MATERNAL CORTICOSTEROIDS FOR ACCELERATING FETAL LUNG MATURITY AND MAGNESIUM SULPHATE FOR NEUROPROTECTION: HOW COMPLIANT CAN WE BE?



Dr. A. Arungunasekaran, Senior clinical fellow, Wrexham Maelor hospital Mr. B.A.S. Fernando, Consultant, Wrexham Maelor hospital



INTRODUCTION

Corticosteroids and magnesium sulphate are two important drugs administered to women having preterm birth. Most obstetric societies recommend their use to reduce neonatal morbidity and mortality. Corticosteroids are also given to women having elective term Caesarean delivery before 39 weeks to reduce respiratory morbidity of the newborn.



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To check coverage of steroid in preterm birth and elective caesarean, type of drug, dosage, any adverse effects. Assess how many women received Magnesium sulphate for neuroprotection in preterm birth.



METHOD

A retrospective audit was performed from January 2017 to December 2017 at our DGH. Women who had preterm births before 36 weeks and women who had elective caesarean before 39 weeks were included in the audit.



RESULTS

Elective Caesarean: Out of the 62 women,11 (17%) women did not receive steroids. 2 of them had uncontrolled diabetes, 7 had caesarean 1-3 days prior to 39 weeks to accommodate in the list, as elective caesarean list was performed only 3 days a week. Our booking forms showed elective Caesarean requested at 39 weeks. One caesarean was brought forward due to maternal request and steroids not given due to insufficient time and in one woman steroid was missed.

Preterm births: 85 notes were analysed. 5 women did not receive steroids, 3 of them came in advanced labour. Other two women had emergency caesarean, one for abruptio placenta and other for pathological CTG.

Adverse effects of corticosteroids: Totally, 3 women with Diabetes developed high blood glucose following steroids.

Dose & type of steroid used: 9 women received only one dose of steroid as they delivered before 12 hours. 69% received 2 doses of Betamethasone 12mg at 24 hours interval and 19% received at 12 hours interval. 4 women received Dexamethasone.

Magnesium sulphate: As per the local health board policy, we offer magnesium sulphate for neuroprotection for women delivering before 30 weeks. 6 out of 12 women delivered before 30 weeks, received Magnesium sulphate and the remaining 6 women had immediate delivery.



CONCLUSION

In our unit we have achieved 94.1% compliance in providing antenatal steroid in preterm births. It may not be practically possible to achieve 100% compliance due to reasons like advanced labour or need for emergency delivery. One of our recommendations is to request for caesarean 39-40 weeks in booking form to avoid elective caesarean before 39 weeks and thereby reduce neonatal respiratory morbidity.



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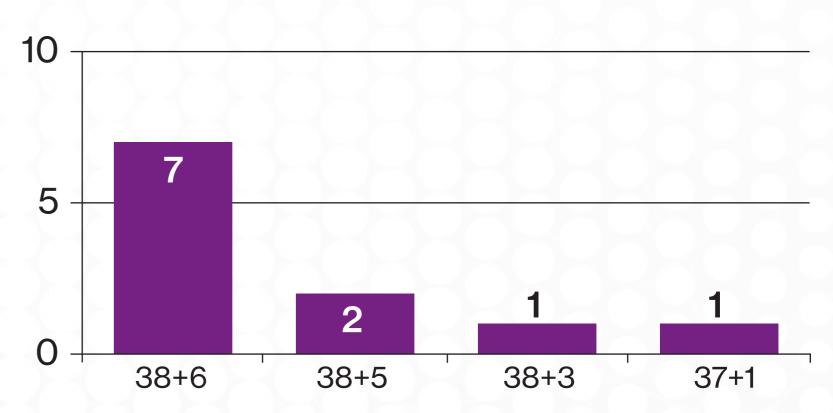
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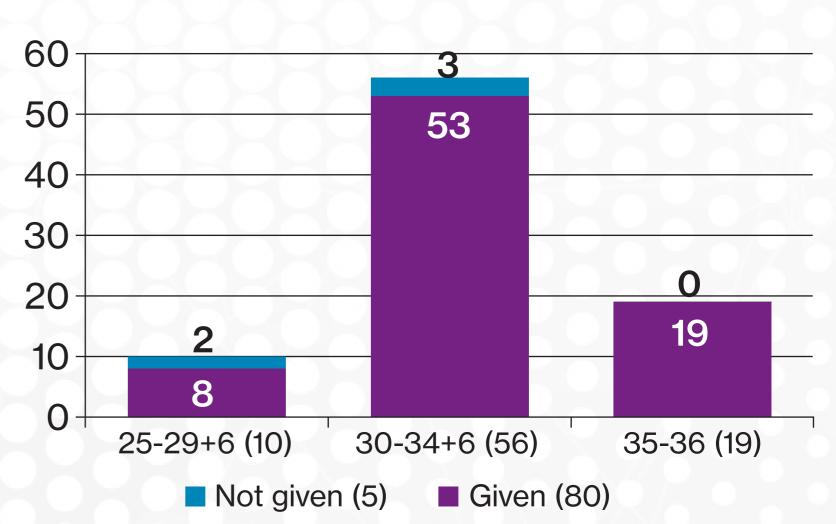
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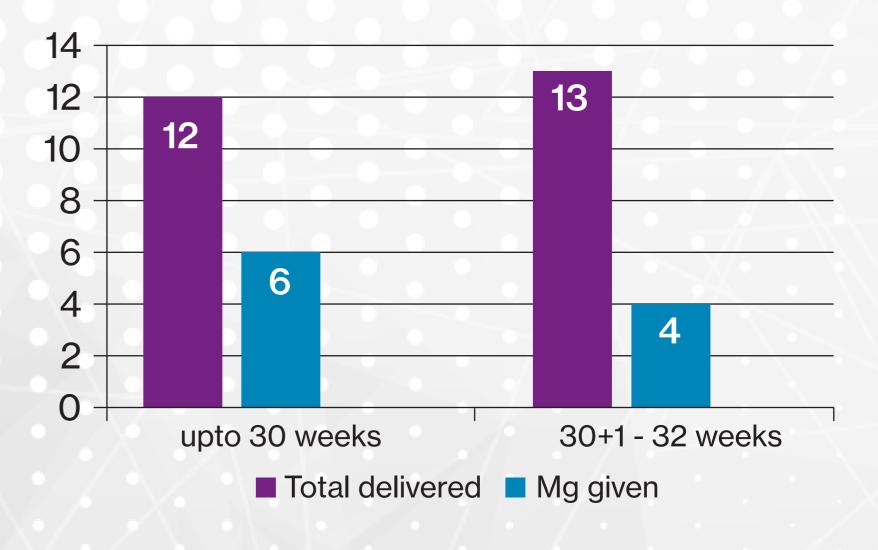
Elective Caesarean group – Not received steroid 11/62



Steroid 94% compliance in preterm group



Magnesium sulphate compliance



Type of steroid administered

