Manitoba
Health, Healthy Living and Seniors

Manitoba Health, Healthy Living & Seniors (MHHLS) supports reporting and learning from patient safety events. The focus of a patient safety review is to closely look at the health care system that surrounds and interacts with those giving and receiving care. The goal is to identify risks to patient safety and recommend the most effective ways to minimize risk and improve the delivery of healthcare.

Patient Safety Learning Advisory

Neonatal Death

Summary:

A primipara (giving birth for the first time) patient was admitted to an acute care centre at 0043h. Due to a failure to progress in labor despite labour induction/ augmentation medication, the patient underwent an emergency Cesarean Section (C-Section). Following the C-Section (birth time noted as 2128h), the neonate had severely depressed apgar scores. The neonate was transferred to a tertiary care facility and passed away.

Keywords:
Neonatal death, Obstetrics, Labour and Delivery

Device Name *(if applicable)*: **N/A**

Drug/Name/Fluid Name: (*if applicable*): **N/A**

Type of Analysis: single event

Topic: Obstetrics, Labour and Delivery

Findings of the Review:

Potential concerns regarding the palpation/timing of contractions in relation to the fetal heart rate decels (early verses late) were not recognized in a timely manner and increased the likelihood there was the possibility of a compromised condition in the neonate.

Many factors may have contributed to the compromised condition of the fetus/neonate as many differing diagnosis's were being considered during treatments from establishing the challenging airway, whether the fetus had an infection inutero from the placenta, or whether the neonate aspirated meconium, or whether the neonate had wet lung disease at the time of the birth all of which may have contributed to the delay in antibiotic administration to the neonate which in turn may have increased the likelihood of worsening pneumonia as the infection was not initially recognized.

The lack of fetal heart rate monitoring during OR prep may have increased the likelihood that the possible compromised condition of the neonate would go unrecognized prior to the C-Section.

The lack of a central storage space for neonatal resuscitation equipment in the OR may have increased the likelihood of perceived time delays during the resuscitation.

Scalp lactate testing availability may have provided the health care providers with additional tools to assess whether the neonate was compromised earlier during the labour.

System Learning:

Continue the mandatory annual education for all obstetrical staff ensuring this includes, but not limited to:

- PV exams on admission, palpating contractions, recording contractions, Toco monitor and positioning when fetal heart rate is questionable, fetal heart rate in relation to decels, early decels verses late decels, continuous fetal monitoring while on syntocinon augmentation, ambulation after syntocinon increase, and fetal monitoring during OR prep
- Neonate antibiotic administration, the importance of clear communication regarding the presence/absence of meconium, obtaining cord blood from the placenta, documenting neonatal resuscitation, and general neonatal appearance post delivery.

Create a storage area in the OR to hold all the necessary extra neonatal resuscitation equipment that is convenient and easily accessible to all health care providers.

Determine the efficacy of scalp lactate testing for fetal blood sampling during labour for all obstetrical sites.

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