

AN AUDIT ON ASSISTED VAGINAL DELIVERY AND ASSOCIATED MATERNAL AND NEONATAL OUTCOMES

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BACKGROUND

- Operative vaginal delivery (OVD) is a vital health intervention that can result in better outcomes for mothers and their babies when complications arise in the second stage of labour.
- A prolonged 2nd stage of labour is a common indication for a caesarean section; however, many of these caesarean sections could be prevented by the use of assisted vaginal birth, with vacuum extraction being the method of first choice.
- As per RCOG GreenTop Guideline No. 26, the following are the safety criteria for successful OVD

Full abdominal and vaginal examination	1. Head is ≤ 1/5 palpable per abdomen (in most cases not palpable) & Cervix is fully dilated and the membranes ruptured 2. Station at level of ischial spines or below & Position of the fetal head has been determined 3. Caput and moulding is no more than moderate (or +2)α & Pelvis is deemed adequate
Preparation of mother	1. Clear explanation given and informed consent taken and documented in women's case notes 2. Appropriate analgesia 3. Maternal bladder has been emptied 4. Indwelling catheter has been removed or balloon deflated 5. Aseptic technique
Preparation of staff	1. Operator has the knowledge, experience and skill necessary 2. Adequate facilities are available (equipment, bed, lighting) and access to an operating theatre 3. Backup plan: for midpelvic births 4. Personnel present who are trained in neonatal resuscitation

Figure 1: Safety criteria for OVD

METHOD

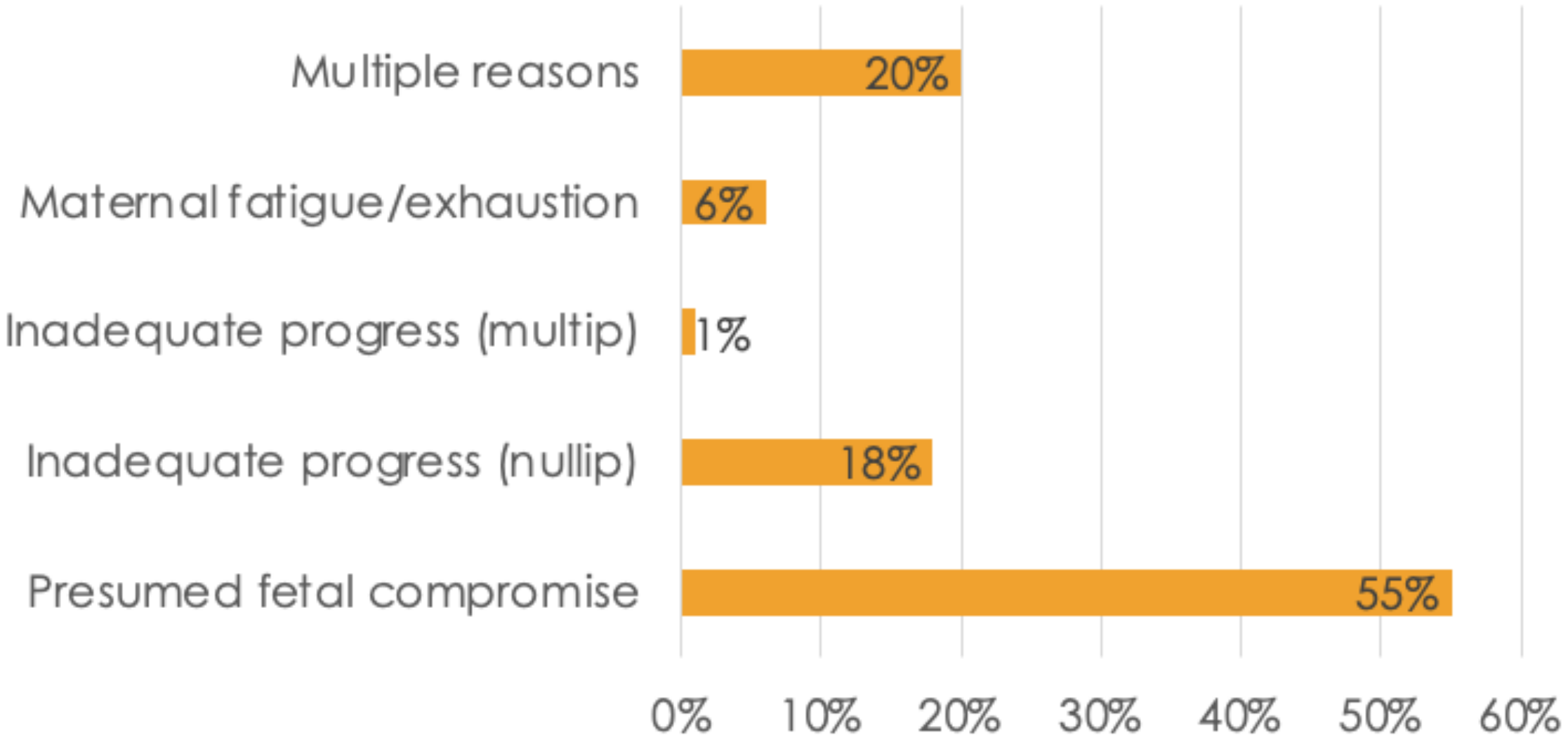
- A retrospective review of all patients who underwent an OVD and a proforma was used to collect data.
- A total of 140 patients were included in this audit.
- Data proforma included demographics, details of delivery, prerequisites for OVD, and outcome of the procedure.

- The majority (87%) were primigravida and the rest were multiparous and 98.6% were at term.
- In three cases sequential instruments ere used and documentation was updated.

RESULTS

- The reasons for OVD are as outlined below.

Figure 2: Reasons for OVD



Normal CTG	34%
Suspicious CTG	19%
Pathological CTG	47%

- Safety criteria were met in the majority of cases.

	%
Informed consent	91
Indication recorded	100
Full abdominal and pelvic examination	100
Bladder care recorded	100
Adequate analgesia	100
Operator fully competent (HST/RS)	100
Decision to delivery interval	100
Antibiotics given at time of procedure	60
Cord gases taken	75
Cord gases in presumed fetal compromise	80
Paediatrician present/informed	100

Figure 3: Safety criteria and percentages

- 55% of women required a routine episiotomy.
- In terms of complications, 52% had a perineal tear with only 7% of these tears being >3rd degree. 11 patients had PPH
- In terms of neonatal outcomes, 6 neonates required NPICU admission and only 2 neonates had a 1st minute Apgar<5.

DISCUSSION OF RESULTS

- Overall, this audit is showing that we are complying with RCOG guidelines for operative vaginal deliveries. Safety criteria are being followed.
- An area for improvement would be documentation of paired blood gases and administering a shot of IV abx during the procedure.

RECOMMENDATIONS

- Implementation of OVD record based on RCOG guidelines and re-audit in 1 year

CONCLUSION

- Consequently, operative vaginal deliveries are suitable in available conditions to decrease the rates of caesarean deliveries and related morbidity and mortality

REFERENCES

- [Assisted Vaginal Birth \(Green-top Guideline No. 26\) | RCOG](#)