabeth also has experience with assessing growing children for turned feet, unusual gait patterns, joint pains, sporting or dance injuries and scoliosis / back pain. Elizabeth works in conjunction with, Qld Cerebral Palsy League and other State and Federal initiatives such as Better Start Program for Children with a Disability Initiative Program. **Patients do not need a doctor's referral.**

PLAGIOCEPHALY (Baby's head shape)

It is common for a newborn baby to have a misshapen head. This can be caused by the position of the baby before birth, or by moulding' of the head during birth. Moulding happens when pressure in the birth canal moves the skull bones a little so that the head moves through the birth canal more easily. A baby's head will become a more normal shape within about 6 weeks. By 6 weeks, a baby should also be able to turn his head from side to side. Sometimes in the first 6 to 8 weeks after birth, a baby will develop a flattened spot on the back or side of his head rather than having a rounded shape. This is called plagiocephaly (play-gi-o-cef-a-ly).

Causes of plagiocephaly

- The bones of a newborn baby's head are thin and flexible, so the skull can change shape if there is pressure on part of it for a long time.
- Flattening of the back or side of the head happens when the baby lies with his head in the same position for a long time (for example, lying on his back with his head always facing up or always turned to the same side). Pressure from the weight of the baby's head will cause the flattening.
- Sometimes one of the muscles in the neck is tight, so that the baby's head is turned to the same side most of the time. See "Congenital torticollis"

Congenital Muscular TORTICOLLIS

It is also known as “Wry Neck”. A child with Torticollis will hold its head tilted to one side with its chin pointing to the opposite side. It is due to tightness of a neck muscle which is called the sternocleidomastoid muscle. There may be the presence of a lump or swelling in the sternocleidomastoid muscle of one side of its neck.

In newborns, torticollis can happen due to positioning in the womb or after a difficult childbirth. This is called infant torticollis or congenital muscular torticollis. It can be upsetting to see that your baby has a tilted head or difficulty turning his or her neck. But most babies don't feel any pain as a result of their torticollis. And, fortunately, the problem usually gets better with simple position changes or stretching exercises that can be done at home.

Positioning for Play

Playing while lying on his side (side-lying): Position your child so that he can play while lying on his side. This position allows gravity to do some of the work of stretching the neck and bringing the hands to the middle of the body. Bringing hands to the middle is an important step for feeding, hand and eye coordination, and other areas of your child’s development.

Playing on his stomach: When your child is awake, it is very important he be placed on his tummy for play. This helps him learn to control his head movement. When your child is on his tummy on the floor, place all toys so he has to turn his face to the side that is tight. You can help him turn his face while he plays on his tummy.

Tummy Time

Babies have very strong protective and postural reflexes which make them want to keep their eyes horizontal and lift up their heads. The early development of these reflexes is evident in very young babies, while on their tummies, in that they can lift their heads, enough to turn it from side to side. Gradually they become able to lift their heads enough to look around and will start to prop higher using their arms for assistance. These movements strengthen their backs: a benefit for later core stability and balance.

METATARSUS ADDUCTUS (also known as “In Toeing”)

Stretching exercises
A physiotherapist is recommended to instruct you with this procedure.

What is Metatarsus Adductus?

Metatarsus adductus is a common foot deformity noted at birth that causes the foot, or forefoot to turn inward. There is a “C” shaped curve of the outside of the foot. Sometimes there is an increased space between the great toe and second toe. This condition can affect one or both feet.

Babies born with Metatarsus Adductus may also be at increased risk of having an associated hip condition known as Developmental Dysplasia of the Hip (DDH)

What causes Metatarsus Adductus?

The cause of metatarsus adductus is often postural. It occurs in approximately 1 out of 1,000 to 2,000 live births and effects girls and boys equally, family history, position of the baby in uterus (breech position) or prone sleeping position may also cause Metatarsus Adductus.

