



Growing pains can be exacerbated by insufficient vitamin D levels, so let your child catch some rays and establish good fitness habits.



The pain puzzle

Growing pains are a little understood experience of up to 30 per cent of children, but there are some helpful steps to address the problem.

Words CARROL BAKER

For the third night in a week, Maryanne was woken by her son Jonas crying out in the dead of night. Her usually active, bright and bubbly eight-year-old was complaining of recurrent pain in his leg muscles that seemed to go on for hours. But, by morning, the pain had vanished.

What Jonas was experiencing was growing pains, a mysterious phenomenon of real but essentially harmless muscular pain that occurs in up to 30 per cent of young children. Kids who suffer growing pains report experiencing anything from a niggling ache to a deep, throbbing sensation, which may also be accompanied by a hot burning feeling. The pains are usually localised in the calf muscles, ankles, behind the knees and in the thighs, but they can also occur elsewhere.

Researcher Dr Angela Evans from the University of South Australia's School of Health Science says, just like in Jonas's case, growing pains typically start later in the day, particularly at night. They can also differ in degrees of discomfort for the child. "The level of distress varies from complaints by some children to distress and crying in others, depending on the intensity of the pain," she says.

In terms of frequency, there is no real set pattern. "It may occur four times in a week and then not at all for a month, making it difficult to monitor," says Dr Evans.

Growing pains: the facts

The term "growing pains" was coined by French physician Marcel Duchamp in 1823, but experts agree the pain has nothing to do with growing. Growing pains generally occur between the ages of three and five and then between eight and 12, but they can continue well into the teenage years in some children. Boys and girls are equally likely to

experience them. If a child is overweight, has foot issues such as flat feet or has very flexible limbs, they may also be predisposed to growing pains.

Researchers have also discovered a genetic link. In the *European Journal of Pain* in 2012, a study of twins showed a greater likelihood of growing pains if another family member had them. As for when they are more likely to occur, it's often after playing sport or intense or prolonged physical activity.

Growing pains can also occur in children where none of the above applies. Exercise physiologist Dr Bill Sukala says it's no wonder the phenomenon of growing pains is often misunderstood. "We need to look at cause and effect vs coincidence," he says. "For example, are a child's legs sore because they are having growing pains or because they played three hours of soccer the day before?"

Having super-flexible joints may also contribute to growing pains. It's a condition that is passed through families whereby the soft tissues are stretchier than in other people, so the child's joints move very freely and beyond the normal range of movement for the joint.

Dr David Adib, paediatric rheumatologist, says this means the muscles that control joints have to work a bit harder to stabilise them. "As a result, the muscles become fatigued, often resulting in delayed-onset muscle soreness," he says.

Putting your child's best foot forward

There is also a correlation between problem feet and growing pains. Kim Edwards, children's podiatrist, says kids who fall outside the "normal" range of foot posture are more likely to experience growing pains. "We definitely see established patterns with kids

presenting with growing pains and foot posture issues such as rolling-in or flat feet," she says.

If your child suffers from growing pains, the good news is it's something they will outgrow normally. More often than not, the bouts of periodic pain some children experience will simply fade over time as they enter their teenage years.

Dr Adib says there is only really cause for concern if the growing pains are incessant and relentless. "If the child is distressed and they cause night waking on a regular basis, you need to see your GP who can refer the child to a specialist for further assessment," he says.

What growing pains aren't

Growing pains can also be mistaken for other health issues, so it's important to differentiate between what typifies symptoms of growing pains and what could possibly be another issue.

For starters, growing pains should not affect movement or mobility. The child should still be able to engage in physical activity without discomfort; they should be able to walk, run, hop and skip normally. If a child is limping, favouring one arm, or the arm or leg is painful to touch, or an otherwise active child is unwilling to engage in physical activity, there could be something else going on.

Other health issues that could be mistaken for growing pains are arthritis and infections such as osteomyelitis or viral infections. If in doubt, seek medical advice to rule out other health concerns.

Reducing your child's risk

While there aren't any sure-fire guarantees, there are some ways to lessen the likelihood of childhood growing pains.

Eating a broad range of nutritious foods can help. So too can topping up certain vitamins and minerals.



Naturopath Alison Mitchell says ensuring a child has adequate calcium phosphate/magnesium phosphate in their diet is important. "This helps to support the nutrients required for healthy bone growth and tendon development," she says. And, of course, the more vigorous exercise a child undertakes, the more the child will deplete their body's valuable stores of these minerals.

Ensuring a child has adequate vitamin K₂ is also important, as it plays a role in bone mineralisation. "K₂ is good bacteria that we make in our gut," explains Mitchell. "You need vitamin K₂ to help calcium go where it needs to in the body." To stabilise K₂ levels, she suggests natto, a traditional Japanese food made from fermented soybeans. Taking care of gut bacteria with starchy vegetables and some nuts, which feed all the good bacteria in the digestive system, can also help. Try sweet potato, zucchini, onions, garlic, witlof and almonds.

