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

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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 – Assess the impact locally implemented strategies had at Townsville University Hospital on improving adherence to the Queensland clinical guidelines for early term induction of labour between 2022 and 2023.

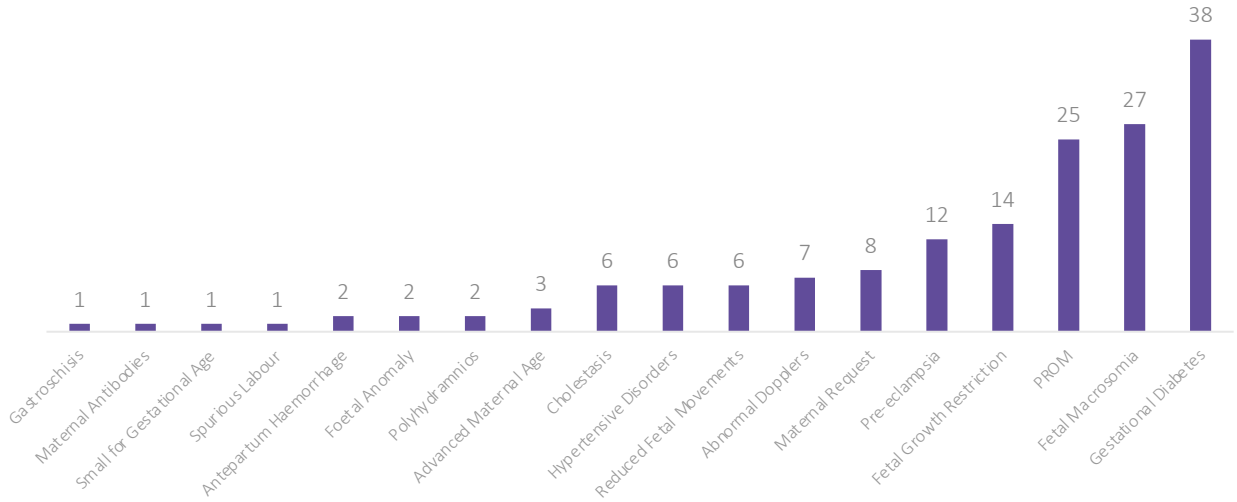
Method – Retrospective cohort analysis of 106 patients from January 2023 – June 2023. Data was sourced from electronic medical records and analysed in Microsoft Excel to determine if IOL was clinically indicated and what the maternofetal outcomes were.

Results – IOL was initiated by mechanical dilation (37%, n=39), prostaglandins (14%, n=15) and artificial rupture of membranes/oxytocin (46%, n=49). Delivery modes included vaginal (64%, n=68), vacuum (5%, n=5), forceps (6%, n=6) and caesarean section (25%, n=27). Postpartum haemorrhage occurred in 30% (n=32). Perineal trauma included none (22%, n=23), first degree (25%, n=26) and second degree (28%, n=30) tears. Neonatal APGAR scores were >9/10 for >90% at 5-minutes (n=106). The smallest and largest neonates weighed 2048g and 4425g, respectively. **Early term induction was appropriately indicated in 71% (n=75) of cases, improved from 58% (n=81) in 2023**. Frequently incorrect indications included gestational diabetes (39%), maternal request (19%), and cholestasis (19%).

Conclusions – Townsville University Hospital reported improved adherence to Queensland guidelines for early term induction of labour in 2023. Improvements have been attributed to improved junior doctor education. A new paper-based booking system been implemented in 2024, which a senior medical officer will exclusively review, to further improve adherence rates.

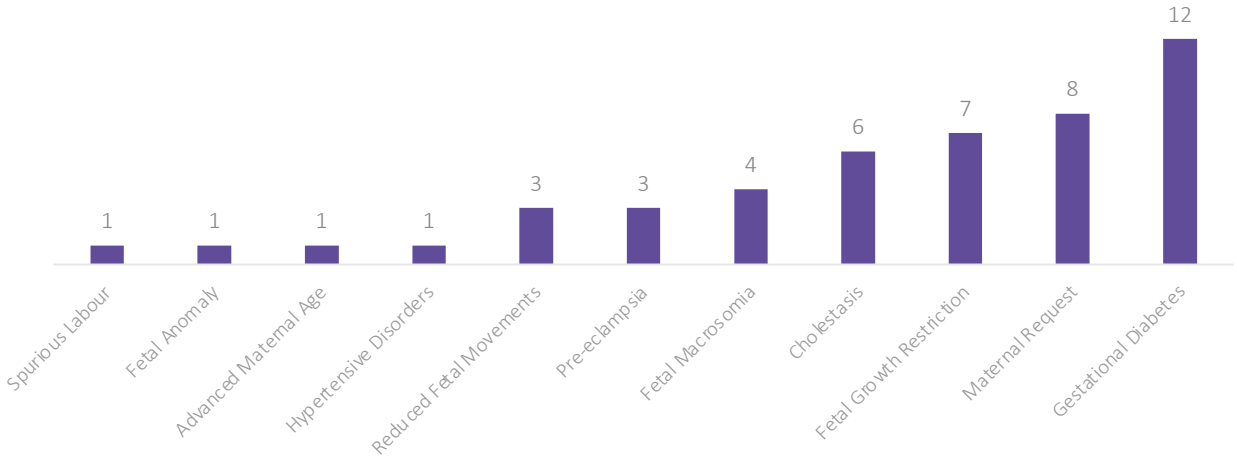
Indication for IOL*

**some women had more than one indication*



Inappropriate Indications for IOL

**based on individual case reviews*



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