Management and planning of elective Caesarean Section

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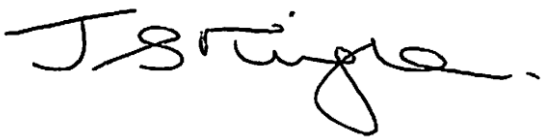
Signed	

Jacqui Tingle
Chair of MRMG

Version Control Sheet

Date	Review Type (please tick)		Version No.	Author of Review	Date Ratified	Ratification Body	Page Numbers (where amended)	Line Numbers (where amended)	Details of change	
	Minor amendment	*Full Review							Inserted	Deleted
May 2012		✔	1	Anne Carvalho	24/5/2012	MRMG				✔
Dec 2012	✔		1.1	Anne Carvalho	20/12/12	MRMG	P6, s5.3			✔
Dec 2013	✔		1.2	Anne Carvalho	30/01/14	MRMG	s5.4.42, s5.6, s7			✔
July 2014	✔		1.3	Anne Carvalho	21/07/2014	MRMG	P6 S5.3 P8 S5.4.1 P9 S5.4.2 P10 S5.6 P11 S7.2	S5.3 – alteration of gestation for steroids	✔ addition of requirement to take swabs for MRSA	✔
September 2016		✔	2	A Reid						

* Where there is a full review, amendment details are not required in the version control sheet.

CONTENTS

1. Introduction
National rates for caesarean section are now in the region of 20 to 25%. There is widespread concern about the rising caesarean rate and wide variations between local services in relation to figures for planned and unplanned caesarean sections (The Maternity Care Working Party 2007).

This document provides guidance on the Management of caesarean section and applies to all clinical staff.

This policy does not follow NICE Guideline 132 in relation to post-operative observations following intrathecal opioids. The maternity team have reviewed the available evidence, and in particular our own cases, and have come to the decision that this level of observation is not justified by the evidence available. We therefore undertake observations following intrathecal opioids as detailed in sections 5.7.2 and 5.7.3 below.

2. Purpose
This evidence based guideline has been developed to help ensure consistency in the quality of care experienced by women having CS as per the recommendations of national guidance.

It is intended to enable healthcare professionals to give appropriate research-based advice to women and their families. This will enable women to make informed decisions about caesarean section.

This policy supersedes The Policy for the Management of Caesarean Section (2008).

3. Scope
This policy applies to all clinical staff.

4. Duties and Responsibilities
4.1 Managers
It is the responsibility of the managers to ensure that the midwives are aware of the guidelines and their application to practice. They will also review and update them in line with the latest evidence as required, or at least every 3 years.

4.2 All clinical staff have a duty to be familiar with this policy and to use it to guide their practice.

4.3 Local Policy Officer
The Local Policy Officer has a duty to ensure the policy is compliant with the Trust Policy on Policies. The Local Policy Officer must ensure this policy is reviewed within the designated time period or as changes in national guidance arise. The policy should comply with the current base of evidence and best practice guidance and be current and in date.

5. Management of Caesarean Section

5.1 Reducing the Risks of Caesarean Sections

Caesarean section is major surgery which has physical and psychological implications for the woman, her baby and the maternity service providing care. With appropriate care and support the majority of healthy women can give birth with

minimum medical procedures and most women prefer to avoid interventions, provided that they feel their baby is safe, and they can cope (Maternity Care Working Party 2007). It is therefore important that we strive to avoid all unnecessary caesarean sections and do all we can to facilitate normal birth.

Women should be informed that planning a home birth will reduce the likelihood of them having caesarean section, whereas planning to give birth in a midwifery led unit will not (NICE 2011).

The following provides guidance on specific circumstances where caesarean section rates can be reduced;

- ECV should be offered for all for uncomplicated singleton breech pregnancies at 36 weeks. ECV is to be avoided in women in labour, those with a uterine scar or anomaly, fetal compromise, ruptured membranes, vaginal bleeding or medical problems.
- Careful counselling regarding VBAC vs repeat elective caesarean section in appropriate cases.
- Women should receive continuous support in labour.
- Uncomplicated pregnancies should not be induced before 41 weeks gestation unless maternal age is >/= 40 years.
- A 4 hour action line should be used for uncomplicated singleton pregnancies at term
- A Consultant Obstetrician should be involved in all decision making for Caesarean section.
- Electronic Fetal Monitoring (EFM) is associated with increased likelihood of caesarean section and as such should only be used where there is a clear indication. Uncomplicated term pregnancies should have intermittent monitoring only (please refer to Fetal Surveillance policy).
- Where Caesarean Section is contemplated because of abnormal FHR pattern, a FBS should be offered if it is technically possible and there is no contraindication e.g. maternal pyrexia, HIV.

