

## **Thoracic paravertebral block – Information Leaflet**

This leaflet tells you about the paravertebral block (PVB). It explains what is involved, and the common complications associated with this treatment. It is not meant to replace discussion between you and your doctor, but as a guide to be used in connection to what is discussed with your doctor.

### **What is paravertebral block? What are the intended benefits?**

The paravertebral area is the area running up and down the back, on either side of the spine. This area runs parallel to the spine, which is made up of vertebrae; hence the name paravertebral. A paravertebral block (PVB) is an injection, which is used to treat a number of different painful conditions. The injections are given into your upper back, to the side of the spine in the paravertebral area. The needles are placed between the ribs, near the nerves that supply the chest wall and ribs. Local anaesthetic and anti-inflammatory steroid drugs can be injected around the nerves. By doing this painful conditions affecting the skin and chest wall can be relieved.

### **Before the procedure**

- It is unsafe to perform the injection on patients with clotting problems, or in those taking medicines such as **warfarin** or **clopidogrel**. It is also dangerous to perform the injection when there is an infection of the skin of the back, or septicaemia.
- The injection cannot be given to patients who are sensitive or allergic to the drugs and chemicals used. We put a dressing over the injection, and you should tell us if you are allergic to plasters, tapes or dressings.
- You can continue your normal medicines, including your pain killers (unless advised otherwise by your doctor) prior to the procedure.

### **On the day of the procedure**

- You can eat until about 4 hours prior to the procedure and drink plain fluids (water, black coffee / tea, juice, ginger ale etc.) until 2 hours before the procedure.
- Take all your usual medication including your painkillers
- Bring all your usual medication, or a list of what you are taking with you.
- Make sure that someone will collect you, take you home, and is available to stay with you overnight.

### **The procedure**

- The procedure is done as a day case.
- When the injection is performed, you will need to sit (or at times lie on your tummy) for about 20 minutes. The procedure as such takes about 20 minutes, but your stay will vary from 2-4 hours.

An x-ray machine is used to take pictures of the injection. If there is any possibility of pregnancy, then we cannot perform the injection.

- The site of the injection is cleaned with cold antiseptic. A small injection of local anaesthetic (lidocaine), which stings for a few seconds, is used to numb the skin on either side of the middle of the upper back.
- One or more needles are then pushed through the skin, on the side of the back, and carefully moved past the backbone to lie next to the nerves. This may take a few minutes, and is sometimes uncomfortable.
- The needles are checked by injecting a small amount of dye that shows up in the X-rays. The treatment is then injected. You may feel some warmth, a little discomfort, or some numbness.

### **What to expect after the procedure?**

- The chest may feel warm. The pain relief may not be apparent immediately. In fact, there can be a temporary exacerbation of pain (because of the needles) and stiffness in the back before you appreciate any benefit.
- After the procedure you will be monitored for about 30-60 minutes and then sent home. You may feel weak or tired for a little while and so we advise that you rest for 24 hours. During this time you should not: drive a car or operate equipment, or drink alcohol. You should continue taking your usual medication and the next day you may take a bath, or shower, and remove any plasters.
- If there is unbearable exacerbation of pain, unusual redness, discharge or swelling at the site of injection or persistently high temperature – you have to contact the doctor or your general practitioner immediately.

### **Are there any problems with the treatment?**

Unfortunately no injection treatment is free from risks. Occasionally there can be bruising or local infection. You may develop allergy to the drugs used. The most serious problem is damage to the lung-lining which can cause collapse of lungs. Although this is extremely rare, if you develop abnormal chest discomfort and difficulty in breathing you need to rush to the accident and emergency department as soon as possible. Very rarely there can be permanent nerve injury causing chest wall numbness.