CHAPTER 15

PROBLEMS IN PREGNANCY AND CHILDBIRTH

This chapter is divided into two; firstly, the provision of care to a pregnant woman; and secondly, the delivery of a baby in an uncontrolled environment.

First aid care for the pregnant woman suffering a specific illness or injury is similar to the care provided to a non pregnant person suffering the same illness or injury. However, consideration has to be given to the impact of a specific treatment on the baby and the mother. Thus pregnant women are always put on their left side so that the baby is off their Inferior Vena Cava and blood return to the heart is not compromised.

Where the casualty is seriously injured or ill the risk to the baby can be extreme and there is little that you can do other than basic life saving treatment and get help as soon as possible.

CARE OF THE PREGNANT WOMAN

MINOR DISORDERS

During pregnancy a number of minor disorders may arise. These disorders are usually annoying or uncomfortable and do not place the mother or baby at risk. However, they need to be assessed and managed by the mother’s medical practitioner to ensure that they are not an early warning of more serious problems. The disorders that fall into this group are morning sickness, heart burn, constipation, backache, varicose veins, haemorrhoids, inflammation of the leg veins, nose bleeds, peripheral oedema, muscle cramps, fainting, tiredness, itching and increased frequency of urination.

Most of these problems can be well managed by the mother in consultation with their own medical practitioner. Where first aid treatment of a condition, such as nose bleeds or fainting, is required you simply follow the procedures for that condition set out in this book.

MAJOR DISORDERS

BLEEDING IN EARLY PREGNANCY

Vaginal bleeding is an important sign at any stage of pregnancy and must be investigated by the mother’s medical practitioner. Such bleeding may be a sign of a serious complication which could endanger the mother or foetus. Therefore any pregnant woman who experiences vaginal bleeding should be taken to her own medical practitioner or to hospital.

ANTEPARTUM HAEMORRHAGE

Antepartum haemorrhage is defined as bleeding from the vagina after the 20th week of pregnancy and before the birth of the baby. This type of bleeding is very serious and is a major cause of death of mothers and babies.

The causes of antepartum haemorrhage are the premature separation of the placenta from the uterine wall (Placental Abruption), the implantation of the placenta over the cervical opening (Placenta praevia) or tearing of the uterus itself. The exact cause of the bleeding is unimportant to you but you must recognise the danger to the mother and her baby.
PROVISIONAL DIAGNOSIS OF ANTEPARTUM HAEMORRHAGE

HISTORY
a. Patient is pregnant
b. Unexplained vaginal haemorrhage

SIGNS
a. Poor perfusion
b. Vaginal bleeding
c. Possible guarding and rigidity of abdominal wall

SYMPTOMS
a. Severe lower abdominal pain
b. Weakness

TREATMENT OF ANTEPARTUM HAEMORRHAGE

1. Maintain airway, breathing and casualty’s perfusion status
2. Apply Dressing/pad to vagina
3. Place casualty on left side with knees drawn up
4. Call ambulance immediately
5. Observe casualty and treat poor perfusion
6. Do not palpate abdomen

ECTOPIC PREGNANCY

Ectopic pregnancy is where the foetus and placenta are implanted outside of the uterus, either in a fallopian tube (Common-97%) or in the abdominal cavity (Rare-1% of cases). Tearing of the Fallopian tube may occur leading to severe internal haemorrhage and the rapid death of the mother.

PROVISIONAL DIAGNOSIS OF ECTOPIC PREGNANCY

HISTORY
a. Patient may or may not be aware of being pregnant
b. Unexplained vaginal haemorrhage

SIGNS
a. Extremely rapid onset of profound poor perfusion
b. Vaginal bleeding
c. Guarding and rigidity of abdominal wall

SYMPTOMS
a. Severe lower abdominal pain

TREATMENT OF ECTOPIC PREGNANCY

1. Maintain airway, breathing and casualty’s perfusion status
2. Apply Dressing/pad to vagina
3. Place casualty on left side with knees drawn up
4. Call ambulance immediately
5. Observe casualty and treat poor perfusion

1. N.A. Beischer and E.V. Mackay, Care of the Pregnant Woman and Her Baby, W.B. Saunders, Artarmon, NSW, 1978, p.80.
PRE-ECLAMPSIA

Pre-eclampsia is the first stage in the disease process that leads to eclampsia. The causes of eclampsia are unknown but it is suspected that the substances produced by the placenta cause a chemical imbalance in the tissues of the body. These changes lead to circulatory and kidney problems in the casualty leading to increased fluid retention and high blood pressure. Any pregnant women suffering from excessive fluid retention, swelling of body tissues and/or high blood pressure must consult their medical practitioner.