For further guidance on facilitating normal birth please refer to the RSCH Policy for the Management of the First Stage of Labour 2012 and the RCOG (www.rcog.org.uk)and RCM websites (www.rcm.org.uk).

5.2 When should we offer elective Caesarean sections

Planned caesarean sections should not be performed at less than 39 weeks gestation.

Indications for Elective CS:

- Term Singleton Breech (if ECV is contraindicated or failed) – See ECV Policy
- Twin Pregnancy with first twin other than cephalic
- HIV positive mother not receiving antiviral therapy
- HIV positive mother with a viral load of ≥ 400 cpm regardless of therapy
- Mother both HIV and Hepatitis C positive
- Primary Genital Herpes in the third trimester

- Grade 3 or 4 Placenta Praevia
- Maternal disease/condition requiring CS
- Morbidly adherent placenta (see 5.3.1 below)
- Maternal Request including those declining VBAC (see 5.3.2 below)

Caesarean Section **should not** routinely be offered for:

- Uncomplicated Twin pregnancy where Twin 1 is cephalic presentation at term
- Preterm Birth
- A small for gestational age baby
- Hepatitis B or Hepatitis C virus
- Recurrent genital herpes at term
- BMI ≥ 50 as sole indication
- HIV positive women receiving HAART therapy with a viral load of less than 400 cpm (NICE 2011)
- HIV positive women receiving anti-viral therapy with a viral load of less than 50 cpm (NICE 2011)

With HIV positive women, receiving anti-retroviral therapy with a viral load of 50-400cpm, consider vaginal or operative delivery (NICE 2011).

If an elective caesarean section is necessary prior to 37 complete weeks, antenatal steroids MUST be given to reduce the risk of respiratory distress syndrome and admission to SCBU.

One course of steroids should be given at least 24 hours prior to the planned time of delivery. **The regimen is 2 doses of betamethasone 12mg intramuscularly 24 hours apart.** The fetal half-life of betamethasone is 12 hours. Accelerated courses (2 doses 12 hours apart) have not been shown to be of greater benefit and may increase side effect

5.2.1 Caesarean Section for morbidly adherent placenta

(This section is taken from the NICE Guideline on Caesarean Section November 2011)

Diagnosing morbidly adherent placenta

- After confirmation of low lying placenta at 32-34 weeks in women who have had a previous Caesarean section, use colour – flow Doppler ultrasound to test for morbidly adherent placenta
- If the ultrasound scan suggests morbidly adherent placenta, discuss the improved accuracy of MRI in addition to ultrasound to help diagnose morbidly adherent placenta and clarify the degree of invasion
- explain what to expect during the procedure
- inform the woman that experience suggests that MRI is safe but there is a lack of evidence about any long term risks to the baby
- offer MRI if acceptable to the woman
- Discuss the interventions available for delivery including cross-matching of blood and planned CS with a consultant obstetrician present

At delivery ensure that;

- a consultant obstetrician and anaesthetist are present
- an experienced paediatrician is present
- a senior haematologist is on notice that they may need to be available for advice
- there is access to a critical care bed
- there is initially 2 units of cross matched blood and blood products readily available
- When performing a CS for women suspected to have morbidly adherent placenta, determine which other healthcare professionals need to be consulted or present for example, interventional radiologists for emergency arterial embolisation.

