

P-9

THE USE OF VIDEO TAPES OF SPECIFIC ERRORS AS AN ADJUNCT TO TEACH EPIDURAL TECHNIQUE *Birnbach, D.J., Marengo, J.F.; Kerimoglu, B.; Stein, D.J.; Santos, A.C. Anesthesiology, St. Luke's-Roosevelt Hospital Center, Columbia University, New York, NY* Introduction: Videotaping of residents performing epidural analgesia on laboring women and subsequent review of the videotapes has been shown to enhance performance (1). The aim of this preliminary study was to determine whether reviewing a videotape collection of commonly occurring errors performed by others would also enhance teaching. Methods: An exam was prepared and was administered to ten residents who were taught via conventional practices (no video) and to 4 residents who viewed videotapes of epidural errors as part of their instruction. The residents were asked a total of ten questions, such as: How does povidone iodine work and how should it be applied? What is the optimal management of a catheter that becomes intravascular during placement? How do you manage a catheter that can only be threaded two cm into the epidural space? How far should the catheter be threaded into the epidural space? What intravenous fluid should be administered prior to an epidural for labor and how much fluid is optimal in a healthy parturient? Results: Prior to use of the videotape, our educational objectives were not being met. Of the ten residents who were taught by conventional methods, 70% answered 4 or more questions wrong. The 4 residents who have been taught using the video tape collection of errors, however, have answered all questions correctly. The video will be shown and the questions outlined at the SOAP meeting. Discussion: It has been previously reported that self-assessment by residents of videotapes obtained while they were initiating epidural analgesia enhances performance (1). That study, however, did not differentiate between the benefit of viewing of one's own errors versus simply viewing a videotape. These preliminary data suggest that self-assessment may not be necessary, but that resident education may improve by observing the videotaped missteps of others. If further study confirms this finding, a video library of errors considered important for residents to learn can be easily prepared, individualized, and used in different institutions. A randomized study comparing knowledge and skills following either self-assessment or video review of the performance of others will be undertaken and should help determine if self assessment is necessary. *1. Anesthesiology 2002;96: 5-9*

P-10

MEDICAL STUDENT EDUCATION IN OB ANESTHESIOLOGY: CONNECTING BASIC AND CLINICAL SCIENCES IN A NEW MEDICAL SCHOOL CURRICULUM *Wissler, R. Anesthesiology and Obstetrics & Gynecology, University of Rochester School of Medicine and Dentistry, Rochester, NY* The new "double-helix" medical student curriculum at our institution includes a two week block of advanced basic science after each ten week inpatient core clinical rotation during the third year of medical school. OB anesthesiology is an ideal topic for a one-day module in the advanced basic science block that follows the pediatric and OB/Gyn core clerkship. The "double-helix" medical student curriculum was developed at our institution, and began in 1999 with the class of 2003. Therefore, the 2001-2002 academic year is the first time that the new curriculum has been applied to the third year of medical school. The "double-helix" restructures the traditional medical student curriculum into two integrated four-year strands of basic science and clinical medicine. It is designed in part to respond to the experience of upper level medical students who report that "now that I know a little clinical medicine, I wish I could go back and really learn the basic sciences"(1). Several themes are woven throughout the curriculum including; aging, diversity, ethics, and health economics. The learning objectives for the OB anesthesiology module are listed in the Table. The one-day module consists of one OB anesthesiology faculty and 28 third year medical students. The day begins with a one-hour session of four rotating poster board stations that review anatomy and physiology of acute labor pain, applied anatomy of neuraxial analgesia, and pharmacology of local anesthetic agents and opioids. Next the students are divided into two sequential groups for a 90 minute case discussion conference. In addition to the stated learning objectives, these cases are chosen to illustrate two concepts: basic science knowledge used in clinical problem solving, and problems in labor analgesia that have motivated improvements through clinical research. Following lunch, the day continues with two student presentations of 30 minutes each on a special topic in OB anesthesiology. So far, the students have chosen "neuraxial labor analgesia and labor outcomes" and "fetal pulse oximetry" as presentation topics. The day concludes with a question and answer period. Feedback evaluations from the students have been very enthusiastic. In conclusion, a new medical student curriculum at our institution has provided an opportunity to develop an OB anesthesiology module within the advanced basic science program for third year medical students. It is an efficient model of faculty utilization (four days/year), that provides all third year medical students with one day of small group interaction with an OB anesthesiology faculty member. *1. Hundert EM and Dannefer EF. Academic Medicine 75:S252-5, 2000.*

Table. Learning Objectives for the OB Anesthesiology Module The student should be able to: 1. List the range of labor analgesic options available to patients 2. Explain the anatomy and physiology of labor pain 3. Understand the pharmacology of local anesthetics and opioids used to treat labor pain 4. Describe the pathophysiology, evaluation and treatment of post-dural puncture headache 5. Describe the pathophysiology, evaluation and treatment of post-dural puncture headache 6. Recognize the potential impact of economic diversity on access to labor analgesia