ECLAMPSIA

Eclampsia is the end stage of the process and is a threat to the life of the mother and her baby. In fact eclampsia is one of the major causes of maternal death in western countries. The major aim of treatment is to identify pre-eclampsia and get the casualty to hospital.

PROVISIONAL DIAGNOSIS OF ECLAMPSIA

HISTORY
a. Patient is pregnant
b. Discomfort, swollen tissue, headaches

SIGNS
a. Headaches
b. Pulse greater than 100
c. Swelling of face and hands due to fluid retention
d. Pale, cool, clammy skin
e. Fitting and convulsions

SYMPTOMS
a. Abdominal pain
b. Visual disturbances

TREATMENT OF ECLAMPSIA
1. Prevent fitting by ensuring a calm, quiet and dark environment
2. Lie casualty down on left side
3. Call ambulance immediately
4. Maintain airway, breathing and casualty's perfusion status if required
5. Observe casualty and gently reassure

THE NORMAL DELIVERY

There are three stages of labour called, oddly enough, the First, Second and Third Stages of labour.

FIRST STAGE OF LABOUR

This stage begins with the onset of regular contractions and pains which come at about 5 to 15 minute intervals. These contractions serve to position the baby for delivery and prepare the cervical opening for the delivery of the baby. It is usually at the end of this first stage that the mother’s waters break.
SECOND STAGE OF LABOUR

This is where the baby’s head enters the birth canal. This stage is marked by the mother’s contractions and pain becoming more frequent, with one every 2 to 3 minutes apart. At this stage the mother’s cervix fully dilates and the baby begins to press on her rectum making her feel as if she wants to pass a bowel motion. Following this the baby’s head (usually and hopefully) appears at the vaginal opening and the stage finishes when the baby is fully delivered.

THIRD STAGE OF LABOUR

This stage begins following the delivery of the baby and ends following the expulsion of the placenta from the uterus.

DELIVERY

When presented with a pregnant women who believes that she is about to deliver you need to know two things; one, am I going to have to deliver the baby, and if so; two, what possible complications will I face? If this is the mother’s first baby then the chances are that you will not need to deliver the baby. If it is her second child then the delivery may be very fast indeed.

PROVISIONAL DIAGNOSIS OF RAPID DELIVERY

HISTORY
a. Mother has had other child born vaginally
b. May have had weak contractions for an hour or so

SIGNS
a. Regular contractions with a gradually decreasing interval between
Contractions and an increasing intensity
b. Contractions now less than 2 minutes apart
c. Baby is seen at vaginal opening

SYMPTOMS
a. Mother desires to use bowel

ASSESSMENT OF POSSIBLE COMPLICATIONS

HISTORY
a. Mother is under medical supervision for a specific problem, or
b. Mother has had no prenatal care
c. Baby is not due and would be premature if born now
d. Mother has had previous caesarean section
e. Mother has had problems with past pregnancies

