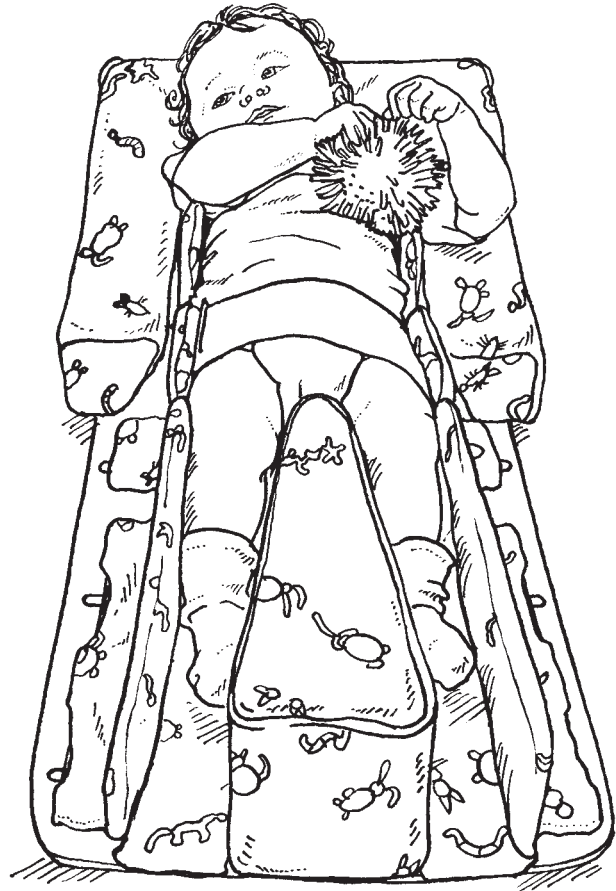


Chailey Lying Support

Fitting and Operating Instructions



IMPORTANT

Please read the instructions in full before using the Chailey Lying Support.

The Chailey Lying Support must be finally set and adjusted by a competent therapist or rehabilitation engineer **before use**.

The Chailey Lying Support should only be used unsupervised or for sleeping following consultation with your therapist or doctor.

The Chailey Lying Support may be heavy. Take care when lifting a heavy load.

If you are unsure of any part of these instructions or have queries on the use the Chailey Lying Support, do not hesitate to contact us.

Please ensure the leaflet 'Information for Parents and Carers' supplied with the Chailey Lying Support is passed on to the parent or carer.



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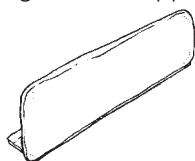
Introduction

The Chailey Lying Support is designed for children who have moderate to severe motor impairment, to support them in a stable, symmetrical position in prone or supine. It is based on more than a decade of clinical experience and detailed research at Chailey Heritage School and Chailey Heritage Clinical Services in East Sussex. To keep things simple we refer to children in this leaflet although the Chailey Lying Support is available in large sizes and can be of great help to adults with movement difficulties. We refer to the child as 'he' to keep the text simple.

Identifying the components

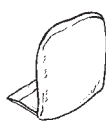
The illustrations below will help you to identify the various components of the lying support and what they do. The supports that are supplied with the Chailey Lying Support give you the option of using it for either prone or supine lying positions. Further information on the settings required for each position is shown on page 4.

Leg Lateral Support



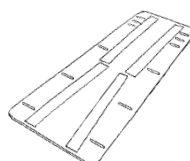
The lateral supports help to keep the body in a symmetrical posture to help prevent Internal and External rotation.

Lateral Support

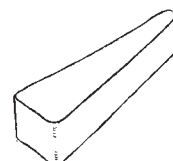


The firm base provides stable, consistent support and helps to prevent the development of asymmetrical body

Base Board



Abduction Block



Keeps the hips in a slightly abducted position.

Chest Support (Prone)



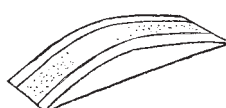
Supports the trunk and encourages shoulder girdle protraction. A low support is used for rest, a higher one for play.

Lumbar Support (Supine)



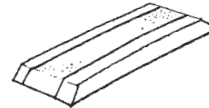
Supports the lumbar spine.

Knee Support (Supine)



Puts the knee into slight flexion for comfort and to help control internal and external rotation.

Thigh Support (Prone)



Helps distribute weight along the length of the leg and takes weight off the patellae.

