**Who is it for?**
Intrathecal phenol is used for the management of cancer pain. The pain problem can be in the chest wall, perineal area or legs. The chest wall pain must have a clear upper and lower limit. It is also used for pelvic or perineal pain due to cancer. It is particularly useful for those who cannot sit due to pain.

**What is intrathecal phenol or alcohol injection?**
Intrathecal phenol or alcohol injection is a nerve block. The spinal cord floats in (spinal fluid) cerebrospinal fluid (CSF). The nerves carrying pain pass through the CSF to reach the spinal cord. Phenol or alcohol injected into the CSF will bathe the nerve roots where they enter the spinal column to provide numbness in the pain affected area.
The phenol used is in glycerol, which is heavier than water. When injected into the CSF it sinks towards the target small nerves. By positioning you with the painful area below the level of the injection and injecting slowly, the spread of the phenol can be controlled to affect just those nerves supplying the painful area of the body. Alcohol is lighter than spinal fluid (CSF) and therefore positioning of painful site is opposite to that in case of the phenol.

**How is it done?**
A verbal explanation will be given followed by an opportunity for you to ask questions on at least two occasions. You will be required to sign a consent form agreeing to the procedure towards the conclusion of consent process.
You need to be positioned with the painful area below the injection point. If the pain is in your chest, you will lie on your side. If your pain is perineal area or in your pelvis you will be sitting upright. Pain relieving drugs and sedatives can be used to help you stay in the position required for this injection. The doctor will mark the bones of the spine and select the injection point under x ray guidance. This will be in the midline of your back, between two vertebrae at a level above your pain. The skin will be cleaned with antiseptic and numbed with local anaesthetic. The doctor will insert a needle through the numbed skin, between the bones, into the fluid that bathes the nerves of the spinal cord. Once the needle is in place the injection of phenol will be painless, but you may feel a warm sensation spreading through the treated area. As soon as the injection is complete and the needle withdrawn you will be repositioned so as to allow the injected medicine to reach and work in the intended area of your spinal nerves. If you are sitting, you will be positioned semi-reclining. This is to control the spread of the phenol while it is working. It is important that you remain in the position advised without moving for 30 minutes.

**What is the benefit?**
The intention is to numb the sensory nerve roots for many months to prevent pain signal from entering the spinal cord; thus you not feeling the pain as much. Pain within the area treated should be replaced by numbness which may be partial or complete.

**How likely is it to work?**
If the needle can be positioned and phenol is injected into the CSF it is likely to work. A second injection is sometimes needed once the effect of the first is known.

**How long does it last?**
The numbness lasts for about three months. Pain may increase before this due to disease progression beyond the treated area. The injection can be repeated.

**What can go wrong, and how often?**
Numbness mostly occurs; that is how phenol/alcohol works. Most people find it preferable to their pain, but some find it unpleasant. Weakness or loss of coordination can occur, but is uncommon. Loss of control of the bowel and bladder is possible when phenol is used for pelvic or perineal pain but not for chest pain. Catastrophic side effects, e.g. permanent paralysis or death, have been reported, but occur in less than 1% patients. This can occur even if the injection was performed to satisfactory standard and if not possible to predict.

**What alternative treatments are available?**
Bigger doses of painkillers can be tried.
Subcutaneous syringe-drivers pump morphine-like drugs continuously through a small needle lying under the skin.
Neuraxial infusions involve placing a fine tube into the spinal canal, which is attached to a pump. A mixture of local anaesthetic and diamorphine is infused continuously.