Obstetric Anesthesiology Outreach in China: 'No Pain Labor n' Delivery' Project

Abstract Type: Case Report/Case Series
Sasso B. Sasso, M.D.; Feyce Peralta, M.D.; Ling Qun Hu, M.D.; Cynthia A. Wong, M.D.; Christopher R. Cambic, M.D.
Northwestern University

According to the 2007-08 World Health Organization (WHO), the Cesarean delivery rate in China is 46.2%, of which 11.7% are considered without medical indication (1). The high elective Cesarean delivery rate has been attributed to financial compensation to the obstetricians as well as the fear and anxiety of pain in Chinese women during labor and delivery. Currently less than 1% of laboring women in China receive continuous labor epidural analgesia. The 'No Pain Labor n' Delivery' project aims to increase awareness by Chinese patients, obstetricians, and anesthesiologists of the risks and benefits of labor analgesia.

'No Pain Labor n' Delivery' is an outreach project that was developed in 2008 by Dr. Ling Qun Hu, and the initial outreach site was Hangzhou, China. The project's objective is to increase the epidural analgesia rate by 10% and to establish training centers at 10 Chinese hospitals over a 10-year time period.

The central design of the project is to send anesthesiologists, residents, obstetricians, and labor nurses from established institutions in the United States to pre-selected Chinese hospitals to increase the safe use of neuraxial analgesia in the labor and delivery units. Practical considerations of implementing an effective program for labor analgesia include dedicated personnel and readily available drugs and equipment. The outreach members emphasize patient safety, peripartum evaluation of each patient, conversion of neuraxial labor analgesia to surgical anesthesia if Cesarean delivery is indicated, and the importance of following complications of epidural and spinal placement.

The 2010 project of 'No Pain Labor n' Delivery' took place in Beijing, Wenzhou, and Taizhou, where multidisciplinary teams provided one week of 24-hour service and training to increase neuraxial labor analgesia. In order to improve communication, an electronic platform, 'Baby on Board,' was introduced that allowed patient tracking during the course of labor and improved communication among the healthcare team. A bilingual obstetric anesthesia protocol was developed to guide daily practice. The outreach project also included educational conferences of evidence-based reviews of the current obstetrical anesthesia practice.

Among the challenges encountered during this outreach project were a different cultural expression of pain by parturients, resistance among healthcare workers to assess the effectiveness of labor analgesia, and the interaction between nurses and physicians (e.g., nurses do not want to disturb the physician if a patient is in pain).

Future directions of 'No Pain Labor n' Delivery' include additional sites, including Shanghai, Nanjing, and Wuxi for August 2011. Additionally, multiple collaborative research projects are underway to establish the financial impact of increasing the use of neuraxial labor analgesia and the overall maternal morbidity and mortality rate after implementing the program.

1. Lancet 2010; 375: 490-9