Elective Caesarean Section

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Key Amendments

Date	Amendments	Approved by

Introduction

This evidence based guideline has been developed to help ensure consistency of quality of care experienced by women having an elective caesarean section (CS). It provides evidence based information on various aspects of elective caesarean sections from the time of decision making until discharge from hospital. CS is major abdominal operation. In general it is safe, especially when performed as a planned procedure but has associated perinatal morbidity.

Timing of an elective Caesarean section

The risk of respiratory morbidity is increased in babies born by caesarean section before labour, but this risk decreases significantly after 39 weeks. Therefore, unless clinically indicated, elective CS should be booked after 38^{+6} weeks pregnant. If elective CS is booked before 38^{+6} steroids should be given.

Classification of Caesarean section

A planned (elective caesarean) section is classified as a Grade 4 caesarean section and includes all CS electively planned or carried out to suit the mother or clinicians. The timing/urgency of CS must be clearly stated.

Maternal refusal of Caesarean section

Women retain the right to refuse a planned CS. All women who decline a C/S which is felt to be clinically indicated should be seen and counselled by the Consultant Obstetrician and a clear management plan must be documented in the maternal records.

Indications for Caesarean section

This list is not exclusive and further indications will be covered in other guidelines.

Major placenta praevia

See Antepartum haemorrhage including massive obstetric haemorrhage

Previous caesarean section with a low lying placenta

All women who have had a previous caesarean section must have their placental site determined in the second trimester and if the placenta is low lying, placental site should be confirmed in the third trimester, ideally at around 32/40 to enable further imaging to occur in a timely manner. If it is an anterior low lying placenta then MRI should be considered along with USS and colour Doppler to determine placenta accreta / percreta.

See Antepartum haemorrhage including massive obstetric haemorrhage

C/S for breech

See Management of breech presentation including external cephalic version ECV
An ultrasound scan should be performed immediately before transfer to theatre to confirm presentation. The woman should have been informed that, in the case of confirmed cephalic presentation, where

breech was the only indication for C/S, that the C/S will be cancelled and the woman advised to return home and await spontaneous labour.

Maternal Request for Caesarean Section

There is some increase in maternal request for CS. There are many reasons for such requests but these are not always revealed by the women or adequately explored and clearly documented.

Evidence suggests that there is a consistent relationship between a women's preference for CS and either previous CS, previous negative birth experience, a complication in the current pregnancy or a fear of giving birth. It is estimated that about 6%–10% of pregnant women experience fear of childbirth. Fears concerning childbirth such as pain, obstetric injury, unplanned CS and the effects on family life have been reported to be more common among primips. A request for CS should prompt enquiries to address any issues or concerns.

Primary CS for the purpose of this guidance is defined as CS on a virgin abdomen.

Planned primary CS on maternal request should be only be booked after 39 weeks gestation unless clinically indicated otherwise

When a woman requests a primary CS with no obstetric, surgical, medical, psychological/ psychiatric indications for CS:

- The woman requesting a primary CS should be referred to a consultant obstetrician. She should be seen by the consultant at least twice in the antenatal period, ideally once at booking and then in the third trimester.
- Discuss the risks and benefits of CS compared with vaginal birth taking into account their circumstances, concerns and priorities. Discuss their plans for future pregnancies and implications for future pregnancy and birth after CS (including the risks of placental problems with multiple CS)
  - **Planned CS may reduce risk of :** perineal /abdominal, pain up to Day 3, perineal & vaginal tear and early PPH.
  - **Planned CS may increase the risk of:** NICU admission for baby, longer hospital stay, hysterectomy, cardiac arrest.
- Discuss the overall risks and benefits of CS compared with vaginal birth and record that this discussion has taken place.
- If necessary explore the reasons for the request, and to ensure the woman has accurate information.
- If vaginal birth is still not an acceptable option, a planned CS may be offered. If the obstetrician is not happy to offer a CS in such a case the woman should be referred to another obstetrician. The case may be discussed / referred to another obstetrician, specialist midwife and anaesthetist to discuss any relevant queries / concerns.

