PREMEDICATION FOR NEONATAL INTUBATION: CURRENT PRACTICE IN THE TERTIARY NEONATAL UNITS IN THE UNITED KINGDOM

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Background Evidence clearly shows that awake intubation is associated with a significantly higher intracranial pressure, higher blood pressure, and more variable heart rate than premedicated intubation. The last national survey was over 10 years ago. Recently there has been promising research on use of Propofol during neonatal intubation which showed it to be more effective than the morphine, atropine and suxamethonium.

Aims To establish and up to date census on the current use of premedication drugs to facilitate neonatal intubation in the UK tertiary neonatal units.

Design and methods Telephone survey included all the 44 tertiary neonatal units in the UK. Professionals were asked about their current practice in use of premedication drugs during neonatal intubation.

Results 44 tertiary neonatal units were contacted and all units use pre-medications to facilitate intubation in the UK tertiary neonatal units. A prospective study in a tertiary neonatal unit in the UK showed that six different premedication drugs are being used in ten different combinations. Preparation and administration of these premedication drugs, especially regimen having controlled drugs, may take significantly longer time and may delay intubation.

Aims and objectives: To study the time taken for preparation and administration of commonest drug regimen (combination of Fentanyl, Atropine and Suxamethonium).

To study its efficacy during neonatal intubation.

Design and methods A prospective study in a tertiary neonatal unit in the UK included elective and semi-elective intubations. Neonatal intubations done in the delivery suite and emergency situation, where patient was collapsed, were excluded.

Results Data was collected from use of premedication drugs during 24 neonatal intubations. Mean time taken to obtain and prepare premedication drugs was 18 minutes (Range: 3–94 minutes) and mean time taken to administer premedication drugs was 3 minutes (Range: 1–10 minutes).

Mean time taken from insertion of laryngoscope in mouth to successful intubation was 5 minutes (Range: 1–24 min) and mean number of attempts were 2 (Range: 1–7 attempts). Only 8% cases needed repeat premedication drugs.

Conclusion The average time taken for preparation and administration of three premedication drugs was 18 minutes which is significantly longer than expected for emergency situations. Use of single un-controlled premedication like Propofol can be quick and cost effective. Is this time to change our practice or do we need more randomised trials to study the efficacy of Propofol?