Shin Support (Prone)



Raises the lower leg to keep the ankle in a neutral position.

What is the Chailey Lying Support?

The Chailey Lying Support consists of a solid baseboard with lateral supports, a triangular abduction block and a number of shaped, cushioned body supports. It is used to provide a comfortable, symmetrical position for active play during the day or for sleeping in at night. It is prescribed as part of a child's treatment programme and should be used on a daily basis.

Checking the initial set up

The Chailey Lying Support will be delivered already set up to the measurements recorded during the assessment. The pelvic lateral supports will be both symmetrical and centrally aligned and may need to be moved if there is gross asymmetry. If measurements were not provided with your order you will need to take these now and set the support up accordingly. Measurements required are: hip width, heel to groin, axilla to knee and leg width. Figure 1 shows the position of the components.

The position of the lateral supports and shaped supports can be adjusted. Once all of the adjustments have been made, re-check all components for the correct position and tighten all the bolts with the allen key supplied with the Chailey Lying Support.

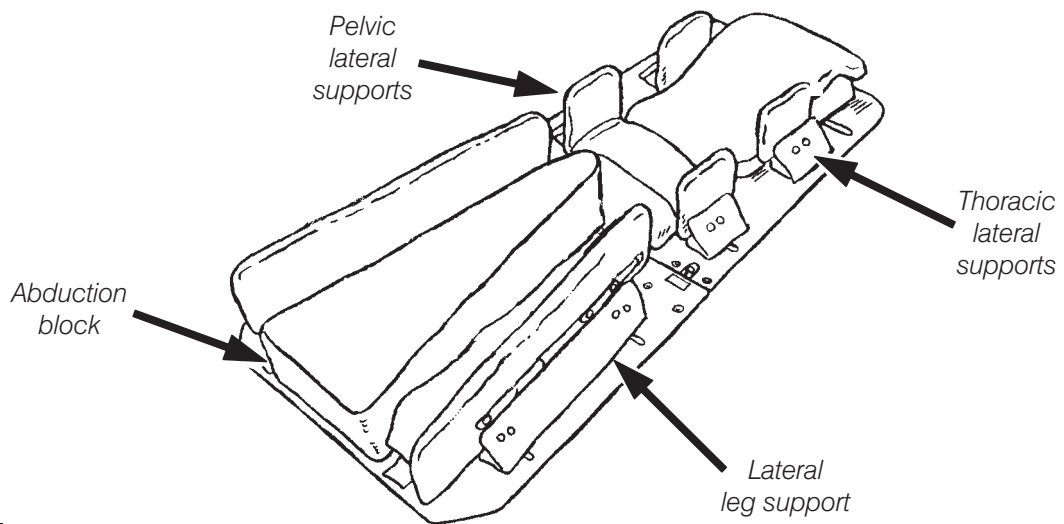


Fig 1

Adjusting the lateral supports

All lateral supports can be adjusted for width, and moved up or down the board to suit a particular child.

On smaller lying supports, the adjusting bolts can be found underneath the lateral cover. (Fig 2)

On larger lying supports, unclip the angled part of the lateral support (Fig 3). The bolt will then be exposed.

Loosen the adjusting bolt, but do not completely remove it (on the leg lateral support you should loosen both bolts). Move the support to the required location on the board and re-tighten the bolt. If you need to use a different slot, remove the bolt and position the lateral on the new slot. Replace the bolt and retighten.

The pelvic lateral supports should be positioned so that the greater trochanter is central to the support. These need to fit snugly in order to maintain body symmetry.

The thoracic lateral supports should be positioned 4cm below the axillae. They should be symmetrical and at the appropriate width.

The lateral leg supports should be positioned to follow the line of the leg, giving close support to the whole length of the leg.