If reason for maternal request CS is anxiety about vaginal delivery / Tocophobia:

- The consultant should discuss the case with the perinatal psychiatric team on the phone initially and, if felt appropriate, offer a referral to a perinatal mental health team to help her address her anxiety in a supportive manner.
- If the woman is referred for request of caesarean section late in third trimester, there may not be enough time for the referral to the psychiatrist. The consultant obstetrician may have to address the anxieties and counsel regarding risks and benefits.
- Ensure the healthcare professional providing perinatal mental health support has access to the planned place of birth during the antenatal period in order to provide care.
- These women should be offered referral to VBAC by a specialist midwife
- If after discussion and offer of support (including perinatal mental health support for women with anxiety about childbirth), a vaginal birth is still not an acceptable option, offer a planned CS after 39/40.

Procedure for booking an elective Caesarean section

- Once the decision for elective C/S has been made the date should be booked in the C/S diary.

- Midwife to complete check list for elective C/S and ensure patient's current weight is clearly documented
- **Methicillin Resistant Staphylococcus Aureus** (MRSA) screening should be performed at the time of decision for C/S and no later than 1 week prior to delivery.
- Take blood for Group and Save (or X match if clinically indicated) and FBC if less than 5 days until C/S. Provide the patient with the forms and instruct her to have her blood taken within 2 days of planned C/S date.
- The woman should be consented for her caesarean section by the doctor in ANC booking her caesarean section (e-consent is advised).
- Ensure that Ranitidine is written up on the drug chart and given to the patient to take home:
  Ranitidine 300mg oral 22.00 night before C/S
  Ranitidine 150mg oral 06.30 morning of the C/S
- Thromboprophylaxis: (see guideline) Women having a CS should be offered thromboprophylaxis because they are at increased risk of venous thromboembolism, for example, graduated stockings, hydration, early mobilisation, low molecular weight heparin. Duration of thromboprophylaxis is decided on individual basis.
- Measure patient for anti-embolic stockings.
- Sequential pneumatic compression stockings should be used during CS for women with high BMI >40.
- Inform theatre team if BMI >40 to arrange for special wound dressings
- Ensure patient has been referred for anaesthetic opinion if necessary. If considered particularly high risk Consultant Obstetrician should discuss individual case with the Consultant Anaesthetist on call for that day.
- Provide patient with information leaflet " Information for women prior to elective C/S".

On the day of surgery

- The patient should be reviewed by the surgeon and anaesthetist on the day of surgery.
- If the indication for C/S is breech an ultrasound should be performed for presentation. (See above).
- Prior to theatre, the midwife responsible (bleep 405) for the patient should check:
  - Hb, platelet count, group and save (availability of blood if indicated)
  - VTE score
  - Maternal rhesus status and need for cord bloods
  - Requirement of paediatric attendance at delivery
  - Presence of a fetal heartbeat
- Once the patient has been reviewed by the anaesthetic and obstetric team the WHO team brief should be completed in the anaesthetic room at 8:30 am. This is led by the Lead scrub for theatre and should include in attendance the anaesthetist, obstetric surgeon, scrub, ODP, Runner and Midwife. This is to confirm the surgical plan and any extra concerns for the patient prior to being in theatre.

The modified WHO surgical safety checklist will be used for all cases conducted in Maternity Theatre and completed by the theatre lead.
The following will apply
A **Sign in** will take place with anaesthetist and anaesthetist practitioner
A **Time out** will take place with the whole team prior to skin incision
A **Sign out** will take place with the whole team following completion of the case.

Prophylactic antibiotics:
Women having a CS should be offered prophylactic antibiotics.

