

DOES AN ‘AFTER HOURS’ DELIVERY AFFECT THE RATE OF THIRD & FOURTH DEGREE TEARS? A RETROSPECTIVE COHORT STUDY AT A REGIONAL AUSTRALIAN HOSPITAL OVER 3 YEARS

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Abstract

Objective: Does an ‘after hours’ delivery affects the rate of third and fourth degree tears (Obstetric Anal Sphincter Injuries, OASIS) **Design:** a single -centre retrospective cohort study **Setting:** A major regional Australian hospital **Population:** All cephalic vaginal deliveries at 37+ weeks over a 3-year period. Exclusions: previous/planned Caesarean section, prematurity, multiple pregnancies, non-cephalic presentations and models of care other than mainstream consultant-led care. **Methods:** Data collected was age, parity, gestation, body mass index, induction of labour, use of oxytocin, second stage duration, mode of delivery, perineal trauma, episiotomy and birth weight. **Main Outcome Measures:** Compare the rates and risk factors of OASIS between deliveries occurring “in hours” (8am-8pm weekdays) and “after hours” (8pm-8am, weekends and public holidays) **Results:** 2404 patients were included. 57.4% of deliveries occurred ‘after hours’. The overall rate of OASIS was 3.12% with no statistical difference between ‘in hours’ (3.22%) and ‘out of hours’ (3.04%), $p=0.8$. More primigravid deliveries and spontaneous onset of labours occurred ‘out of hours’ (both $p<0.001$). More multigravid deliveries, labours requiring oxytocin and prolonged second stage occurred ‘in hours’ ($p<0.01$). No statistical significance was noted for epidural analgesia (34.0% vs 34.3%, $P=0.85$), spontaneous vaginal birth (90.4% vs 90.1%, $P=0.81$), operative vaginal birth (9.6% vs 9.9%, $P=0.81$) and episiotomy use (17.2% vs 18.4%, $P=0.41$). **Conclusions:** No statically significant difference was noted in the rate of OASIS ‘in hours’ and ‘out of hours’ in our centre.

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OASIS write up. Table 1.docx available at <https://authorea.com/users/601075/articles/632418-does-an-after-hours-delivery-affect-the-rate-of-third-fourth-degree-tears-a-retrospective-cohort-study-at-a-regional-australian-hospital-over-3-years>