



SOGP GUIDELINE VAGINAL BIRTH AFTER PREVIOUS CAESAREAN SECTION (VBAC)

Adapted for Pakistan from the Green top RCOG guideline No: 20a, 2006

By the Guideline Committee of SOGP through consensus & literature review

Reviewed by: The executive Body of SOGP

Endorsed by: The CPSP

1. Purpose and scope

To provide evidence-based and expert opinion for the care of women undergoing either planned vaginal birth after previous caesarean section (VBAC) or elective repeat caesarean section (ERCS) in the Pakistan.

This guideline with incorporated local consensus will present the best available evidence to facilitate antenatal counseling in women with prior caesarean birth and to inform the intrapartum management of women undergoing planned VBAC in Pakistan and according to the wishes and desires of our population

2. Introduction and background

There is widespread public and professional concern about the increasing proportion of births by caesarean section.¹ Increasing rates of primary caesarean section have led to an increased proportion of the obstetric population who have a history of prior caesarean delivery. **In Pakistan where grandmultiparity is already a risk factor, repeat CS is an even higher contentious issue.** Pregnant women with a previous section may be offered either planned VBAC or ERCS. The proportion of women who decline VBAC is, in turn, a significant determinant of overall rates of caesarean birth.

New evidence is emerging to indicate that VBAC may not be as safe as originally thought (1, 2, and 3). These factors together with medico-legal fears, have led to a recent decline in clinicians offering and women accepting planned VBAC in the UK and North America (5, 6, 7). In Pakistan VBAC offer exists but ERCS is also on the rise (8, 9, and 10)

Definition of terms used in this guideline

Planned VBAC

Planned VBAC (vaginal birth after caesarean) refers to any woman who has experienced a prior caesarean

Birth that plans to deliver vaginally rather than by ERCS (elective repeat caesarean section).

Successful and unsuccessful planned VBAC

A vaginal birth (spontaneous or assisted) in a woman undergoing planned VBAC indicates a successful VBAC.

Birth by emergency caesarean section during the labor indicates an unsuccessful VBAC.

Maternal outcomes

Uterine rupture is defined as a disruption of the uterine muscle extending to and involving the uterine serosa or disruption of the uterine muscle with extension to the bladder or broad ligament.

Uterine dehiscence is defined as disruption of the uterine muscle with intact uterine serosa.

Other outcomes include hysterectomy, thromboembolism, haemorrhage, transfusion requirement, viscous injury (bowel, bladder, and ureter), endometritis, and maternal death.

Fetal outcomes

Term is defined in this guideline as, at or beyond 37 completed weeks of gestation.

Term perinatal mortality in this guideline is defined as the combined number of stillbirths (anteartum and intrapartum) and neonatal deaths (death of a live born infant from birth to age 28 days) per 10 000 live births and stillbirths, at or beyond 37 completed weeks of gestation. Term perinatal mortality rates exclude deaths due To fetal malformation unless otherwise stated.

Term delivery-related perinatal death is defined as the combined number of intrapartum stillbirths and neonatal deaths per 10 000 live births and stillbirths, at or beyond 37 completed weeks of gestation. Birth related perinatal mortality rates exclude anteartum stillbirths and deaths due to fetal malformation unless otherwise stated.

Neonatal respiratory morbidity is defined as the combined rate of transient tachypnoea of the newborn (TTN) and respiratory distress syndrome (RDS).

Hypoxic ischemic encephalopathy (HIE) is defined as hypoxia resulting from a decrease in the blood supply to a bodily organ, tissue, or part caused by constriction or obstruction of the blood vessels, which results in compromised neurological function manifesting during the first few days after birth. HIE refers to a subset of the much broader category of neonatal encephalopathy, in which the aetiology is felt to be intrapartum hypoxic–ischemic injury.

3. Antenatal counseling

1: How should women is counseled in the antenatal period?

Worldwide counseling is weak area regarding VBAC more so in developing world (11).

- Women with a prior history of one uncomplicated lower-segment transverse caesarean section, in an otherwise uncomplicated pregnancy at term, with no contraindication to vaginal birth, should be able to discuss the option of planned VBAC and the alternative of a repeat caesarean section (ERCS).
- The antenatal counseling of women with a prior caesarean birth should be documented in the notes.
- There should be provision of a patient information leaflet with the consultation (in local language or pictorial).
- Options for mode of birth should be agreed between the woman and her obstetrician before the expected/planned delivery date (ideally by 36 to 38 weeks of gestation) including reference to indication of Index section, Bishop Score and Clinical pelvimetric assessment.
- A plan for the event of labor starting prior to the scheduled date should be documented.
- Women considering their options for birth after a single previous caesarean should be informed that, overall, the chances of successful planned VBAC are 72–76%.

Despite the limitations of antenatal care, intrapartum monitors and lack of standardization of facilities offering primary CS in Pakistan, local studies quote 70% success rate (8, 9).

2 What are the contraindications to VBAC?

- Women with a prior history of one classical caesarean section are recommended to give birth by ERCS (12).
- Women with a previous uterine incision other than an uncomplicated low transverse caesarean section incision who wish to consider vaginal birth should be assessed by a consultant with full access to the details of the previous surgery. Can be delivered vaginally with caution and direct Consultant care only.