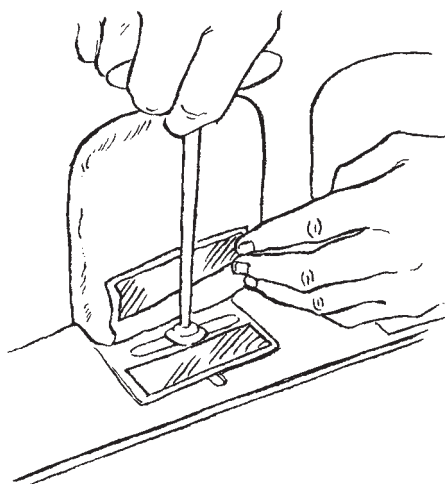


Fig 2

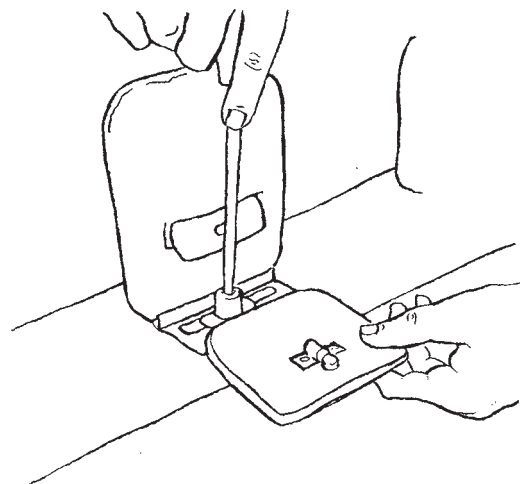


Fig 3

Setting the support up for prone or supine

The Chailey Lying Support can be set up for both prone and supine lying positions. Both positions are useful for play. Different shaped supports should be used for the different positions. They are attached to the board using Velcro. Simply pull them off the board and locate them in the appropriate position. The way each type is used is shown below (Fig 4 and Fig 5). Both positions encourage the development of postural ability. The use of a special support may be the only way a child who has difficulty with movement can gain experience of a higher level of ability.

To change the position between prone and supine, remove the main body and leg cushions. The shaped supports can then be positioned correctly on the board.



TIP

The shaped supports are easily interchangeable between prone and supine. Mark the location of each of the supports to ensure they are correctly positioned each time.

Prone setup

In prone, the chest support will encourage the child to lift his head and chest off the surface and support himself on his forearms. The pelvic strap should be used to bring the pelvis down onto the surface and maintain symmetry. An ankle strap may occasionally be used to limit unwanted movement over the abduction block.

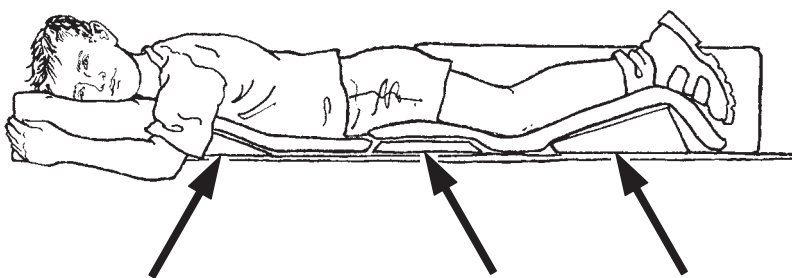


Fig 4

Chest support

The top edge should be in line with the axillae (if this is uncomfortable, move it down a little). Care should be taken that the top edge is not under his neck.

Thigh support

The bottom edge should clear the child's knee.

Shin support

The top corner should be into the ankle.

Supine setup

In supine, a head and shoulder girdle support is used to help develop shoulder girdle protraction. This will enable the child to learn to lift his arms up and play against gravity. A pillow may be needed for additional head support. Occasionally, a strap to limit unwanted movement may be added above the knee.

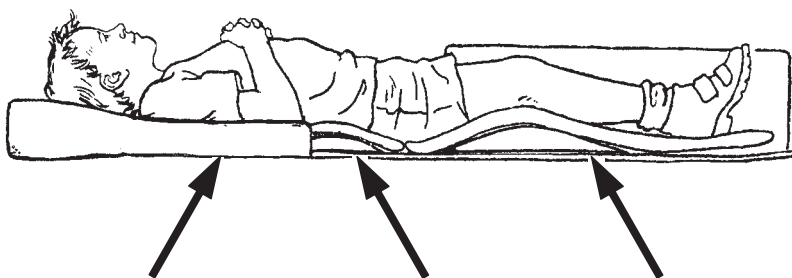


Fig 5

Head and shoulder girdle support

If should be placed as far down the board as possible, against the thoracic laterals.

Lumbar support

The lower edge should be under the PSIS's bringing the pelvis into anterior tilt.

Knee support

The apex should be under the knee joint to give a slightly bent knee position.

