PREPARING FOR VAGINAL DELIVERY BY DR ADAM GUBBAY – PATIENT INFORMATION

INTRODUCTION

The commonest approach is to try for a normal or natural vaginal delivery. However, it is important to appreciate that a normal vaginal delivery is not always possible. For example, it may be that during your pregnancy an elective caesarean section becomes preferable because the baby is presenting via the breech (bottom first). Alternatively, during your labour your baby may become distressed or there maybe lack of the labour to progress. In this situation either an instrumental delivery (e.g. vacuum or forceps) or an emergency caesarean section becomes necessary. In other words it is important to remain somewhat flexible since events in pregnancy and childbirth are often unpredictable.

ANTENATAL CLASSES (PREPARATION FOR CHILDBIRTH)

The SJOG hospitals run preparation for childbirth classes. These classes not only enable you and your husband or partner to become familiar with the hospital but they are also informative and usually enjoyable. The classes take you through most of the important aspects of childbirth.

ONSET OF LABOUR

Labour is heralded by the onset of painful regular contractions. If this is your first labour then 5 minutely painful contractions should prompt a phone call to the hospital. You should also call the hospital if you think your waters have broken, bleeding is happening or you have concerns about your baby's movements. In other words, simply ring the delivery suite and speak to the midwife if there are any concerns. If this is your second vaginal delivery then 10 minutely contractions should prompt a phone call to the delivery suite midwife. This is because second and subsequent labours often progress much faster.

STAGES OF LABOUR

Labour may be divided up into the following phases.

1. Latent phase. This is the phase immediately prior to the active phase which may last hours or even days. During this phase contractions are variable ranging from mild and infrequent to strong and frequent. These contractions are associated with ripening of the cervix. Ripening of the cervix is where your cervix becomes softer, shorter and partially dilated. In other words the cervix is preparing for the "active" phase of labour.

2. The active phase (or first stage) of labour is where the cervix progressively dilates from about 3cm dilated to fully dilated ("fully" or "10cm dilated"). The dilation in the active phase usually occurs by at least 1cm per hour. It is typically associated with painful and strong regular contractions. When Obstetricians and Midwives talk about the "start of labour", they often mean the start of the active phase of labour.

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3. The second stage of labour. This is the period of time from when you are fully dilated until the time that your baby is delivered. During the second stage you are generally actively encourage to start "pushing."

4. Placental delivery (the third stage)

PAIN RELIEF OPTIONS

The 3 common forms of pain relief in labour are nitrous oxide gas, pethidine and an epidural.

Nitrous oxide gas is administered via a suction "whistle." It is quite effective in controlling the pain and has no effect on the baby that we know of. There are 3 drawbacks of the gas. Firstly, if you are going to have a long labour then it can be quite exhausting sucking on the gas, although it certainly can be done. Secondly, if you have too much gas in a short space of time then you can become disorientated/dizzy – we are careful to try and prevent this. Finally, at the pushing stage you have to push! which means that you cannot also "suck" on the gas.

Pethidine is usually given by intramuscular injection into the buttock. Depending on various factors, the effect of pethidine can last anywhere from 2 to 4 hours. Pethidine injections work well for some in taking the edge off your pain. Having a pethidine injection too close to delivery can on rare occasions affect your baby. It may happen that your baby becomes drowsy ("narcotised") with delivery and needs physical stimulation, oxygen or even an antidote injection to "perk up." This is not a common problem. Other effects include:

- Dizziness and nausea.
- Disorientation, altered perception and very occasionally hallucinations.
- Reduced breathing rate – rarely.

An epidural generally gives very good pain relief and can be topped up as desired. Approximately 90 to 95 percent of women are happy with their epidurals in labour. Anaesthetic in injected into your back around the covering of the spinal cord. This makes you feel numb from the waist down. This option provides very good pain relief for a natural vaginal delivery or instrumental vaginal delivery e.g. vacuum or forceps. An epidural allows the mother to stay awake and alert if delivery by caesarean section is required. The anaesthetist will ask you to sit hunched forward over a pillow or curled on your side. This allows the space between the bones of your spine to open up as much as possible so that the anaesthetist can find the epidural space more easily. It is important not to move through the

procedure! After cleaning the skin with antiseptic, the anaesthetist will inject some local anaesthetic into your back before inserting an epidural needle into the gap between two of your lumbar vertebrae to reach the epidural space. A plastic catheter is then inserted through the needle and then the needle is removed so that you can move about. The plastic catheter, which is taped to the skin, then allows the anaesthetist or midwife to deliver the anaesthetic top up dose as required (which is often 1-2 hourly). An epidural may be inserted during your labour at any stage provided delivery is not imminent. Since your first labour tends to be long, it is very unusual to "miss out" on an epidural. If you have already decided on an epidural prior to labour, then there is no good reason why the epidural cannot be inserted at the commencement of your (active) labour or at the very start of an induction of labour. Many women take the "wait and see approach." In this situation you can determine how you are fairing with other measures and decide on an epidural at a later time. Be aware that there may be a delay to insert your epidural by up to 45 minutes in occasional circumstances.

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Possible side effects and complications of epidural anaesthesia include:

- Patchy block.
  If the anaesthetic isn't injected into the right spot, only one side of the body is numb i.e. a "patchy block" – this requires a subsequent injection or slight withdrawal of the epidural catheter.

- Urinary catheter.
  The lack of sensation in your lower body means a urinary catheter needs to be inserted.

- Shivering.
  An epidural can affect your body's temperature control system and make you shivery.

