

Unusual Cause Of Unresponsiveness During The Second Stage Of Labor

America V. Oujevolk, MD, Claudia A. Christman, MD, and John Altrocchi, PhD

Unresponsiveness during labor is an extremely uncommon event. Differential diagnosis includes catastrophic events, such as abruptio placentae, uterine rupture, cardiac arrhythmias, or neurologic events. Rapid assessment and diagnosis are important for fetal and maternal well-being. If temperature, blood pressure, pulse rate, and findings from a physical examination are not consistent with a catastrophic event, a psychiatric process should be considered. We report a case of a young Hispanic woman who became unresponsive during the second stage of labor. The differential diagnosis is reviewed and a probable psychiatric process is discussed.

Case Report

A 23-year-old Hispanic woman, gravida 2, para 1, came to the hospital in active labor at term. Her obstetric history was notable for a previous Cesarean section with low transverse uterine incision because of fetal distress during the second stage of labor and failed vacuum extraction. Her medical history was unremarkable, and the patient denied drug, alcohol, or tobacco use. Her prenatal course for this pregnancy had been complicated by poor progression of fundal height noted at 37 weeks' gestation, and the patient was examined for intrauterine growth retardation at that time. Obstetric consultants believed findings on her examination and sonogram to be consistent with a normal variant and recommended serial nonstress tests. Because these tests elicited no evidence of fetal distress, it was believed that she was a candidate for vaginal birth after Cesarean section.

When she arrived at the hospital, the patient's cervix was dilated to 6 cm. She continued through the first stage of labor with no medications.

Approximately 1 hour after admission, the patient had artificial rupture of membranes with clear fluid, and an intrauterine pressure catheter was placed to enhance fetal monitoring. The patient progressed to the second stage of labor 1½ hours after admission. The second stage of labor lasted 65 minutes. During that time the patient's spouse, nursing staff, and various physicians were present. The patient was encouraged to push appropriately during contractions, but she became increasingly unresponsive. After 30 minutes she was totally unresponsive. Her temperature, heart rate, and blood pressure remained stable, fetal monitoring was reassuring, as there were no signs of distress, and uterine catheter pressure monitoring continued to show a good labor pattern. The patient was unresponsive to verbal and noxious stimuli, including sternal rub, ammonia capsule for olfactory stimulation, and loud verbal stimulus. When the patient's eyelids were retracted, only sclerae were visible, making pupillary examination and doll's eyes maneuver impossible. Immediately before becoming unresponsive, the patient ceased any effort to push with her contractions; instead, she forcibly crossed her legs. Despite a good contraction pattern, there was no further progression of fetal descent, so a vacuum extractor was applied with successful delivery of a vigorous female infant whose Apgar scores were 9 and 9 at 1 and 5 minutes, respectively. After the fetal head crowned, the patient became alert and responsive and asked for the infant. She continued to bond well with the infant.

During the postpartum hospitalization, the patient had normal findings on a neurologic examination, and a brief psychiatric evaluation was obtained. It was noted that the patient reported a sense of shutting herself off to pain 6 years ago following a motor vehicle accident and that she had no recollection of this final stage of labor. Further workup was recommended, but the patient refused, and the consultant's final note stated "rule out conversion reaction." Postpartum, the patient was lost to follow-up, although the infant was seen briefly for poor weight gain.

Submitted, revised, 9 May 1995.

From the Department of Family Community Medicine (AVO, CAC) and the Department of Psychiatry and Behavioral Sciences (JA), University of Nevada School of Medicine, Reno. Address reprint requests to America V. Oujevolk, MD, UNR Brigham Bldg/316, Reno, NV 89557-0046.

Discussion

Unresponsiveness during labor is extremely uncommon. In the face of unstable temperature, heart rate, blood pressure, and fetal distress, differential diagnosis would include placental abruption, intrauterine rupture, cardiac arrhythmias, and cerebral hemorrhage.¹⁻³ In this case, maternal and fetal temperature, heart rate, and blood pressure remained normal; therefore, a catastrophic event was unlikely. During the second stage of labor, the patient became less responsive to verbal encouragement until she finally became totally unresponsive, even to noxious stimuli. Immediately after delivery the patient was alert and oriented and appropriately asked to see the baby. No evidence of disorientation or postictal confusion was found. As noted in the psychiatric evaluation, the patient denied memory of the second stage of labor. She also stated that during her episode of amnesia following the motor vehicle accident 6 years earlier, she was trying to escape from all pain. During her first delivery the patient remained alert during her second stage of labor; however, she underwent primary Cesarean section after a failed vacuum extraction. At that time no unusual behavioral phenomena occurred, although nursing notes did mention the patient to be stoic or very quiet.

