LIBERTY HEALTH ENHANCING LIFE THROUGH PERINATAL SAFETY

I. GOALS

- Implement & promote patient safety practices that decrease the probability of patient injury & thereby reduce liability risk.
- Share best practices & lessons learned.
- Create a patient safety culture that promotes safety and quality improvement
- Utilize a multidisciplinary team approach to care
- Establish effective communication with standardized nomenclature
- Standardize policies, procedures & clinical practices in accordance with recognized national standards & best practices.
- Promote transparency with reporting and disclosure of adverse events including patient apology

II. KEY ELEMENTS OF PERINATAL SAFETY

- Adopt nationally recognized nomenclature for interpretation of all electronic fetal monitoring (National Institute of Child Health & Human Development nomenclature-NICHD)
- Certification in electronic fetal monitoring
- Standard protocols for the safe use of oxytocin for induction and augmentation of labor
- Monitoring system of obstetrical care management and oxytocin use

III. OBJECTIVES

1. To reduce uterine hyperstimulation
2. To identify indications and contraindications for labor induction
3. To describe individual responsibilities for managing the patient receiving oxytocin for induction or augmentation of labor
4. To discuss interdepartmental teamwork, communication, and collaboration
5. To describe documentation

IV. IHI ELECTIVE INDUCTION BUNDLE ELEMENTS

- Assess gestational age to ensure that the gestational age is $\geq$ 39 weeks
- Monitor fetal heart rate for reassurance of fetal status
- Assess pelvis to determine dilation, effacement, station, cervical position and consistency, and fetal presentation
- Monitor and manage hyperstimulation (tachysystole)

V. IHI AUGMENTATION BUNDLE ELEMENTS

- Document estimated fetal weight
- Monitor fetal heart rate for reassurance of fetal status
- Assess pelvis to determine dilation, effacement, station, cervical position and consistency, and fetal presentation
- Monitor and manage hyperstimulation (tachysystole)

VI. SAFETY CLIMATE BUNDLE ELEMENTS

A. Safety Climate

- Initial & periodic safety survey

B. Team Work and Communication

- Provide ongoing formal team training to all perinatal staff
- Require EFM certification for perinatal staff

- Conduct ongoing simulated rapid response drills to assess response to emergent situations (e.g. maternal hemorrhage, shoulder dystocia)
- Daily interdisciplinary rounds
- Implement standardized communication strategies (e.g. SBAR) for "hand-offs, critical situations, escalation
- Incorporate use of standardized nomenclature in all communications: verbal, documentation, EFM interpretation

VII. ADVERSE OUTCOME MEASURES

A. Maternal Indicators

1. Maternal death
2. 4th degree perineal laceration
3. Maternal Blood Transfusion
4. Return to OR
    - Evacuation of hematoma of vulva or vagina
    - D & C following delivery
    - Reclosure of postoperative disruption of abdominal wall
    - Surgical occlusion of abdominal vessels
    - Control of hemorrhage
    - Aspiration curettage following delivery
5. Unplanned Maternal ICU Admission
6. Uterine Rupture

B. Neonatal Indicators

1. Intrapartum Neonatal Death $\geq$ 2500grams (excludes cases of congenital anomalies & fetal hydrops)
2. Birth Trauma
    - Subdural and Cerebral hemorrhage
    - Injuries to the skeleton
    - Injury to spine and spinal cord
    - Facial nerve injury
    - Injury to brachial plexus
    - Other cranial and peripheral nerve injuries
3. APGAR 5 < 7
    - Birthweight $\geq$ 2500 grams (excludes cases of congenital anomalies & fetal hydrops)
4. Admission to NICU
    - Birthweight 2500 grams, gestational age 37 weeks (excludes cases of congenital anomalies & fetal hydrops)

IV. GUIDELINES

A. HYPERSTIMULATION

a. Definition

- > 5 contractions in 10 minutes, each lasting > 45 seconds for 30 minutes
- pattern of contractions with duration of 120 seconds or longer for 30 minutes
- Contractions of normal duration occurring within one minute of each other (less than one minute between the end of the first & the beginning of the second contraction) for 30 minutes
- Insufficient return of uterine resting tone to baseline between contractions by manual palpation, or intrauterine pressure above 25 mmHg between contractions recorded by IUPC for 30 minutes.

b. Indications for Induction

- Pregnancy –induced hypertension

- Premature rupture of membranes
- Chorioamnionitis
- Suspected fetal jeopardy as evidenced by biochemical or biophysical indications (e.g. fetal growth retardation, post-term gestation, isoimmunization)
- Maternal medical condition (e.g. diabetes mellitus, renal disease, COPD)
- Fetal demise

7.2Any time oxytocin is decreased or discontinued and time it is restarted via physician order (on EFM tracing and L&D nursing intake and output flow sheet in QS system).
7.3Document within 15 minutes after infusion initiated and/or restarted:
7.3.1 Notification of the physician/CNM of oxytocin initiation and/or restart dose.

III.Teamwork and communication practices
•On-going team development continues, to varying degrees, at each hospital
•Most hospitals have adopted & continue to incorporate formal teamwork & communication practices
•e.g. Daily or twice daily interdisciplinary patient care conferences on L&D
•SBAR*educational materials available on MCIC web site http://ps.mcicvermont.com

*The SBAR (Situation-Background-Assessment-Recommendation) technique is a framework for communication among health care team members.

•Staff education
–Coordinating Team, ERT Team, Core Teams
–Team concepts and communication skills
–Debriefings
•Observation & coaching to reinforce skills

•Use the "CUS"words to alert the receiver to the level of concern regarding the patient's safety
–C-I'm concerned
–U–I'm uncomfortable
–S–I'm scared
•Use "SBAR"Brief to focus communication
–S-Situation -describe
–B –Background -concise and focused
–A–Assessment -concise and focused
–R–Recommendations -what needs to happen

•Close the loop -After communicating the patient/situation information, ask the provider:
–What do you want done until you get here?
–How long before you will be here?
–"Should I call someone else?"or "I am going to call someone else because the situation / patient cannot safely wait that long."

•Do Event& Shiftreviews (DEBRIEFINGS)
–? For each case
•Always ask as a team:
–What did we do well?
–What could we have done better?
–What did we learn?

IV.Electronic fetal monitoring (EFM)
•100 % targeted physicians & nurses at all MCIC hospitals have taken the Electronic Fetal Monitoring Exam
•Hospital pass rates generally exceeded 90%. Pockets of nurse failures.
•Most individuals who failed typically passed on second attempt. (with exception of a few postpartum/antenatal staff)

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