5.2.2 Maternal Request for caesarean section
(This section is taken from the NICE Guideline on Caesarean Section November 2011)

- Explore, discuss, and record specific reasons for the request
- If a woman requests a CS when there is no other indication, discuss the overall benefits and risks of CS and vaginal birth and record that the discussion has taken place.
- Facilitate a discussion with other members of the obstetric team if necessary, to ensure the woman has accurate information
- For women requesting a CS because of anxiety about childbirth, offer referral to a healthcare professional with expertise in providing perinatal mental health support. The healthcare professional providing perinatal mental health support should have access to the planned place of birth during the antenatal period.
- Refer to the Birth Options Clinic if it is judged that Perinatal mental health support is not strictly required.
- For women requesting a CS, if after discussion and offer of support, a vaginal birth is still not acceptable, offer a planned CS.
- An obstetrician can decline a woman's request for a CS. In this instance they should refer the woman to an obstetrician who will carry out the CS

5.3 Management of Women undergoing Elective Caesarean Section

Management prior to admission

Women will be seen in clinic at 36 weeks of pregnancy, or later, when the decision to have an Elective LSCS is further discussed and confirmed. Once this has been done, sign the relevant section of the notes to confirm this has taken place. A prescription for Ranitidine 150mg PO and domperidone 10mg (Mishriky & Habib 2012) PO as pre medications should be provided for the woman. MRSA swabs should be taken at this visit and date of swab collection recorded in the notes.

The caesarean section should be booked by the obstetric team in the antenatal clinic and the date recorded in the patient's notes. Arrangements will be made by the labour ward receptionist for women to attend the Pre-operative assessment clinic where completion of the surgical care paperwork, documentation of MRSA swab results, blood work and provision of information about the enhanced recovery programme is undertaken.

Fasting times will vary. If the operation is planned for the morning, the woman is to stop eating solid food at 02.00 on the day of surgery. She can continue to drink clear fluids until 06.00. After this time, the woman must be nil by mouth.

- Women whose operations are arranged in the afternoon can have a light breakfast at 06.00 e.g. toast or cereal and can drink clear fluids until 10.00, when she can have a glass of fluid with nothing thereafter.

- Clear fluids means water, diluted squash, black tea, black coffee, non-fizzy clear isotonic sports drinks and clear fruit juice without pulp.

- She should be advised to take Ranitidine 150mg orally at 10pm the night before and 6am on the day of surgery along with domperidone 10mg.

- The woman should have a haemoglobin assessment undertaken within 7 days of the proposed surgery – there is no need to take blood routinely on the day of surgery for full blood count or group and save.

- The woman should be admitted to labour ward at 08.00hrs on the day of her planned surgery if her operation is booked for the morning and at 11.00 on the day of her planned surgery if her operation is booked for the afternoon.

5.3.1 Admission Management of Women undergoing Elective Caesarean Section

- On admission to labour ward, a full set of observations including assessment of FHR will be undertaken.
- Ensure the woman is familiar with the process for elective caesarean section
- Apply name band with name, date of birth, hospital number and consultant
- Obtain result of FBC from Winpath to confirm haemoglobin within normal levels
- Confirm whether she has any allergies. If yes allergy band is to be applied.
- Pubic shave using electric clippers, if necessary
- Consent obtained by a doctor trained in consent for the procedure - this could be an ST1/2 who is trained in obtaining consent.
- Anaesthetic assessment by anaesthetist prior to transfer to theatre
- Pre-operative assessment confirmed and/or undertaken and checklist to be completed.
- Documentation made in the Surgical Care document
- Confirm MRSA swab result and document if not already done. If MRSA swabs have not been taken, MRSA swabs should be taken at this point.

See Policy for Transferring Women to Theatre, Transfer to ITU or Transfer Home.

5.4 General additions for the Management of Women Undergoing Emergency Caesarean Sections

- The Consultant Obstetrician should be involved in the decision making process unless doing so would be life threatening to woman or fetus.
- Classification of caesarean section (Appendix A) should be used as an audit tool but in no way to judge the management of timing of delivery (NICE 2011).
- A Paediatrician must ALWAYS be called for delivery.
- Continue CTG in theatre until the time of skin preparation.
- Following delivery of the placenta, Paired cord samples, i.e both arterial and venous blood, for Cord pH's MUST be taken with little delay and analysed within one hour maximum time period.
- **The reason for Caesarean section must always be documented in the notes and the classification stated by the person making the decision. If there is a delay in undertaking caesarean section it must be documented.**

5.4.1 For Immediate Delivery Caesarean Sections

Call 2222 and ask for '05' Team

Move the woman on her bed promptly to theatre

Ensure accurate documentation, consider using a scribe

If GA is used –birth partner may not accompany to theatre

Consent for Surgery may be verbal in extreme cases e.g. suspected uterine rupture, cord prolapse, severe fetal distress, but must be documented clearly in the notes by the Doctor obtaining consent

For all emergency Caesarean sections, paired cord samples should be taken for cord gases (*see Policy for the Management of the Third Stage of Labour including: Retained Placenta and Cord Blood Sampling).*

5.5 In Theatre – for all caesarean sections

The WHO Safer Surgery Checklist MUST be completed in ALL CASES.

