VAGINAL BIRTH AFTER CAESAREAN SECTION (VBAC)

Supporting information

This guideline and supporting information has been prepared with reference to the following:


What evidence is available to support the decision whether or not to attempt VBAC?

A Cochrane systematic review (Dodd, 2006) found no randomised controlled trials and concluded that “Planned elective repeat caesarean section and planned induction of labour for women with a prior caesarean birth are both associated with benefits and harms. Evidence for these care practices is drawn from non-randomised studies, associated with potential bias. Any results and conclusions must therefore be interpreted with caution. Randomised controlled trials are required to provide the most reliable evidence regarding the benefits and harms of both planned elective repeat caesarean section and planned induction of labour for women with a previous caesarean birth.”

Dodd JM, Crowther CA. Elective repeat caesarean section versus induction of labour for women with a previous caesarean birth. Cochrane Database of Systematic Reviews 2006, Issue 4. Art. No.: CD004906

Evidence Level: I

VBAC should be approached with caution in:

a) women with a twin gestation?

A retrospective study of VBAC in 134 patients with twin gestation (Aaronson, 2010) recorded that 25 underwent a trial of labour and the remaining 109 underwent a repeat caesarean delivery. Although there were no cases of uterine rupture, maternal mortality, or peripartum fever, higher rates of perinatal mortality were noted in patients undergoing trial of labour (8% vs. 1.8%, p = 0.042, OR = 4.652, 95% CI = 1.122-19.286). However, trial of labour was not found to be an independent risk factor for perinatal mortality after controlling for confounders such as gestational age, ethnicity, and fetal malformations (adjusted OR = 1.07, 95% CI = 0.07-15.95, p = 0.95). More research was called for.


Evidence Level: IV

b) women who have had two previous caesareans?

A systematic review and meta-analysis of 20 case series and 23 cohort studies (Tahseen, 2010) concluded that “Women requesting for a trial of vaginal delivery after two caesarean sections should be counselled appropriately considering available data of success rate 71.1%, uterine rupture rate 1.36% and of a comparative maternal morbidity with repeat CS option.”

Tahseen S, Griffiths M. Vaginal birth after two caesarean sections (VBAC-2): a systematic review with meta-analysis of success rate and adverse outcomes of VBAC-2 versus VBAC-1 and repeat (third) caesarean sections. BJOG 2010;117:5-19

Evidence Level: I

Not found an answer to your question? Contact bedsideclinicalguidelines@uhns.nhs.uk
What is the risk of uterine rupture following previous caesarean section?
A population-based registry study in 18,794 women (Al-Zirqi, 2010) identified 94 cases of uterine rupture. Compared with elective prelabour caesarean section, odds of rupture increased for emergency prelabour caesarean section (OR: 8.63; 95% CI: 2.6-28.0), spontaneous labour (OR: 6.65; 95% CI: 2.4-18.6) and induced labour (OR: 12.60; 95% CI: 4.4-36.4). The odds were increased for maternal age > or =40 years versus <30 years (OR: 2.48; 95% CI: 1.1-5.5), non-Western (mothers born outside Europe, North America or Australia) origin (OR: 2.87; 95% CI: 1.8-4.7) and gestational age > or =41 weeks versus 37-40 weeks (OR: 1.73; 95% CI: 1.1-2.7). Uterine rupture after trial of labour significantly increased severe postpartum haemorrhage (OR: 8.51; 95% CI: 4.6-15.1), general anaesthesia exposure (OR: 14.20; 95% CI: 9.1-22.2), hysterectomy (OR: 51.36; 95% CI: 13.6-193.4) and serious perinatal outcome (OR: 24.51 (95% CI: 11.9-51.9). Induction by prostaglandins significantly increased the odds for uterine rupture compared with spontaneous labour (OR: 2.72; 95% CI: 1.6-4.7)


Evidence Level: IV

Last amended December 2010