- Vacuum delivery.
  You will have reduced sensation about the pelvis and sometimes less effective pushing. Thus, there is a high chance of delivery by vacuum extraction. However, the chance of a caesarean section is not increased.

"FULLY DILATED" and "PUSHING"

You are said to be fully dilated ("fully") when your cervix has dilated to a diameter of 10 cm. At this stage you can potentially start pushing.
When you are fully dilated there is a very strong involuntary urge to push and you will be encouraged and taught to do so. If you have an epidural in-situ which is "topped up", the urge to push will be less. Women with epidurals will often be given ½ to 1 hour to allow the head to descend further down into the pelvis prior to the commencement of active pushing. This tends to make it easier for the final "push toward delivery". The degree of epidural "top up" while pushing is individualised. Some women fare better with a more dense top up i.e. less pain but less feeling while pushing. Alternatively, other women fare better with a less dense epidural top up i.e. more pain but the ability to "feel the pushing".

The vast majority of babies will be born after 1 hour of pushing. However, if this is your second or subsequent baby, your baby should have delivered even sooner. Once you have

been pushing for a prolonged period of time then strong consideration is given to an instrumental delivery e.g. vacuum or forceps delivery.

VACUUM AND FORCEPS

The aim is to progress to a normal vaginal delivery without recourse to the vacuum or forceps. However, if the progress is slow or the baby becomes distressed then a vacuum or forceps delivery may become necessary. The vacuum or forceps will only be applied if it is deemed safe. This generally means that your baby is not "too big" and that your baby's head is low enough down in the pelvis. My routine is to mainly use the vacuum instrument in preference to the forceps. The vacuum has the advantage in that one does not always have to perform an episiotomy. As with any medical intervention there are risks. The risk of injury to the baby after an instrumental delivery is extremely rare indeed. In summary, an instrumental delivery will only be performed when medically indicated. In experienced hands instrumental deliveries are very safe.

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EPISIOTOMY

Routinely episiotomies are not performed. There is general acceptance that post delivery pain is less with a small natural tear than with an episiotomy. However, if it looks as if a bad tear is imminent then one is better off with an episiotomy. At the time that the head is "crowning" (i.e. top of head being delivered), great care will be taken to control the speed of the head delivery so that the vulval tissue has the chance of stretching up as opposed to tearing. In some situations an episiotomy should generally be cut. Examples of this include use of forceps and a previous third degree tear (tear involving the external anal sphincter).

DELIVERY OF THE PLACENTA

Generally the placenta is delivered within about 10 to 15 minutes of your baby being born. In rare situations the placenta may not be expelled spontaneously and you may require a "manual removal of the placenta". This means that the placenta is manually removed from your uterus under either an epidural top up or a brief general anaesthetic.

BONDING WITH YOUR BABY

As soon as your baby is born it will generally be placed on your abdomen then covered and wiped down with a blanket. It is customary for your husband or partner to be offered the task of cutting the umbilical cord. Of course, it is your day so if you are unhappy with these arrangements just inform us. In some situations, your baby may require resuscitation and hence your baby will need to be taken to the baby resuscitator and given oxygen etc as necessary. You will be able to observe what is going on. There has been a lot of research regarding early contact affecting subsequent bonding with your baby. Generally, we make great effort for you to maintain either touch or visual contact with your baby. However, it

may be necessary for your baby to be observed in the neonatal nursery. The Paediatrician will discuss this with you.

COMPLICATIONS

A vaginal delivery whether it be spontaneous or by the vacuum or forceps is associated with a small chance of complications.

These risks are:-

1. Bleeding. About 5 percent of women will experience a post partum haemorrhage. A post partum haemorrhage is where more than 500mls of blood is lost with the delivery. The commonest causes of this are retained placental tissue or a floppy/tired uterus (i.e. atonic uterus). In this situation you will be given extra medication and treatment to contract your womb down. The requirement for a blood transfusion is rare.

2. Infection of a serious nature involving the inside of your womb or the pelvic region is very rare. However, it is not uncommon to be treated with antibiotics for a mild infection of the lining of your womb or the urinary tract.

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3. Vaginal Tears and Episiotomies. Great care will be taken to minimise vaginal tearing. In some cases an episiotomy will be deemed appropriate. However, even with expert care sometimes significant tearing can result. The reasons for this are many and varied e.g. very swollen perineal tissue or very big baby. Significant tearing is associated with higher levels of post delivery pain. Occasionally the tear may involve the circular muscles of the back passage (external anal sphincter) i.e. a "third degree tear". As long as the sphincter is repaired then the chance of significant impairment of bowel function (i.e. incontinence of flatus or faeces) is very low indeed.

4. Pelvic Floor Impairment. Pregnancy and childbirth do impair pelvic floor function. Impairment of pelvic floor function relates to urinary stress incontinence (i.e. cough urinary incontinence) or vaginal prolapse (the vaginal walls prolapsing downwards and in some situations through the vaginal orifice). Current thinking points towards not only the actual delivery but also the pregnancy itself as contributing to pelvic floor dysfunction. Certainly, caesarean section is only partially protective. Other factors are age, "genes" and menopause.

5. Newborn Risks. Thankfully birth injury to your baby has now become extremely rare. Selective medical interventions are used to minimise this. These interventions include:- continuous monitoring of your baby's heart beat throughout the labour, instrumental delivery (vacuum and forceps) caesarean section and having the Paediatrician at delivery.

It is of course impossible and I think unhelpful to list every possible complication. On the other hand, the ability to make informed choices throughout your pregnancy and childbirth requires some knowledge. It must be stressed that many of these complications are extremely rare.

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