All women should be offered prophylactic antibiotics in theatre; these should be administered prior to the incision (NICE 2011).

The use of separate surgical knives to incise the skin and deeper tissue at c-section is not recommended because it does not decrease wound infection.

- MRSA swabs should be taken prior to the caesarean section. If this is not possible, MRSA swabs should be taken following the operation. Document when the MRSA swabs have been taken.
- Once spinal sited, insert indwelling catheter using aseptic technique.
- Check resuscitaire.
- Call paediatrician if required – this is not necessary for elective section.
- Midwife to scrub to take the baby.

- Complete Operation Register in theatre
- Check and document time of :
  - Into theatre
  - Knife to Skin
  - Delivery of baby, sex and Apgars
  - Delivery of placenta
  - Time out of theatre
- Document names of personnel in theatre
  - Surgeon
  - Surgeon's assistant
  - Scrub Midwife/Nurse
  - Anaesthetist
  - ODP
  - Circulating Nurse
  - Paediatrician

6. Implementation

The implementation of this policy will be monitored as below.

7. Monitoring compliance and effectiveness of the document

All category 1 caesarean sections will be audited on a quarterly basis. 1% of all women who have had a caesarean section will be audited on an annual basis.

LSCS							
Audit criteria	**Tool**	**Audit Lead**	**Frequency of audit**	**Sample Size**	**Responsible committee**	**How changes will be implemented**	**Responsibility for Actions**
Classification of urgency documented and complied with. Reason for delay if not	LSCS Audit tool	Audit midwife	Quarterly Annual	All women who have had a category 1 CS 1% of women who have had a caesarean section	Quarterly to MRMG Annual to MRMG	Individual feedback, CG newsletter, SaM teaching sessions, policy review	CGMW, PD team, Obstetric consultants
Reason for category 1 caesarean section documented by the person who makes the decision	LSCS Audit Tool	Audit Midwife	Quarterly	All women who have had a category 1 CS	Quarterly to MRMG	Individual feedback, CG newsletter, SaM teaching sessions, policy review	CGMW, PD team, Obstetric consultants
Consultant involved in decision	LSCS Audit tool	Audit midwife	Quarterly Annual	All women who have had a category 1 CS	Quarterly to MRMG	Individual feedback, CG newsletter, SaM teaching sessions, policy review	CGMW, PD team, Obstetric consultants

				1% of women who have had a caesarean section	Annual to MRMG		
Care in the first 24 hours: antibiotic prophylaxis, thrombo prophylaxis	LSCS Audit tool	Audit midwife	Quarterly Annual	All women who have had a category 1 CS 1% of women who have had a caesarean section	Quarterly to MRMG Annual to MRMG	Individual feedback, CG newsletter, SaM teaching sessions, policy review	CGMW, PD team, Obstetric consultants
Discussion prior to discharge	LSCS Audit tool	Audit midwife	Quarterly Annual	All women who have had a category 1 CS 1% of women who have had a caesarean section	Quarterly to MRMG Annual to MRMG	Individual feedback, CG newsletter, SaM teaching sessions, policy review	CGMW, PD team, Obstetric consultants

8. Review, Approval/Ratification and Archiving

Previous versions of this policy can be found in the Maternity Archive on the shared drive. This policy will be reviewed prior to its third anniversary in accordance with the RSCH Policy for Policies 2012.

9. Dissemination and Publication

- Circulated to all Matrons and Consultants via email
- Circulated to all staff via email
- Circulated to the Local Policy officer for publishing the document on the Department policy library on the shared drive.
- Circulated to the Central Policy officer for publishing the document on the Trust's Central Library (intranet).

