

Preliminary report for the effects of a shorter course intramuscular dexamethasone on neonatal respiratory morbidities in term elective lower segment caesarean section deliveries

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ABSTRACT

Introduction: The use of intramuscular dexamethasone injections before an elective caesarean delivery at term has been shown in multiple randomised controlled trials to reduce the rates of transient tachypnoea of the newborn, admission to neonatal care and the need for mechanical ventilation. There have been studies suggesting that partially completed intramuscular corticosteroids can be beneficial in preterm deliveries, therefore we aim to establish if half the regime dose of dexamethasone can demonstrate any benefit for term elective caesarean section deliveries. **Objectives:** A retrospective observational study comparing neonatal respiratory morbidities before and after the single dose 12 mg dexamethasone was implemented in our obstetrics and gynaecology centre for term elective caesarean section deliveries between 37 to 38 weeks. **Methods:** We compared the rates of admission to neonatal care, the need for mechanical ventilation and the rate of transient tachypnoea of the newborn in the first half of the 2019 without intramuscular dexamethasone injections against the second half of the year when a single dose intramuscular dexamethasone was given. **Results:** The findings showed that the rate of admission to neonatal care was lower in the single dose intramuscular group (OR 0.97, n=674, p-value 0.88), the need and duration for mechanical ventilation was also lower (OR 0.98, n= 674, p-value 0.95) compared to the group without intramuscular dexamethasone given. **Conclusions:** This retrospective study showed that there were lower rates for neonatal admission and mechanical ventilation when 12 mg dexamethasone was given however, no statistically significant differences were demonstrated for these findings.

Is there an association between semen volume and age?

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ABSTRACT

Introduction: Cellular and physiological alteration in aging men's genitourinary tract cause seminal vesicle insufficiency and prostate changes. These changes resulting in smooth muscle atrophy, decreased protein and water content, thus decreased ejaculate volume. **Objectives:** This study aims to determine the association between semen volume and age of men. **Methods:** This is a retrospective study involving 1,775 men that had semen analyses done at KL Fertility Centre, Malaysia from January 2016 to December 2017. The World Health Organization (5th edition) semen parameters was used as reference. Data was analysed using One-way ANOVA and Pearson Correlation, SPSS version 22. **Results:** The men were divided into three age groups: 20-39, 40-59 and 60-79 years old which accounted for 78.6% (n=1395), 20.6% (n=366) and 0.8% (n=14) of total respectively. The youngest and oldest men were 22 and 70 years old with an average age of 35.88 years old. The mean semen volumes per ejaculate for men aged 20-39, 40-59 and 60-70 were 2.73 ml, 2.53 ml and 1.96 ml respectively, with the average of 2.5 ml across all age groups. The one-way ANOVA showed significant difference in semen volume from different age groups ($p < 0.05$) especially for men aged 60 to 79. This group showed significantly lower semen volume compared to the other two groups ($p < 0.05$). Pearson Correlation test also showed that semen volume was significantly reduced with age ($p < 0.01$, $R = -0.09$). **Conclusions:** This study showed that semen volume significantly reduced as men aged. Factors such as environmental, occupational, medical condition and living lifestyle can attribute to the decrease in semen volume and can be examined in future study.