

Audit of caesarean section at full dilatation



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Introduction

In 2010, more than 160,000 babies were born by caesarean section (CS) in the UK.¹ The incidence of CS performed at full dilatation has increased (0.9% in 1993 versus 2.2% in 2001, $P < 0.05$; 2.0% in 2006 versus 1.8% in 2008, $P = 0.0033$). 5% ($n = 458$) of CSs were performed at full dilatation.²

Increasing rates of failed operative vaginal delivery (8.4% in 1992 versus 12.9% in 2001, CC 0.93, $P < 0.05$) reduced attempts at instrumental delivery (3.9% no attempt at instrumental in 1992 versus 5.3% in 2001, CC 0.47, $P = 0.002$) have also been documented.² The reasons for these are likely to be multifactorial.

Babies born by CS at full dilatation are 1.5 times more likely to have perinatal asphyxia than those born by CS during the first stage of labour (11% of 549 deliveries versus 8% of 1074 deliveries; 95% CI 1.06–2.14, $P < 0.05$).³

This is an audit of our practice.

Aim:

- 1) To benchmark our rates against UK national standards
- 2) Identify factors that may reduce 2nd stage caesarean sections

Audit Standards

The rate 2nd stage CS should be 5%.
Rate of maternal complications:
✓ intraoperative complications in range of 10-27%
✓ PPH > 1litre < 10%
Rate of fetal complications ~11%.
Quality of documentation in the op notes - all relevant info available in op notes -100%.
Access to patient information on CWS- 100%.

Methods

Retrospective study
Full dilatation Caesarean deliveries at Neville Hall hospital and Royal Gwent hospital
Sample size were 32 (16 patients from each hospital)
Study period – Jan. – June 2020 (NHH) and May-June 2020 (RGH)
Data collected from ORMIS
Standard proforma was used
Window excel and data analysis

Results

Basic parameters

Age (mean) 28.5
Nulliparous 94%
Gestational age (mean) 39.68

Labour

Spont. onset of labour 50%
Induction of labour 50%
Length of 1st stage 7 hours (2-18)
Length of 2nd stage 2.4 hours (1-4.5)
Augmented with synto. 31%

Op. Vag. Del. (OVD)

OVD attempted 69%
OVD not attempted 31%
Trial in theatre 94%
Failed in room 6%

Operator's choice

Registrar (No cons) 94%
Rotation attempted 31%; Not attempted 69%
Neville-Barnes forceps 44%; Kiwi 19%; Double 13%
No of pulls ≤3 91%

Baby

Mean birth weight 3.5kg
Mean APGAR at 1 8.7
Mean APGAR at 5 9.6
APGAR <7 at 5 min 1
Admission to SCBU 1

16 Fetal...

Reasons for C/S	Number of patients
Failure of descent	15
Inability to apply instrument	6
PP too high for OVD	5
Maternal choice	1
High spinal	1
Inability to correct	7
Mal-position	

Complications of C/S	Number
Postpartum Haemorrhage >1L	8
Uterine Angle extension	7
sepsis	4
SCBU admission	0 (No fetal injury reported)
Episiotomy before C/S	1
Blood transfusion	1
Cervical tear	1
Bladder injury	1

Conclusions

1. We found that our 2nd stage CS rates are 13% of all OV deliveries and the main reason was OP position. This suggests there increased need for optimizing metal position before and during labour and more training in assisted delivery on OP position.
2. We also recognized that there was a need to include an operation template that helps in ensuring all relevant info is captured easily.

Recommendations

1. Regular training in aspects of assisted vaginal deliveries during Friday teaching sessions including training on standards of documentation in case notes, operative notes and, specific training in Rotational deliveries including Kiellands.
2. CS template to include instrumental delivery in trial of OVD
3. Timely scanning of whole notes on CWS- to facilitate timely communication and for purposes of clinical governance.
4. Create a culture of support and safety netting with presence of Senior Obstetricians/peer support during trial of instrumental deliveries
5. Re-audit in June 2021

Bibliography

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