The aim of this leaflet is to explain the use of Remifentanil Patient controlled (PCA) Analgesia as a method of pain relief in labour. This is one of the methods of pain relief that we are able to offer on the Consultant-led delivery Unit (Ward 64) at Saint Mary’s Hospital.

What are the methods of pain relief in labour?

It is important to remember that there are many different ways of easing (or coping) with pain in labour. Every labour is different, so it is good to understand what options are available. You may decide to try several different techniques during your labour.

Methods include:

- Relaxation techniques, massaging and breathing exercises.
- Use of a birthing pool.
- TENS (transcutaneous Electrical Nerve Stimulation) machine.
- ‘Gas and air’ (Entonox).
- Opioids – eg, Diamorphine injections or Remifentanil PCA.
- Epidural.

More information on these techniques is available on the Saint Mary’s Website.

What is Remifentanil?

Remifentanil is a strong pain relieving medicine that belongs to the same opioid group of pain killers as morphine and diamorphine.

It works very quickly and wears off very quickly, so one advantage is that it can be timed with your contractions to help with the pain when it is at its strongest.

Like other opioids, it can make you feel sick or dizzy and can slow down your breathing, but because it wears off quickly, these effects will go away within minutes when the drug is stopped. The drug also wears off quickly in your baby so is unlikely to have any serious effects.
What does it involve?

As mentioned above, the Remifentanil PCA is offered on the Consultant-led delivery unit (Ward 64) and cannot be offered on the Midwifery Led Unit. Its use is overseen by a specialist doctor called an anaesthetist. They will explain more about the PCA before setting it up for you. You will also be carefully monitored by a midwife who has been trained in the use of Remifentanil. Your midwife will not leave the room once the PCA has been started.

The Remifentanil pump is attached to a separate drip in the back of your hand. When you feel a contraction starting, you press a button and the pump gives you some of the medicine. The Remifentanil takes up to 20 seconds to reach its full effect, so timing of pressing the button is important and can take a little practice.

Remifentanil is a strong medicine and when a dose is given during a contraction it can slow your breathing and affect your oxygen levels. For this reason, you will need to be given a small amount of extra oxygen through a plastic tube by your nose, you will need a peg on your finger to monitor your oxygen levels and your baby will be monitored using the CTG (cardiotocograph) machine. As mentioned above, any side effects wear off quickly.

For safety, the pump is programmed to limit the amount of the drug you can have to one dose every two minutes. It is crucial that it is only you that presses the button when you need it.

Once the Remifentanil PCA is started you will need to stay on the bed and are not safe to walk around. This may mean that you need to have a urinary catheter (tube in your bladder) if your labour is long, as you will not be able to walk to the toilet.

Another thing to consider is that Remifentanil cannot be given with other opioid drugs. If you have had diamorphine during your labour then you must wait four hours before starting Remifentanil. You can however, use ‘gas and air’ with Remifentanil. The use of Remifentanil does not stop you having an epidural unless there are other reasons why you can’t have one.

What are the benefits of remifentanil PCA?

- Many women find that it provides good pain relief during labour.
- The use of a button means that you are completely in control of your pain relief.

What are the disadvantages of the Remifentanil PCA?

- Unwanted effects include sleepiness, itching, sickness and reduced breathing. As mentioned above, these effects are short-lived once the medicine is stopped.
- You will require an extra drip to be placed in your hand/arm and additional monitoring as described above.
• You will not be able to walk around once the PCA has been started.

**Further Information**

Please feel to discuss your pain relief options with your midwives both in the community and in hospital. If you have specific questions about Remifentanil during your labour on Ward 64 then the Anaesthetic team will be happy to discuss these with you.