For Women with a prior history of two uncomplicated low transverse caesarean sections (13, 14), in an otherwise uncomplicated pregnancy at term, with no contraindication for vaginal birth, expert opinion recommends ERCS in cases of previous 2 or ≥ 2 CS for Pakistan

3. What are the specific risks and benefits of VBAC?

- Women considering the options for birth after a previous caesarean should be informed that planned VBAC carries a risk of uterine rupture of 22–74/10,000. There is virtually no risk of uterine rupture in women undergoing ERCS.
- Women considering the options for birth after a previous caesarean should be informed that planned VBAC compared with ERCS carries around 1% additional risk of either blood transfusion or endometritis in West (ref) Considering this all women undergoing birth after CS should have blood cross matched and arranged regardless of mode of delivery..
- Women considering planned VBAC should be informed that this decision carries a 2–3/10,000 additional risk of birth-related perinatal death when compared with ERCS. The absolute risk of such birth-related perinatal loss is comparable to the risk for women having their first birth.
- Women considering the options for birth after a previous caesarean should be informed that attempting VBAC probably reduces the risk that their baby will have respiratory problems after birth: rates are 2–3% with planned VBAC and 3–4% with ERCS.

- Women considering the options for birth after a previous caesarean should be informed that the risk of anesthetic complications is extremely low, irrespective of whether they opt for planned VBAC or ERCS. In Pakistan where patients report in emergency and do not avail opportunity of having a pre-anaesthetic evaluation risks of an anaesthesia remain high (15).
- Women considering the options for birth after a previous caesarean should be informed that ERCS may increase the risk of serious complications in future pregnancies.

4. How should women be counseled in the context of obstetric complications?

Preterm birth

Women who are preterm and considering the options for birth after a previous caesarean should be informed that planned preterm VBAC has similar success rates to planned term VBAC but with a lower risk of uterine rupture.

Twin gestation, fetal macrosomia, short interdelivery interval

A cautious approach is advised when considering planned VBAC in women with twin gestation(16,17), fetal macrosomia (18,19) and short interdelivery interval(20,21), as there is uncertainty in the safety and efficacy of planned VBAC in such situations.

- Such trials should only be conducted at Consultant led units only with clear informed delivery plan documented at 36 weeks.
- Unbooked patients with above indication in labour should have individualized delivery plan with early Consultant involvement
- VBAC can be awaited till 41 weeks of gestation in otherwise uncomplicated pregnancies.

5. Intrapartum support and intervention during planned VBAC

- *Where and how should VBAC be conducted?*
- Women should be advised that planned VBAC should be conducted in a suitably staffed and equipped delivery suite, with continuous intrapartum care and intrapartum intermittent auscultation after each contraction for full 1 minute. There should also be

available **resources for immediate caesarean section and advanced neonatal resuscitation (22, 23) and blood transfusion.**

- ONE TO ONE care is recommended with Partograph attached in notes later as controlled document.
- Epidural anaesthesia is not contraindicated in planned VBAC provided continuous EFM is available.
- Continuous EFM is not possible in majority of hospitals, therefore it is recommended as with intermittent auscultation/15min for full 1 minute and having a high index suspicion.

There is no single pathognomic clinical feature that is indicative of uterine rupture but the presence of any of the following peripartum should raise the concern of the possibility of this event: 42

- Abnormal CTG
- Severe abdominal pain, especially if persisting between contractions
- Chest pain or shoulder tip pain, sudden onset of shortness of breath
- Acute onset scar tenderness
- Abnormal vaginal bleeding or haematuria
- Cessation of previously efficient uterine activity
- Maternal tachycardia, hypotension or shock
- Loss of station of the presenting part.

The diagnosis is ultimately confirmed at emergency caesarean section or postpartum laparotomy.

6. Induction and augmentation

- *How should women with a previous caesarean birth be advised in relation to induction of labour or augmentation?*
- There two- to three-fold increased risk of uterine rupture and around 1.5-fold increased risk of caesarean section in induced and/or augmented labours compared with spontaneous labours.

- Women should be informed that there is a higher risk of uterine rupture with induction of labor with prostaglandins priming.
- The decision to induce and augment is not recommended routinely but can be individualized and should be taken at the highest level/Senior Consultant.
- Serial Cervical assessment should be performed by at least registrar level
- The decision to induce, the method chosen, the decision to augment with oxytocin, the time intervals for serial vaginal examination and the selected parameters of progress that would necessitate and advise on discontinuing VBAC should be taken by Consultant obstetrician.
- Induction of labor or Augmentation (18) with prostin/oxytocin/cervical foley should be at the discretion of Senior Obstetrician and in facilities that meet International Standards as continuous fetal monitoring.

Areas for generating research establishing local evidence

- *Standards for audit of practice should include the following:*
- *Outcome in women in 41 weeks and beyond for women who want to wait*
- *Induction and augmentation in women with VBAC*
- *Use of continuous EFM during second stage of labor*

Standards for audit of documentation could include the following:

- *documented discussion of risks and benefits of VBAC and ERCS*
- *documentation of consultant involvement in:*
- *deciding to induce or augment labor*
- *establishing a plan for induction or augmentation*
- *And proceeding to emergency caesarean section.*

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