Treatment The main goal of treatment is to straighten the foot. The treatment depends on the severity of the condition, child’s age and associated medical conditions. Flexible deformity can be treated with passive stretching exercises and positioning. The physiotherapist advises parents how to perform the passive stretching exercises during each nappy change. If the foot does not respond to the stretching program, a plaster cast may need to be applied. For severe Metatarsus Adductus or rigid deformity, surgery may be required to release the forefoot joints and muscles. A cast may be applied after surgery, to hold the foot in the correct position.

Childhood musculoskeletal growth pain

Growing pains are common among children. As many as one in five children experience some degree of this real, but quite harmless muscular pain during early years.

Growing pains are most prominent between the ages of three to five and eight to eleven. The most common complaints include limb pain that has started for no real reason. Sometimes pain may occur after exercise, but this is not always the case as children often experience just as much discomfort without any physical activity. In most cases, growing pain usually ceases by mid-adolescence.

Symptoms

Most children tend to experience pain in the legs, particularly the thighs, calves and behind the knee. Arm pain is far less common and pain does not tend to change with movement. Pain episodes can occur as frequently as nightly through to weekly or monthly. Complaints of pain are most common in the late afternoon and evening and can often affect the child's sleep with pain usually gone by morning. Normal daily activity is typically unaffected, with pain during the day being fairly uncommon. Children may also experience other forms of discomfort such as headaches or abdominal pain during an episode of growing pain.

What can physiotherapy do?

Some specific musculoskeletal conditions that occur during growth spurts include Osgood-Schlatter's disease in the knee and Sever's disease in the heel. There are some other more serious conditions that can mimic the symptoms of growing pain, such as infections, viruses and juvenile arthritis. It is therefore important to have your child assessed by a physiotherapist to rule these out.
Once your child has been cleared of other conditions and a diagnosis of growing pain has been made, a physiotherapist can assist with managing your child's pain while eliminating other pain factors:

- *Analysing child biomechanics:* If your child sits, stands, walks or runs awkwardly, they may be placing unnecessary stress on their muscles. By identifying characteristics such as tight muscles, flat feet and knock knees, your physiotherapist can tailor a treatment plan. This may include massage, stretching, strengthening and advice about appropriate footwear which will help minimize the load placed on already painful areas.

- *Muscle fatigue:* If there is a close relationship between extra activity and complaints of pain, your physiotherapist can formulate a strategy to prevent 'overdoing it' during the day. This might include short rest breaks or activities like reading and drawing between more intense sporting activities.

- *Emotional distress:* There can sometimes be a psychological component to growing pains. A physiotherapist can reassure you and your child that the pain will ease and there will be no lasting damage caused by the pain.

KNEE PAIN IN KIDS

Knee Pain in Kids.....

Osgood-Schlatter Disease

Funny name, but what is it!?

Does your knee often trouble you with pain? You're not alone!

The Osgood-Schlatter (say 'oz-good shlat-ter) condition

is common in active, rapidly growing teenagers.

During growth spurts, the muscles around your knees can become very tight. This involves a part of your knee called the tibial tuberosity, which you will notice is the bump just below your knee-cap (patella). Pre-teens and young teens (between 11-14 years old) are often affected by Osgood-Schlatter because the bones are growing fast at this age. Being ultra keen on sport unfortunately might add to the problem. Any activity can cause Osgood-Schlatter, but it's more common in activities that involve a lot of jumping and cutting, like basketball, netball, volleyball, soccer and gymnastics.

The good news is that you and your parents can help treat the pain in your knee by using the RICE protocol.

R Rest the knee from the painful activity

I Ice the affected area for 20 minutes, 3 times a day

C Compress the painful area with an elastic bandage

E Elevate the leg

If the knee remains uncomfortable for you during this time, you should consult a physiotherapist.

A consultation with a physiotherapist involves looking at how your knee is moving, for example, running style, knee-cap angle/position or how you play sport. These factors may contribute to the problem during your growth spurt.

Following this assessment the physio will commence treatment. This could involve a range of techniques such as massage, joint movements, stretches or strengthening exercises to name a few. Small changes can help reduce the pain you are experiencing.

It is important that you tell your parents if your knees are hurting you (you could tell them you think you might know what is causing the pain – they'll be very impressed!)