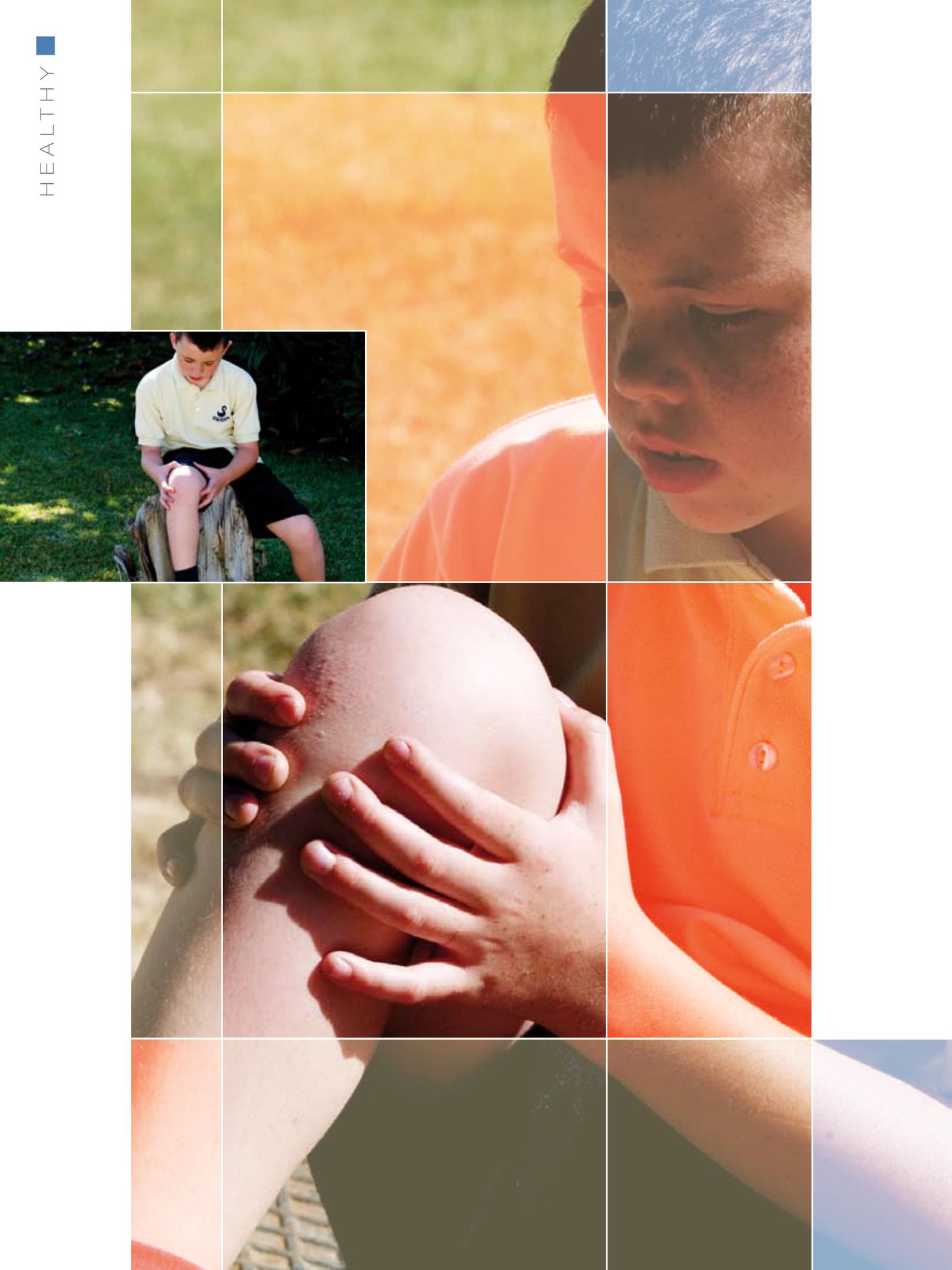


HEALTHY





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KNEECAP LUXATION CONSERVATIVE & OPERATIVE TREATMENT

When someone suffers from luxation of their kneecap this affects both their normal daily living and their ability to perform sports activities.

In children, between the ages of 5 - 10 years old, it is normally something that is treatable through exercises, often under the supervision of a physiotherapist, and without much effort, many of these patients will outgrow their disability. In older children or adolescents, the ability to outgrow the tendency to subluxate (luxation of the kneecap) is less common. Many of these patients will benefit from muscle exercises, most often performed under the supervision of a physiotherapist, who can strengthen the muscles on the inner side of the thigh, preventing the kneecap from luxating towards the outside of the knee. In adults, it is rare to find a patient who suddenly starts to suffer from luxation of the kneecap unless he has suffered an accident to the knee.

Most often in adults, it is a case of someone who has been physically active for several years but due to a change of work, age or other circumstances, their muscular strength diminishes and then they start to suffer from luxation when they hurt their knee by accident.

When a patient is suffering from kneecap luxation, it is due to lateralisation of the kneecap. Meaning that either the capsule of the knee is too weak on the inside, or the capsule is too tight on the outside, pulling the kneecap towards the outside while bending the knee. With some patients, it is possible to strengthen the knee capsule and the muscles around the knee in order to avoid operating it, but often it is necessary to operate to stabilize the kneecap to prevent it from luxating.

WHAT KIND OF OPERATION IS NECESSARY?



A surgeon will always try to do as little as possible, aiming at not interfering with the function of the knee but at the same time achieving his goal of being able to restore the normal function of the knee.

As mentioned above, one thing that could make the kneecap luxate is when the outer part of the knee capsule is too tight, thereby luxating the kneecap laterally. This condition can be changed by making a small incision in the capsule on the outside of its attachment to the kneecap, while at the same time the surgeon arthroscopically examines the placement of the kneecap and is able to perform what is called a lateral release in the capsule of the knee joint. The lateral release will then reduce the pulling strength on the kneecap from the outside and thereby allow the kneecap to return to its proper location, in the middle of the knee.

If the problem does not arise from the outer portion of the capsule being too tight, but rather the opposite i.e. that the capsule is too slack on the inside, this problem can be solved by making a duplicate of the capsule. Again this technique needs to be performed simultaneously with an arthroscopy of the knee so that the knee capsule is tightened as much as is sufficient to restore the function of the knee.

Sometimes the two techniques are just not enough to solve the luxation of the kneecap and this is mostly due to the kneecap being attached too laterally on the lower leg. In order to prevent the luxation of the kneecap in such cases, the surgeon has to combine the two mentioned techniques with a third method, in which he has to perform an osteotomy of the lower leg where the attachment of the ligament from the kneecap is placed. Then the ligament is moved 1 to 1½ cm to the inside from its attachment and in this way the kneecap is prevented from luxating. Again, the manoeuvre will be controlled arthroscopically, ensuring that the kneecap is perfectly placed in the right position before the osteotomy is secured by screws through the bone of the lower leg.

All of the three methods will require the patient undergoing rehabilitation by using a brace for 4 to 6 weeks. During this period, they are allowed to put their full weight on the leg, but only on a straight leg.

The success rate when performing a lateral release is between 50 to 60 %. When combined, if necessary, with a medial duplication, the success rate rises to between 75 and 80%. All three techniques combined have a success rate of 80 to 90%.