SIGNS
a. Any Signs of pre-eclampsia
b. Any Signs of poor perfusion

SYMPTOMS
a. Altered conscious state
DELIVERY

1. Wash your hands
2. Clean area, if there is time
3. Call ambulance immediately
4. Prepare environment and mother
   - ensure mother is warm
   - obtain warm towels and linen to wrap baby
5. Have mother remove clothing
6. Position mother on her back, slightly sitting up with legs apart and knees bent
7. Obtain warm water and cloth
8. Position yourself so you can observe vaginal opening
9. When baby’s head appears at vaginal opening place your hand on the top of the head and apply gentle pressure to prevent it popping out and splitting the vagina
10. As the baby’s head emerges support it with your hands and ensure that membranes are removed from face so baby can breath
11. Ensure that umbilical cord is clear of baby’s neck
12. If umbilical cord is around baby’s neck
    - try and ease it over head
    - if cord too tight
    - tie or clamp cord very firmly in three places 10cm, 15cm and 20cm from the baby’s navel
    - cut the cord between the second and third ties from the baby’s navel
13. Clear baby’s airway
14. Guide baby’s head down to allow delivery of upper shoulder
15. Guide baby’s head upward to deliver the other shoulder
16. Support baby as the trunk and legs are delivered
17. Do not pull on umbilical cord
18. Clear airway carefully
19. If umbilical cord has not already been cut
    - tie or clamp cord very firmly in three places 10cm, 15cm and 20cm from the baby’s navel
    - cut the cord between the second and third ties from baby’s navel
20. Dry and wrap baby in warmed towels etc
21. Give baby to mother

PREPARE FOR DELIVERY OF PLACENTA (THIRD STAGE OF LABOUR)

1. Gently massage the uterus to assist with contractions and have mother breast feed the baby
2. When placenta is delivered place it in a container and examine it thoroughly to ensure it is intact and not torn
3. Clean up and place pad over mother’s vagina
**BREECH DELIVERY**

1. Prepare as for normal delivery
2. When baby appears at vaginal opening allow the presenting part to be born normally without interference
3. As the baby’s legs and lower trunk emerge support it with your hands and guide them downward to allow the baby’s head to pass through the pelvic outlet
4. When the baby’s hair line appears grasp the baby’s ankles and lift the baby up in the direction of the mother’s abdomen
5. If the baby’s head does not deliver and three minutes have passed you must clear the baby’s airway as follows:
6. Continue to hold the baby up by the ankles
7. Form a V with your fingers and push them palm upwards into the mother’s vagina either side of the baby’s nose
8. Push the vaginal wall clear of the baby's face and maintain this until baby delivers of its own accord or help arrives
9. If head delivers then clear baby’s airway
10. Once baby is delivered treat as normal delivery

**PROLAPSED CORD**

A prolapsed cord is where the umbilical cord drops into the birth canal ahead of the baby and is compressed by the baby as it delivers. Prolapsed cord is a serious and life threatening condition and must be treated quickly

**TREATMENT OF PROLAPSED CORD**

1. Carry out delivery protocol
2. With presentation of cord
3. Position mother on her back with her hips well raised
4. Instruct mother to pant and not bear down
5. If possible gently push baby back off cord
6. Cover cord with a sterile, saline dressing
7. Call ambulance immediately

**POSTPARTUM HAEMORRHAGE**

During the third stage of labour it is normal for there to be about 150ml of blood lost. However, if the blood loss is excessive or seems to be continuing then you need to treat the casualty for internal haemorrhage and get an ambulance quickly.

**TREATMENT OF POSTPARTUM HAEMORRHAGE**

1. Gently massage the uterus to assist with contractions
2. Have mother breast feed the baby
3. When placenta is delivered place it in a container and examine it thoroughly to ensure it is intact and not torn
4. If bleeding continues place pad over vagina
5. Elevate casualty’s legs
6. take observations
7. Call ambulance and inform them of situation
CARE OF THE BABY

Once the baby is born you have two people to care for. It will only be natural that the mother will want to nurse her baby and take care of it and you should encourage this. However, you should carry out an assessment of the baby’s condition using the APGAR Score at one and five minutes after birth.

The Apgar Score assesses the baby’s condition by measuring skin colour, respiration, heart rate, muscle tone, and reflex irritability.

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Using the Apgar Score the highest number a baby can get is 10 and the lowest 0. The treatment is as follows:

**TREATMENT OF APGAR SCORE OF 8 TO 10**

1. Clear baby’s airway of mucus or meconium fluid
2. Dry baby and wrap in warm towels etc
3. Get ambulance if necessary

**TREATMENT OF APGAR SCORE OF 4 TO 7**

1. Clear baby’s airway
2. Mouth to mouth and nose Respiration
3. Alert/Get ambulance immediately

**TREATMENT OF APGAR SCORE OF 0 TO 3**

1. Clear baby’s airway
2. CPR
3. Alert/Get ambulance immediately