RISK CASE STUDY

Case: Vaginal Birth after Prior C-Section

Abstract:

A multipara patient experienced a uterine rupture trialing a VBAC delivery in the hospital birth setting. Team communication practices were identified as an underlying contributing factor.

Key Words:

Obstetrics

Acute Care

Interprofessional Communication

Monitoring

Uterine Rupture

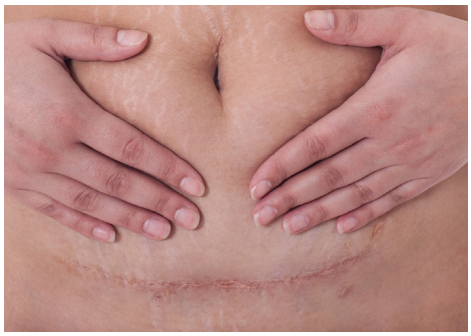
Vaginal Birth after Prior Caesarean Section

Patient Deterioration

Case summary:

A gravida 3 para 2 woman was admitted to a tertiary care hospital at 41 weeks gestation. While the patient's current pregnancy had been uneventful, the patient had a history of pregnancy-induced hypertension and placenta abruption during prior pregnancies. At the time of admission, the patient reported contractions every 3 to 5 minutes and indicated that she would like to trial a vaginal birth after prior caesarean (VBAC). (The patient later confirmed her obstetrician had previously informed her of the risks (e.g. uterine rupture)).

Three hours after the patient's admission, the attending obstetrician examined the patient and performed a vaginal exam, noting the patient was 2 cm dilated. An artificial rupture of the membranes was completed however, no fluid was noted.



Half an hour later, the patient was placed on an electronic fetal monitor (EFM), which indicated a baseline fetal heart rate (FHR) between 120 -130 beats per minute (bpm) with average variability. Over the course of the next hour, the nurse observed several FHR decelerations.

Twenty-five minutes later, the patient requested an epidural. Prior to the insertion of the epidural, a second vaginal exam was conducted, which indicated the patient remained at 2 cm dilation. At this time, the nurse notified the attending physician of the continuing FHR decelerations.

Four hours later, a third vaginal exam was conducted, and the patient was determined to be 5 cm dilated and 90% effaced. The attending obstetrician ordered IV oxytocin, as per organizational protocol. Three hours later, the patient began to express feelings of considerable pressure. While the FHR was stable, with average variability, the patient continued to complain of pressure and refused vaginal examination by the involved nurse.

The nurse subsequently paged the attending obstetrician. Over the course of the next hour, the nurse experienced increasing difficulty monitoring the FHR. Despite repeated pages, the attending obstetrician did not present to the patient's room until over an hour later. Six minutes after the arrival of the attending obstetrician, the patient delivered an infant noted to be flat at birth, without respirations or heart rate.

Subsequent cord gas results suggested the infant sustained brain damage prior to the birth – i.e. during labour. The infant was later diagnosed with hypoxic ischemic encephalopathy (HIE) and cerebral palsy.

Medical legal findings:

Expert review of the case was critical of the care provided to the patient, believing that while the involved nurse had engaged in substantial efforts to monitor and document the fetal status, the nurse had failed to take further steps to alert the attending obstetrician, after signs of fetal deterioration became evident. Further investigations into the case later revealed the attending obstetrician's pager had been set to silent at the time of the incident impacting a timely attendance.

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Reflections:

Reflecting on your practices as well as your facility's fetal monitoring and VBAC policies, procedures and processes:

1. The patient was being monitored via intermittent electronic fetal monitoring. Reflecting on your local policy, what method of fetal surveillance is recommended/required for patient's wishing a VBAC? Who is 'authorized' to make the decision as to the type of fetal surveillance? Describe some of the clinical triggers for the use for continuous electronic fetal monitoring?
2. According to the health record, the nurse documented several instances were fetal heart rate decelerations were observed. Is it sufficient to document 'decelerations noted'? If not, what should be recorded and why?
3. IV oxytocin was ordered by the obstetrician in line with the hospital's protocol. While not evident in this case, discuss whether nurses and midwives are professionally accountable for their decision to implement a physician's order for IV oxytocin in the presence of an abnormal fetal heart pattern.
4. Over the course of an hour, the nurse experienced difficulties monitoring the fetal heart rate before contacting the obstetrician. Reflecting on your local policies, was this the correct course of action? If not, what should have taken place?
5. Despite repeated pages, the obstetrician did not attend the patient's room until an hour later. Reflecting on your local policies, would it be acceptable to wait an hour? Describe the formal contingency plans in place at your facility for such circumstances.

Date last reviewed: October 2017