

# Long line information for parents

Neonatal Unit

You will have been given this information leaflet because your baby needs a long line. This will help you understand what a long line is and how it will be used in your baby's management.

## What is a long line?

A long line is a means of gaining access to a large blood vessel. It is a thin, hollow tube made of synthetic material like polythene and looks rather like a piece of thread.

## Why does my child need a long line?

Fluids can be given through a cannula, but these do not stay usable for long periods and require frequent replacement. This leads to multiple needles and causes stress to your baby. Infants require calories, vitamins and protein to help them grow and give them energy. This enables them to cope with the process of breathing, keeping warm and fighting infection.

The long line will be used to give your baby nutrition (total parental nutrition or 'TPN'). This is a liquid containing all the essential minerals and calories. As well as being used to administer TPN, it can also be used to give antibiotics and certain other drugs.

## Do all babies on the special care unit get a long line?

Not all babies on the unit need to have long lines. The more premature, or more ill your baby, the more likely it is that he/she will need a long line. This is because it may be some time before your baby's stomach is ready to receive milk.

## How will it be inserted?

The long line will be inserted by a doctor, or a nurse practitioner. It is routine that during all sterile procedures parents are asked to leave the room to assist with infection control.

The skin area of the arm or leg where the line is to be placed is first cleaned. The vein of the area will be punctured with a needle. The long line is threaded through the needle and into the vein to a set length.

The needle is then removed and the line is secured to the skin with an adhesive dressing. An X-ray will be taken, to make sure that the tip of the long line is in the correct position. If the line is not in the correct position it will be repositioned before it is used.

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- **Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available**
- **If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111**
- **Keep the environment clean and tidy**
- **Let's work together to keep infections out of our hospitals and care homes.**

## Are there any complications arising from the use of a long line?

Serious complications are rare, but local bruising or initial malpositioning are not uncommon (0.5%). Sometimes the lines can leak or, break (4.4%). As the line is synthetic material in a vein, the vein can become blocked and cause swelling of the limb (thrombosis). The line itself can become blocked because it is so narrow (4.4%). All these problems usually require the line to be removed. All percentages are showing the likelihood of these complications occurring.

Occasionally the line, being foreign to the body, may become infected and need to be removed (5.3%).

There are very rare complications associated with the long line. Air may be introduced into the lung cavity (a pneumothorax). There can be leakage of fluid into the lung cavity (pleural effusion). Another complication is pericardial effusion. This is when there is a leakage into the cavity surrounding the heart (0.05%).

This can lead to an irregular or fast heart beat or a drop in blood pressure.

More seriously it can cause large amounts of blood / fluid to accumulate around the heart sac which may interfere with the functions of the heart (1 - 3%).

These complications are extremely rare and the benefit of supplying adequate nutrition and medication to your baby outweighs these risks.

All percentages are showing likelihood of chances of occurring.

## How will these complications be prevented?

The line position is carefully checked after it has been inserted by the use of an X-ray. This ensures the correct position of the line and reduces the risk of heart and lung associated complications. Your baby is closely monitored throughout his/her stay on the unit by the specially trained nursing staff. Any signs of problems, infection, line blockage or vein blockage are detected early and treatment and/or line removal carried out.

## How long will the line remain in?

The length of time the line remains in is dependent on how sick your baby is. It can also depend on how much extra support he/she needs and if any complications occur. It will be removed at the earliest opportunity once your baby is stable. If you have any questions regarding the use of the long line please do not hesitate to ask any member of the nursing or medical staff.

## What will be the outcome if my baby does not have a long line?

If you do not wish your baby to have a long line we recommend you discuss it further with the medical team. If your baby does not have a long line your baby will need more handling and more cannulas inserted. This is more likely to occur if your baby is under 28 weeks gestation. If we need to administer your baby nutrition through a cannula there may be an increased risk of skin damage. All these may in turn compromise your baby's nutrition and care.

## Contact Details

Unit manager or your consultant  
Neonatal Unit  
Maternity Building  
New Cross Hospital  
WV10 0QP  
Tel: 01902 694032

## Reference

Cartwright, D.W (2004). Central Venous Lines in neonates: a study of 2186 catheter. Archives of Disease in childhood - Fetal Neonatal Edition. 89, F504-F508.

## Glossary

**Adhesive Dressing** - sticky film applied to cover an opening to the skin or to secure medical devices.

**Cannula** - A hollow tube for insertion into a vein by which fluids are introduced.

**Pericardial Effusion** - Large amounts of blood or fluid that accumulate around the heart sac.

**Pleural Effusion** - Accumulation of fluid into the lung cavity.

**Pneumothorax** - Accumulation of air in the lung cavity.

**Vein** - A vessel carrying blood back to the heart.

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。