Adherence to Queensland Clinical Guidelines for Early Term Induction of Labour at Townsville University Hospital

Background – There is increased risk of neonatal admission and respiratory morbidity for babies born early term, either vaginally or by caesarean, compared to babies born >39 weeks. Long term evidence shows increased risk of cerebral palsy and special educations needs. Induction of labour (IOL) is financially costly and adds strain to resources/workforce availability. Queensland Health recommend IOL at 37-38+6 for hypertensive disorders, pre-eclampsia, obstetric cholestasis, fetal macrosomia, and prelabour rupture of membranes.

Aim – Review maternofoetal outcomes of early term (k37 – k38+6) induction of labour at Townsville University Hospital and assess whether indications met Queensland clinical guidelines.

Method – Retrospective cohort analysis of 139 patients from December 2021 – May 2022. Data was sourced from electronic medical records and analysed in Microsoft Excel to determine if IOL was clinically indicated and what the maternofetal outcomes were.

Results – IOL was initiated by mechanical dilation (32%, n=44), prostaglandins (19%, n=26) and artificial rupture of membranes/oxytocin (49%, n=69). Delivery modes included vaginal (73%, n=101), vacuum (6%, n=8), forceps (4%, n=6) and caesarean section (17%, n=24). Postpartum haemorrhage occurred in 27% (n=37). Perineal trauma included none (36%, n=50), first degree (27%, n=38), second degree (35%, n=49) and third degree (<2%, n=2) tears. Neonatal APGAR scores were >9/10 for >90% at 5-minutes (n=127). The smallest and largest neonates weighed 2200g and 4590g, respectively. Approximately 30% (n=40) of neonates were admitted to special care or neonatal intensive care units. **Early term induction was appropriately indicated in 58% (n=81) of cases**. Frequently incorrect indications included gestational diabetes (17%, n=24), large for gestational age (11%, n=15), social request (7%, n=10), and reduced foetal movements (5%, n=7).

Conclusions – Townsville University Hospital reported poor adherence to Queensland guidelines for early term induction of labour. Improving junior doctor education and stringent booking criteria aim to mitigate this before reauditing in 2023.

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Indication for IOL* *some women had more than one indication Inappropriate Indications for IOL *based on individual case reviews 24

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