When biomedical causes for unresponsiveness during labor have been ruled out, it makes sense to look for a psychiatric process as an explanation. The most likely psychiatric process involved in such a trancelike state with amnesia is dissociation, the artificial separation of elements of mental functioning, such as memories, thoughts, and feelings, from each other.⁴ The clinical observation that supports the hypothesis of dissociation is that on questioning about the period of amnesic unresponsiveness, the patient stated that 6 years earlier she experienced a similar episode of amnesia after being involved in a motor vehicle accident. She stated that at that time she was trying to escape from all pain. Escape from pain is the classic and most frequent motive force driving dissociation.⁴

The revised 3rd edition of *Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R)*⁵ defines five dissociative disorders: psychogenic amnesia, psychogenic fugue, multiple personality disorders, depersonalization disorder, and dissociative disorder not otherwise specific (NOS).

The hallmark symptom of these disorders is a sudden temporary alteration in the normally integrated functions of consciousness, identity, and motor behavior in such a manner that one or two of the functions cease to perform in concert with the others. A continuum exists with a minor, non-pathological form, such as daydreaming, on one end of the continuum, progressing to a pathologic state, such as multiple personality, on the opposite end.⁴ From this point of view, dissociative disorders are not characterized by a single symptom or set of symptoms that qualitatively differentiate normal from abnormal, but rather by quantitative differences in the frequency, extent, or intensity of dissociative symptoms.⁶ Three principles characterize pathological dissociation: (1) the individual experiences an alteration in his or her sense of identity, (2) there is a disturbance in the individual's memory for events occurring during a period of dissociation, and (3) most dissociative disorders are traumatically induced.⁴ The diagnostic hypothesis that best fits this case is that the patient dissociated to avoid the pain of the second stage of labor. She ceased dissociating when major pain ceased. This process and disorder can occur in conjunction with a variety of medical and surgical procedures, including birth.⁷

Summary

This case report illustrates an unusual occurrence during the second stage of labor. After appropriate evaluation for life-threatening causes, a psychiatric process must be considered. Although our patient refused further psychological evaluation, we believe that she exhibited a trancelike state during the second stage of labor and suffered from amnesia in which one awakens to the current situation.⁴ It is known that certain individuals are predisposed to dissociate in response to stress.⁶ According to our patient's history, she seems to fall into this category. Although those involved in obstetric care must remain alert to the possibility of catastrophic events intrapartum, we must also remember to consider unusual psychiatric processes.

References

1. Leung AS, Leung EK, Paul RH. Uterine rupture after previous cesarean delivery: maternal and fetal consequences. *Am J Obstet Gynecol* 1993; 169:945-50.
2. Nakagawa H, Yoda K, Fujiwara A, Tanaka Y, Miyazaki M. Painless delivery under lumbar epidural anesthesia for a pregnant woman with syncope

- caused by paroxysmal ventricular tachycardia. *Masui* 1989; 38:560-2.
3. Creasy RK, Resnik R. *Maternal and fetal medicine: principles and practice*. 2nd ed. Philadelphia: W.B. Saunders, 1989.
 4. Putnam FW. *Diagnosis and treatment of multiple personality disorder*. New York: Guilford Press, 1989.
 5. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 3rd ed., revised. Washington, DC: American Psychiatric Association, 1987.
 6. Kihlstrom JK, Glisky ML, Angiulo MJ. Dissociative tendencies and dissociative disorders. *J Abnorm Psychol* 1994; 103:117-24.
 7. Moleman N, van der Hart O, van der Kolk BA. The partus stress reaction: a neglected etiological factor in postpartum psychiatric disorders. *J Nerve Ment Dis* 1992; 180:271-2.