Lifting and Handling

On larger Chailey Lying Supports, the lateral supports can be folded down flat to give easier access. On the smaller supports with fixed lateral supports, a 'straight' lift will be needed. It is possible to hoist a heavier child into the support. The hoist sling should always be removed so that the child is comfortable and the risk of tissue trauma is not increased. If a heavier child is to use the support in prone, a sliding sheet can be used. A removable abduction block is also available if there are difficulties with handling or personal hygiene.

Parents and carers may need to be taught how to lift the Chailey Lying Support if this is necessary.

Maintenance

Every three months, you should check the positions of all components for a good fit, ensure all bolts are tight and the cushions are not worn out. Straps should be checked for signs of wear.

As the child grows the support will need adjusting. The Chailey Lying Support is fully guaranteed for 12 months but should last between 2 and 4 years if correctly maintained. It will need changing when the chest support reaches the top of the baseboard or when the child's feet reach the bottom end of the baseboard.

The main cushions have zipped covers that can be removed for washing. A 40° wash should be used, and they can be tumble dried. The foam inside has a special lining that allows the skin to breathe. This lining should not be removed.

Informing Parents

Parents may need a great deal of support and encouragement when the lying support is first introduced at home. Some children will use the support easily for the whole night from the beginning, others may need to get used to it more gradually, with a slow build up to full time use.

Parents should be shown how to check the positions of the pelvic girdle and shoulder girdle for symmetry and encouraged to do this every time they place their child in the support.

Development of Lying Ability

Based on the Chailey Levels of Ability, the Chailey Lying Support will enable a child to achieve and experience at least a level 3 lying ability. This is described as a symmetrical posture with both the pelvis and shoulder girdle in a neutral position and the chin tucked. Once the child is supported in this position he might be able to learn to turn his head freely from side to side, retract his chin, bring his shoulder girdle into protraction and his pelvic girdle into anterior tilt (level 4 lying ability). Used at night for sleeping it will provide the long periods of stretch needed to maintain muscle length, preventing the asymmetric lengthening and shortening that is the major cause of deformity.

The firm base will help to prevent the development of asymmetrical body shapes that can occur with very soft surfaces and the lateral supports will help joints and muscles to rest in a symmetrical position. Children who have difficulty moving are often uncomfortable and this may prevent them from enjoying a good night's sleep. The cushioned body supports will help with this by ensuring that the child is taking his weight evenly throughout the whole of his body. Evenly distributed loadbearing over the whole body's supporting surface will minimise the risk of tissue trauma. It is also a good starting position for movement, enabling the child to develop his postural ability. Sometimes a child has too much movement that he is unable to control and the firm base and cushioned supports provide stability and symmetry and give boundaries that will enable him to move and develop in a positive way.

The Chailey Lying Support can also be used as an alternative to a hip spica for post-operative management. It may help to reduce pressure problems, allow the maintenance of joint range and muscle strength, and ease handling and hygiene. A removable pommel can also help in this respect.

Night time use

Children spend a lot of time in bed and asleep, so it makes sense to ensure that this time is beneficial in all respects. The symmetrical position that can be achieved in a lying support will help to prevent the shortening of muscles that causes a distortion of body shape. It will also help to stretch muscles that might become tight if the child spends a long time every day in a sitting position. Research has shown that at least 30 minutes of stretch every day is needed to maintain muscles at their current length, and between 5 and 7 hours of stretch is needed to lengthen muscles that have become short.

It is important to talk to parents during the assessment and prescription process to find out about the child's current sleeping patterns and any existing problems. The usual or preferred sleeping position should be considered and may affect how the new support is used, especially at first.

Medical implications must also be considered before using the Chailey Lying Support, especially when it will be used at night. Some conditions, such as nocturnal seizures, reflux oesophagitis, and chest infections causing nocturnal hypoxaemia, may be aggravated by supine positioning and prone may be more suitable. If these factors co-exist then appropriate investigations and treatment should be carried out before the lying support is used. We recommend that the child is positioned in supine at night because it is a 'cooler' position and it is easier to make sure the child is symmetrical and properly positioned. If there is risk of nocturnal hypoxaemia then overnight oxygen saturation should be monitored, and in cases of doubt, repeated in the lying support.

Summary

Children need to feel secure (physically and emotionally) before they are able to be active, sleep or play happily. The Chailey Lying Support will help with this by providing boundaries within which movement can be experienced and learnt in a positive way. The Chailey Lying Support is one part of a 24-hour postural management programme that may include seating, a standing support, active movement (such as horse riding) and hands-on treatment.