

The question if a near-term NB needs level III care for PT remains unanswered.

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UTILITY OF THE FLUID BALANCE IN SICK NEONATES ADMITTED TO THE NEONATAL HIGH CARE WARD

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Background: Fluid balance monitoring is commonly used to assess patient fluid volume status. However, studies on its reliability and usefulness are lacking, particularly in newborns.

Aim: To assess clinical usefulness of recording fluid balances in sick neonates.

Methods: We conducted a randomised, controlled non-inferiority trial in newborns admitted to the high care ward in whom urine output and body weight were assessed daily. Fluid balance data and totals were available in the control group, but were blacked out in the intervention group, thus blinding the attending physician to this information. The primary outcome was hospitalization duration, secondary outcomes included interventions based on information from the fluid balance, and broken randomisation codes by the attending physicians.

Results: 170 neonates were included in the intention-to-treat analysis (mean gestational age 36 weeks 2 days, mean birth weight 2751 gram). Median hospitalization duration was 9 days in the intervention group (n=86) and 8 days in the control group (n=84) (95% CI of difference 0-3 days, p=0.18). No differences in medical interventions influencing fluid status, were reported. The code was broken once.

Conclusion: Recording fluid balance in neonatal high care does not reduce hospitalization duration or medical interventions. This time-consuming and inaccurate method cannot be recommended as a routine procedure in newborn high care.

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OVERWEIGHT AND IRREGULAR MENSTRUAL CYCLE BEFORE PREGNANCY AND PRETERM BIRTH

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Background and aims: Obesity and pre-pregnancy irregular menstrual cycle may independently increase the risk of preterm birth. High body mass index (BMI) and irregular menstrual cycle are both symptoms of the polycystic ovary syndrome (PCOS). The endocrine profile in women with PCOS may further increase the risk of preterm birth. The aim of this study is to investigate the interaction between BMI and irregular menstrual cycle on the risk of preterm birth.

Methods: A population of 55,889 women enrolled in the Aarhus birth cohort was studied. The women were followed during pregnancy and delivery. Self reported data on height and pre-pregnancy weight was used to define 4 groups of BMI: 0-18.5, 18.5-25, 25-30 and >30 kg/m². Groups of self-reported irregular menstrual cycle (yes/no) were used. Odds ratios (OR) of preterm birth, i.e. before 37 completed gestational weeks, determined by ultrasonography, were estimated using logistic regression models.

Results: Compared to normal weight women (BMI 18.5-25) with regular menstrual cycle, the OR's of preterm birth for women with other BMI and cycle characteristics were: Regular cycle; BMI 0-18.5, 1.34 (95 % confidence interval (CI): 1.12; 1.60); BMI 25-30, 1.31 (1.16; 1.48); BMI >30, 1.44 (1.20; 1.73). Irregular cycle: BMI 0-18.5, 1.62 (95 % CI: 1.31; 1.99); BMI 18.5-25 1.12 (1.03; 1.23) BMI 25-30, 1.24 (1.06; 1.45); BMI >30, 1.70 (1.37; 2.10).

Conclusion: Obese women with a pre-pregnancy irregular menstrual cycle had an increased risk of preterm birth. The prevalence of polycystic ovary syndrome is expected to be higher among these women.