10. A statement in relation to its Equality Impact Assessment

10.1 The author of this policy has undertaken an Equality Impact Analysis and has concluded there is no impact identified. The Equality Analysis Initial Screening has been archived and is available via the Central Policy Officer.

11. Details of any associated documents

RSCH Policy for the Management of the First Stage of Labour 2012
RSCH Fetal Surveillance Policy 2012
RSCH Obstetric Thromboprophylaxis policy 2012.

12. References

NICE (2007) Intrapartum care: Care of healthy women and their babies during childbirth
London, NICE. Available at www.nice.org.uk

NICE (2011) CG132 Caesarean Section London, NICE. Available at www.nice.org.uk

Royal College of Anaesthetists, Royal College of Midwives, Royal College of Obstetricians and Gynaecologists, Royal College of Paediatrics and Child Health. (2007). Safer Childbirth: Minimum Standards for the Organisation and Delivery of Care in Labour. London: RCOG Press. Available at www.rcog.org.uk

Mishriky BM & Habib AS (2012). Metoclopramide for nausea and vomiting prophylaxis during and after Caesarean delivery: a systematic review and meta-analysis. BJA 108 (3) 374-383

13. Appendices

Appendix A- Classification of Caesarean Section
Appendix B; Post caesarean section discharge

Appendix A

Classification of Urgency of Caesarean Sections

Determine the urgency of CS using the following standardised scheme:

1. Immediate threat to the life of the woman or fetus
2. Maternal or fetal compromise which is not immediately life-threatening
3. No maternal or fetal compromise but needs early delivery
4. Delivery timed to suit woman or staff

Decision to delivery (DDI) interval for unplanned CS (NICE 2011)

- Perform category 1 & 2 CS as quickly as possible after making decision particularly for category 1.
- In the instance of a category 1 caesarean section, the baby should be delivered within 30 minutes of the decision being made Perform category 2 CS within 75 minutes of the decision
- Use the following decision to delivery intervals as audit standards to measure the overall performance of the obstetric unit: and not to judge multidisciplinary team performance for any individual CS

Take into account the condition of the woman and the unborn baby when making decisions about rapid delivery

Appendix B

Dear **Date**

Hospital Number

What are my choices for birth after a caesarean delivery?
Whether you choose to have a vaginal birth or a caesarean delivery in a future pregnancy, either choice is safe with different risks and benefits. Overall, both are safe choices with only very small risks. The risks and benefits of a vaginal delivery and a repeat caesarean section are explained in the attached leaflet **Birth After A Caesarean Delivery Information Leaflet**.

In considering your choices, you need to consider both your medical history and previous pregnancies and deliveries. The following information will be useful in making a decision;

Your caesarean was performed as an	elective☐ emergency ☐
Your baby was born at ……..weeks gestation and weighed ……Kg.	
The reason for your caesarean birth was;	
The incision was a	classical☐ transverse☐

Based on the information available we recommend that in your next pregnancy you give birth by:

☐ Vaginal birth after caesarean section (VBAC)

☐Elective caesarean section

because.....

If you would like to discuss the information in this letter in more detail please talk to your midwife who can arrange for you to attend an outpatient appointment with a senior doctor.

Yours sincerely

.....
Maternity team

Birth After A Caesarean Delivery Information Leaflet
(for further information go to www.rcog.org.uk/patient information)

What is VBAC?
VBAC stands for 'vaginal birth after caesarean'. It is the term used when a woman gives birth vaginally, having had a caesarean delivery in the past. Vaginal birth includes birth assisted by forceps or ventouse

What is an elective repeat caesarean delivery?
An elective caesarean means a planned caesarean.

What are the advantages of a successful VBAC?
The advantages of a successful VBAC include:

- a vaginal birth (which might include an assisted birth)
- a greater chance of an uncomplicated normal birth in future pregnancies
- a shorter recovery and a shorter stay in hospital
- less abdominal pain after birth
- not having surgery.