Elective Caesarean section Section	Metronidazole AND Cefuroxime	1.0g 1.5g	Rectal Suppository IV	1 hr before skin incision 30 mins before skin incision	
Emergency Caesarean	Metronidazole AND	1g	Rectal Suppository	Administer wherever	The rectal dose of metronidazole should

	Cefuroxime	1.5g	IV	possible within the 30 minutes before skin for incision, or as soon as practical	be given by the obstetrician/midwife at the time of decision
Where a woman has a history of an immediate hypersensitivity reaction to penicillin or an allergy to cephalosporins	Clindamycin AND Gentamicin	600mg 120mg	IV IV	30 mins before skin incision	

For elective C/S:
Metronidazole to be given at the time of catheterisation in theatre and the Cefuroxime at the time of inserting the cannula prior to the spinal. Clearly this would mean that the Metronidazole would probably only be inserted approximately 20mins prior to surgery and the Cefuroxime 20-30 mins.

Thromboprophylaxis:
See guideline Thromboprophylaxis in pregnancy.

Women having a CS should be offered thromboprophylaxis because they are at increased risk of venous thromboembolism, for example, graduated stockings, hydration, early mobilisation, low molecular weight heparin). Duration of thromboprophylaxis is decided on individual basis.

Sequential pneumatic compression stockings should be used during CS for women with high BMI >40.

Post-operative care:
(See Obstetric Theatre Recovery and High Dependency Care and the Management of Severely Ill Obstetric Patient)

After CS women should be observed on a one-to-one basis by a properly trained member of staff until they have regained airway control and cardio-respiratory stability and are able to communicate.

After recovery from anaesthesia, observations (respiratory rate, heart rate, blood pressure, pain and sedation) should be continued every half hour for two hours, and hourly thereafter provided that the observations are stable or satisfactory. If these observations are not stable, more frequent observations and medical review are recommended.

It is the responsibility of the midwife caring for the woman to check for uterine contractility and lochia and to clearly document clinical findings in the notes. This information should be part of handover when the woman is transferred to the ward.

For women who have had intrathecal opioids, there should be a minimum hourly observation of respiratory rate, sedation and pain scores for at least 12 hours for diamorphine and 24 hours for morphine. Women who have had intrathecal anaesthesia should have a spinal care pathway completed.

For women who have had epidural opioids and patient-controlled analgesia with opioids, there should be routine hourly monitoring of respiratory rate, sedation and pain scores throughout treatment and for at least 2 hours after discontinuation of treatment. Patients with epidural must have motor and sensory block checks 4 hourly up to 24 hours after the epidural catheter is removed

- **Pain management after CS**

  Women should be offered diamorphine (0.3–0.4 mg intrathecally) for intra and postoperative analgesia because it reduces the need for supplemental analgesia after a CS. Epidural diamorphine (2.5–5.0 mg) is a suitable alternative.

  Patient-controlled analgesia using opioid analgesics may be considered after CS under GA

  Providing there is no contraindication, nonsteroidal anti-inflammatory drugs should be offered post-CS as an adjunct to other analgesics, because they reduce the need for opioids. Codeine is contraindicated postpartum

- **Early eating and drinking after CS**

Provided no complications women who have had a CS under regional anaesthesia can eat and drink as soon as they feel hungry or thirsty. Women should be encouraged to chew sugarless gum for 15mins every 2 hours after CS. This has been proved effective in reducing paralytic ileus. In all other cases medical staff should review them before commencing oral intake.

- **Urinary catheter removal after CS –** see guideline on bladder management

  Indwelling catheters should be removed 12 hours after the CS. unless otherwise specified. For women having their catheter removed at midnight a reasonable amount of flexibility can be used to suit the woman but it should be between 2300 and 0200 hours. In certain conditions urinary catheter may need to stay in for a longer period and this should be clearly specified in post-operative instructions in yellow labour notes.

- **De-briefing for women after CS**

  Women who have had a CS should be offered the opportunity to discuss with their health care providers the reasons for the CS and implications for the child or future pregnancies.

  All women having their first caesarean section should be seen by the on call consultant prior to discharge and debriefed about the caesarean section and further advice should be given on options for next mode of delivery and any further follow up if required. A letter should be dictated with a copy to the patient, GP and Community Midwife summarising their intrapartum care and management of future pregnancies.

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

  Women who are recovering well, are apyrexial, do not have pre-existing risks or medical conditions and complications following CS 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 readmission.