Of course, this also means avoiding foods that kill off the good bacteria. Some kids will happily munch on sugary go-to convenience foods in favour of flavoursome nutritious food. Too much sugar and soft drinks can upset the balance of gut bacteria, which in turn can affect the body's K₂ levels.

Let your child catch some rays — while being sun-savvy, of course. It seems growing pains can be exacerbated by insufficient vitamin D levels. Researchers at the Department of Paediatrics in Karachi, Pakistan, tested 100 children who had been experiencing growing pains. Only six per cent of them had normal vitamin D levels. Exposure to warm sunshine is one of the best ways to boost vitamin D levels. So turn off the TV, stash the electronic gizmos in the cupboard and send your child outdoors to play.

If your child is playing one particular sport and experiencing growing pains, mix it up with other types of sport. That way, you reduce the risk of overuse and fatigue of some muscle groups. It can also help to take regular rest breaks. And encourage children to listen to and understand what is going on in their bodies. If they are playing sport, a little twinge or tightness in the muscles can be exacerbated if the child ignores it and continues with the physical activity.

Treating growing pains

•**Stepping out.** Problem feet and growing pains can go hand in hand. If a child has a foot posture problem, this can be

Encouraging sports

Exercise physiologist Dr Bill Sukala says getting involved in a wide range of sports is good for a child's brain development and boosts skills and co-ordination.

"Independent of growing pains, it's important that kids are involved in a variety of activities that work the body in different planes of motion, and it's good to establish good habits in different types of fitness — strength, endurance, agility and flexibility. All these things collectively encompass a child's athletic ability."

helped by orthotics, inserts placed inside the shoe to bring the foot back within the range of normal foot posture. Edwards says orthotics stabilise the foot, meaning the muscles controlling it don't work so hard, reducing the potential of muscle fatigue. "A podiatrist may also suggest balance exercises to help stabilise a child's feet and strengthening exercises for any muscle weakness or tightness," she says.

Standing tall as a child walks or sits may also reduce the incidence of growing pains. Slouching while walking or slumping in a chair and even walking with an unusual gait put stress on the supporting muscles of the body.

•**Tub time.** Muscle aches and pains can be eased by applying heat packs, but there's nothing quite like a soothing, calming bath to relieve muscle aches and stresses. Mitchell suggests sprinkling a generous amount of Epsom salts (magnesium sulphate) into a warm bath before bedtime, stirring the salts around until they dissolve. "You can also kick it up a notch with some essential oils," she adds. "Try lavender oil or peppermint, which is also good for muscle aches."

•**Hug therapy.** A parent's cuddles can solve lots of childhood issues and even take away some of the discomfort from their growing pains. Acknowledging how your child feels is important. If your child is suffering from growing pains, let them know that what they are feeling will eventually go away. Share with them that a lot of kids get growing pains and that, for many, it's simply a normal part of being a kid, just like losing teeth and visits from the tooth fairy or growing taller.

It's not a good idea to tell your child that physical activity or active play

may make the pains worse; you may inadvertently instil feelings of anxiety around getting involved in play.

Dr Sukala says the comfort of a parent when a child is experiencing pains and aches has a powerful emotional and psychological benefit. "If a child is being nurtured and supported by their primary caregiver, that certainly has some psychological benefit in easing pain," he explains.

A healing massage

Children who experience growing pains can benefit from soothing massage.

Touch is important for childhood development. The skin-on-skin connection, the power of human touch, has been shown to support mind, body and spirit. It improves circulation, boosts the immune system, supports muscle and joint function and helps a child to relax and find an inner sense of calm. If a parent is massaging a child, that also builds trust and strengthens the bond between caregiver and child.

Here is a simple DIY leg massage you can try, courtesy of naturopath Alison Mitchell:

- You'll need a very light oil that's a pure cold-pressed, organic, vegetable, nut, seed, or fruit oil. (Avoid those that are too thick (eg olive oil) as they will not be absorbed well by the skin. Also avoid mineral oils, which can be irritating to the skin. Set the scene for relaxation with dim lighting, turn off the TV and play some calming music.
- Use long, firm strokes along the legs, with only light pressure on the kneecap. If your child is very young, it's best to use strokes going in the direction of the hair growth (from hip to ankle) as this is most relaxing.
- Next, using the flat pads of your fingers, gently but firmly circle and roll around the meaty parts of the legs — the calf muscles, hamstrings and quadriceps.
- Using your thumbs, circle into the bottom of the foot, focusing on the arch and the ball of the foot. Now, draw lines down the top of the foot with your index finger, aiming in between the bones of the feet.
- Finish with more long, firm strokes along the leg, then repeat on the other leg. 🧘

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