

Background	Aim and objectives	Method
Rotational vaginal delivery require advanced obstetric skills and should be performed by experienced obstetricians. Options include manual rotation, rotational ventouse and Kielland’s rotational forceps. There is a decline in the use of Kielland’s forceps because of the perceived association with maternal and neonatal complications. A number of retrospective cohort studies reported high success rate with Kielland’s forceps (90 - 95%) and low morbidity in experienced hands.	The aim was to review the success rate of Kielland's rotational forceps in our unit, including maternal and neonatal complications.	Retrospective audit All women who had attempted Kielland’s rotational forceps delivery between 1st February 2012 and 31st January 2022 in our unit were included in the analysis. The data was collected from the computerised medical records.
Results		Conclusions
During the study period of 10 years n=118 women out of 54 567 had Kielland’s delivery (0.2%) The delivery was performed or supervised by a trained in Kielland’s forceps delivery obstetrician. Success rates was 94% (n=111/118). In 116 of the cases the pregnancy was singleton and in two cases a twin pregnancy. In seven of the cases (n=7/118) the use of Kielland’s forceps was preceded by an unsuccessful ventouse delivery and the forceps delivery was unsuccessful in only one of the cases. One patient had failed manual rotation followed by unsuccessful Kielland’s delivery and emergency Caesarean section at the end. In all seven cases with unsuccessful Kielland’s rotational forceps the delivery was completed by emergency Caesarean section. Interestingly in six of the unsuccessful cases the babies were male and only in one case the baby was of female gender despite similar gender and weight distribution. The indication for the rotational forceps delivery varied. Informed consent was obtained from all patients.	<i>Maternal outcome</i> Episiotomy was performed in 98% (n=109/111) The incidence of 3rd/4th degree tear was 7% (3rd degree tear n=8/111, no 4th degree tears). The incidence of the vaginal tears was 33% (n=37/111). The incidence of major obstetric haemorrhage ≥1500mls with successful Kielland’s delivery was 6.3% (n=7/111) with maximal blood loss of 2300mls. Only one patient who sustained 3rd degree tear (3b) had blood loss of 1500mls. There was only one patient who had ≥1500mls with unsuccessful Kielland’s delivery. The incidence of shoulder dystocia was 4.5% (n=5/111). Only in one of the shoulder dystocia cases the fetal weight was ≥ 4500gram. <i>Neonatal outcome</i> The neonates with adverse outcomes were n=12 (n=2 with Apgar <5 at 5 minutes, n=4 with birth injury/trauma including hypoxia, n=2 with meconium aspiration, n= 4 with pH<7.0, no stillbirth, no cases with spinal cord injury). Sixteen of the babies needed resuscitation and two of them were intubated.	Kielland's forceps has high success rates. Our success rate of 94% was within the published ranges of 90-95%. Patients' involvement in their care is very important and for some women Kielland’s forceps delivery is a valid choice, including in cases with multiple pregnancies. Presence of trained skilled obstetrician is crucial