

# Protocol for Caesarean Section

This protocol is based on the best available evidence  
( NICE clinical guidance 132 , August 2012)  
It is designed to be used in Iraqi Hospitals

2015

# Pre - operative

## Consent

1-Every Obstetrician if decide to do C/S should inform the patient the following:

a-indication of C/S

b-what procedure involve (open skin, then uterus, extract baby and placenta, close uterus then abdominal wall and skin)

c-benefit and risk of C/S

d-method of delivery after C/S

e-the effect of C/S on future pregnancy

2-The Obstetrician should record in patient's file, that she gave discuss the above issue with patient before taking consent.

3-The consent for C/S should be completed according MoH instruction.

## Timing of C/S

The urgency of C/S should be documented using the following standards:

1-Emergency C/S (immediate threat to the life of woman or fetus).

2-Urgent C/S(maternal or fetal compromise but not life threatened).

3-Schedule C/S(no maternal or fetal compromise but early delivery is needed)

4-Elective C/S (delivery timed to suit woman or staff).

The duty of Specialist or Consultant Obstetrician is documented clearly the timing and the indication of C/S in the file of patient.

## Time interval of C/S

1-Decision to delivery interval for emergency C/S should be less than 30 minutes.

2-Decision to delivery interval for urgent C/S should be less than 75 minutes.

3-Decision to delivery interval for Schedule C/S should be less than 24 hours.

All Health providers in hospitals that provide maternity services should adhere to above time intervals.

## Anaesthesia for CS

1-Regional anaesthesia (epidural and/or spinal) is safer than general anaesthesia with less maternal and neonatal morbidity.

2-Regional anaesthesia should be first choice

## **Intra-operative**

### **antibiotic administration**

Offer women prophylactic antibiotics at CS before skin incision to reduce the risk of postoperative infections

### **Abdominal wall incision**

C/S should be performed using a transverse abdominal incision because this is associated with less postoperative pain and an improved cosmetic effect compared with a midline incision.

The transverse incision of choice should be the Joel Cohen incision (a straight skin incision, 3 cm above the symphysis pubis; subsequent tissue layers are opened bluntly and, if necessary, extended with scissors and not a knife), because it is associated with shorter operating times and reduced postoperative febrile morbidity.

### **Uterine incision**

When there is a well formed lower uterine segment, blunt rather than sharp extension of the uterine incision should be used because it reduces blood loss, incidence of postpartum haemorrhage and the need for transfusion at C/S.

### **Uterotonics in C/S**

Oxytocin 5 IU by slow intravenous injection should be used at C/S, after delivery of baby, to encourage contraction of the uterus and to decrease blood loss.

### **Method of placental removal**

At C/S, the placenta should be removed using controlled cord traction and not manual removal as this reduces the risk of endometritis.

## **Closure of uterus**

Intra-peritoneal repair of the uterus at C/S should be undertaken. Exteriorisation of the uterus is not recommended because it is associated with more pain and does not improve operative outcomes such as haemorrhage and infection.

The effectiveness and safety of single layer closure of the uterine incision is uncertain. Except within a research context, the uterine incision should be sutured with two layers

## **Closure of the peritoneum**

Neither the visceral nor the parietal peritoneum should be sutured at C/S because this reduces operating time and the need for postoperative analgesia, and improves maternal satisfaction.

## **Closure of the abdominal wall**

it should be slowly absorbed continuous suture to reduce incisional hernia.

## **Closure of subcutaneous tissue**

Routine closure of the subcutaneous tissue space should not be used, unless the woman has more than 2 cm subcutaneous fat, because it does not reduce the incidence of wound infection.

## **Use of superficial wound drains**

Superficial wound drains should not be used at C/S because they do not decrease the incidence of wound infection or wound haematoma.

## **Skin closure**

Obstetricians should be aware that the effects of different suture materials or methods of skin closure at C/S are not certain.

## **Thromboprophylaxis**

Women having a C/S should be offered thromboprophylaxis because they are at increased risk of venous thromboembolism. The choice of method of prophylaxis (for example, graduated stockings, hydration, early mobilisation, low molecular weight heparin) should take into account risk of thromboembolic disease.

# Postoperative

## Observation charts

The following parameters should be observed in post-operative period:

blood pressure , pulse rate, respiratory rate, urinary output, fluid input, vaginal bleeding, analgesia drugs.

The frequency of observation, in HDU, should be every 15 minutes for 4 hours, then every 30 minutes for 4 hours, then hourly for another 4 hours if the patient is stable.

The frequency of observation if woman not admitted to HDU, should be every 30 minutes for 2 hours followed by hourly for another 2 hours if patient is stable.

## Analgesia

Opioid should be offered in postoperative period. Providing there is no contraindication, non-steroidal anti-inflammatory drugs should be offered post-C/S as an adjunct to other analgesics, because they reduce the need for opioids.

Women who have a CS should be prescribed and encouraged to take regular analgesia for postoperative pain, using:

\*for severe pain, co-codamol with added ibuprofen

\*for moderate pain, co-codamol

\*for mild pain, paracetamol.

## Early eating and drinking after CS

Women who are recovering well after CS and who do not have complications can eat and drink when they feel hungry or thirsty.

## Urinary catheter removal after CS

Removal of the urinary bladder catheter should be carried out once a woman is mobile after a regional anaesthetic and not sooner than 12 hours after the last epidural 'top up' dose.

## Postoperative investigation

Every woman who had C/S should be investigated for anaemia and urinary tract infection

## **Breastfeeding**

Women who have had a C/S should be offered additional support to help them to start breastfeeding as soon as possible after the birth of their baby. This is because women who have had a C/S are less likely to start breastfeeding in the first few hours after the birth, but, when breastfeeding is established, they are as likely to continue as women who have a vaginal birth.

## **Length of hospital stay and readmission to hospital**

Length of hospital stay is likely to be longer after a C/S (an average of 3–4 days) than after a vaginal birth (average 1–2 days). However, women who are recovering well, are afebrile and do not have complications following C/S should be offered early discharge (after 24 hours) from hospital and follow-up at home, because this is not associated with more infant or maternal readmissions.

## **Important notes after C/S**

Healthcare professionals caring for women who have had a C/S and who have heavy and/or irregular vaginal bleeding should consider that this is more likely to be due to endometritis than retained products of conception.

Women who have had a C/S are at increased risk of thromboembolic disease (both deep vein thrombosis and pulmonary embolism), so healthcare professionals need to pay particular attention to women who have chest symptoms (such as cough or shortness of breath) or leg symptoms (such as painful swollen calf).

Healthcare professionals caring for women who have had a CS should inform women that after a C/S they are not at increased risk of difficulties with breastfeeding, depression, post-traumatic stress symptoms, dyspareunia and faecal incontinence.

Women who have had a C/S should resume activities such as driving a vehicle, carrying heavy items, formal exercise and sexual intercourse once they have fully recovered from the C/S (including any physical restrictions or distracting effect due to pain).

While women are in hospital after having a C/S, give them the opportunity to discuss with healthcare professionals the reasons for the C/S and provide both verbal and printed information about birth options for any future pregnancies. If the woman prefers, provide this at a later date.