

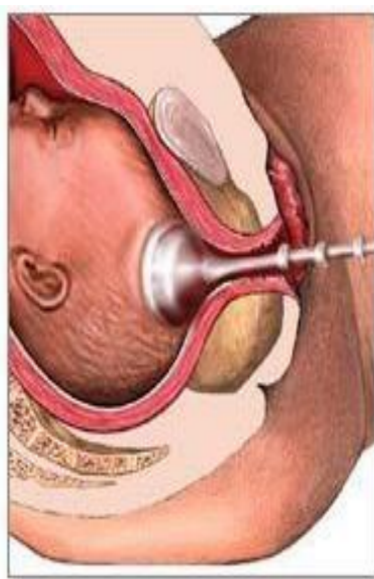
# ReDEFINE (Rotational DELivery at Full dilatationN) – A national prospective service evaluation of deliveries complicated by malposition in the second stage of labour.

## UKARCOG

### BACKGROUND

Fetal head malposition in the second stage of labour is a significant risk factor for adverse maternal and neonatal outcomes. Rotational vaginal delivery is one of the most skilled, high risk obstetric procedures.

Cochrane recently concluding no evidence from randomised trials to guide decision making to attempt instrumental delivery versus caesarean section (pEMCS). Previous studies looking at malposition have highlighted the need for national prospective data collection.



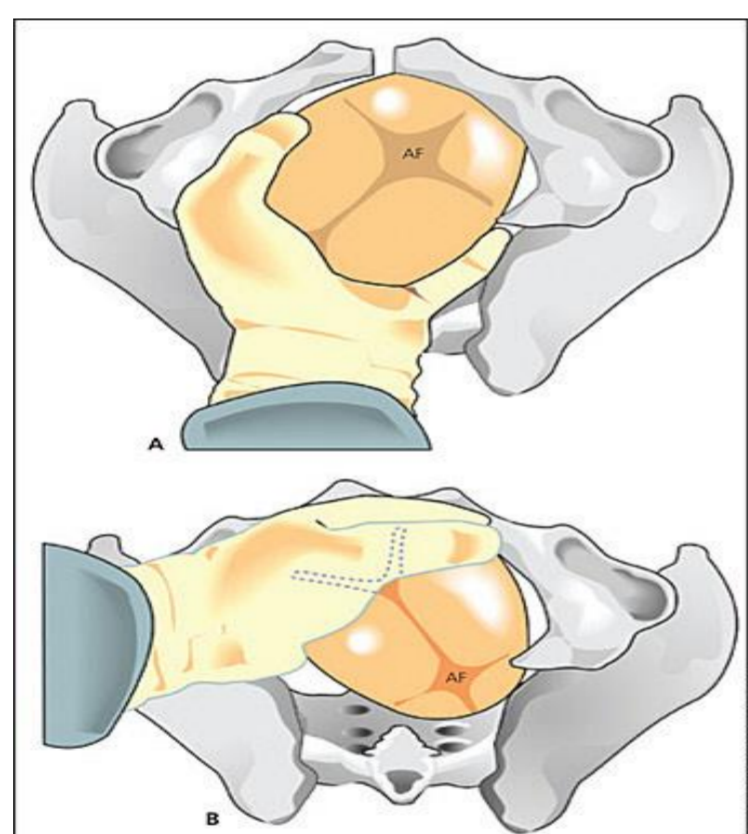
### AIMS

Conduct a national prospective service evaluation of deliveries complicated by malposition in the second stage.

### METHODS

The UK Audit and Research trainee Collaborative in Obstetrics and Gynaecology (UK-ARCOG) network prospectively collected data of births complicated with malposition of the fetal head in the second stage of labour during May 2016.

The information was collected to proforma, uploaded to excel and analysed using SPSS.



### RESULTS

Data on 836 deliveries were included, 237 rotational ventouse (RV) (28.3%), 324 manual rotation followed by direct forceps/ventouse (MROT) (38.8%), 181 Kielland forceps KF (21.7%), 94 pEMCS (11.2%).

### RESULTS

Demographics	Manual rotations (n=324)	Kielland forceps (n=181)	Rotational ventouse (n=237)	EMCS 2 <sup>nd</sup> stage for malposition (n=94)	Significance
Age (Mean)	29.4 years	29.3 years	28.4 years	29.1 years	P>0.05
BMI	26.5	25.9	25.3	25.8	P<0.05
Primip	243 (75%)	145 (80.1%)	173 (73%)	75 (79.8%)	P>0.05
Position					
OP	143 (44.5%)	106 (59.2%)	98 (41.4%)	61 (68.5%)	
OT	178 (55.5%)	73 (40.8%)	139 (58.6%)	28 (31.5%)	
Outcomes	Manual rotations (n=324)	Kielland forceps (n=181)	Rotational ventouse (n=237)	EMCS 2 <sup>nd</sup> stage for malposition (n=94)	Significance
First instrument success	207 63.9%	143 79%	187 79%	NA	P<0.01
Massive obstetric haemorrhage	10 (3.1%)	6 (3.4%)	8 (3.4%)	7 (7.7%)	P>0.05
Sphincter injury	14 (4.3%)	12 (6.6%)	11 (4.6%)	NA	P>0.05
Arterial pH (Mean)	7.2	7.18	7.2	7.21	P<0.05
Admission to SCBU	22 6.8%	13 7.3%	20 8.5%	8 8.6%	P>0.05
Shoulder dystocia	14 (4%)	10 (5.6%)	9 (3.8%)	NA	P>0.05

### CONCLUSION

Rotational vaginal deliveries are commonly performed throughout the UK. A statistically higher rate of success with first instrument is seen if rotational ventouse or Kielland forceps are attempted over manual rotation. UKARCOG has proven itself as a successful platform to conduct multi centre prospective data capture. Guidelines are needed for rotational ventouse, Kielland forceps and manual rotation to be performed/trained/audited and evaluated alongside each other allowing obstetricians to choose the most appropriate instrument in the different situations when rotational vaginal delivery is required.