When is VBAC likely to be successful?
Overall, about three out of four women (75%) with a straightforward pregnancy who go into labour, give birth vaginally following one caesarean delivery.
If you have had a vaginal birth, either before or after your caesarean delivery, about nine out of ten women (90%) have a vaginal birth.
Most women with two previous caesarean deliveries will have their next baby by caesarean delivery. However, should you go into labour your chance of a successful vaginal birth is slightly less than this (between 70% and 75%)

What are my chances of a successful VBAC?
A number of factors (risk factors) make the chance of a successful vaginal birth less likely. These are when you:

- have never had a vaginal birth
- need to be induced
- did not make progress in labour and needed a caesarean delivery (usually owing to the position of the baby)
- are overweight – a body mass index (BMI) over 30 at booking.

What are the disadvantages of VBAC?
The disadvantages of VBAC include:

- **Emergency caesarean delivery**
  There is a chance you will need to have an emergency caesarean delivery during your labour. This happens in 25 out of 100 women (25%). This is only slightly higher than if you were labouring for the first time, when the chance of an emergency caesarean delivery is 20 in 100 women (20%). The usual reasons for an emergency caesarean delivery are labour slowing or if there is a concern for the wellbeing of the baby.
- **Blood transfusion and infection in the uterus**
  Women choosing VBAC have a one in 100 (1%) higher chance of needing a blood transfusion or having an infection in the uterus compared with women who choose a planned caesarean delivery.
- **Scar weakening or scar rupture**
  There is a chance that the scar on your uterus will weaken and open. If the scar opens completely (scar rupture) this may have serious consequences for

you and your baby. This occurs only in two to eight women in 1000 (about 0.5%). Being induced increases the chance of this happening. If there are signs of these complications, your baby will be delivered by emergency caesarean delivery.

- **Risks to your baby**
  The risk of your baby dying or being brain damaged if you undergo VBAC is very small (two in 1000 women or 0.2%). This is no higher than if you were labouring for the first time, but it is higher than if you have an elective repeat caesarean delivery (one in 1000 or 0.1%). However, this has to be balanced against the risks to you if you have a caesarean delivery (see below).

These disadvantages are more likely in women who attempt VBAC and are unsuccessful.

When is VBAC not advisable?
There are very few occasions when VBAC is not advisable and repeat caesarean delivery is a safer choice. These are when:

- you have had three or more previous caesarean deliveries
- the uterus has ruptured during a previous labour
- you have a high uterine incision (classical caesarean)
- you have other pregnancy complications that require a caesarean delivery.

What are the advantages of elective repeat caesarean delivery?
The advantages of elective repeat caesarean delivery include:

- virtually no risk of uterine scar rupture
- it avoids the risks of labour and particularly the risk of possible brain damage or stillbirth from lack of oxygen during labour (one in 1000 or 0.1%)
- knowledge of the date of delivery.

However, since caesarean delivery is planned for seven days before the due date, there is a chance that you will go into labour before the date of your caesarean delivery. One in ten women (10%) go into labour before this date.

What are the disadvantages of elective repeat caesarean delivery?
The disadvantages of elective repeat caesarean delivery include:

- **A longer and possibly more difficult operation**
  A repeat caesarean delivery usually takes longer than the first operation because of scar tissue. Scar tissue may also make the operation more difficult and can result in damage to the bowel or bladder. There are rare reports of accidental cutting of the baby at caesarean delivery.
- **Chance of a blood clot (thrombosis)**
  A blood clot that occurs in the lung is called a pulmonary embolus. A pulmonary embolus can be life threatening (death occurs in less than one in 1000 caesarean deliveries). See RCOG Patient Information Venous thrombosis in pregnancy and after birth: information for you.
- **There is a longer recovery period**
  You may need extra help at home and will be unable to drive for about six weeks after delivery (check with your insurance company).
- **Breathing problems for your baby**
  Breathing problems are quite common after caesarean delivery and usually do not last long. Occasionally, the baby will need to go to the special care baby unit. Between three to four in 100 babies (3–4%) born by planned caesarean delivery have breathing problems compared with two to three in 100 (2–3%) following VBAC. Waiting until seven days before the due date minimises this problem.

- **A need for elective caesarean delivery in future pregnancies**
  More scar tissue occurs with each caesarean delivery. This increases the possibility of the placenta growing into the scar making it difficult to remove at caesarean (placenta accreta or percreta). This can result in bleeding and may require a hysterectomy. All serious risks increase with every caesarean delivery you have.