Estimation of Analgesia Effectiveness Using Sensory Block “Ice Test Method”
For Adult Patient Receiving Epidural Infusion

Co-Investigators for Evidence Based Practice

Yolanda Ayson, RN, BSN, MSN; Imelda Laxa RN, BSN, BC Cecilia Nesmith, RN, CPAN;
Evelyn Acosta, RN, BSN,CPAN; Arlene Lastimoso, RN, BSN, CPAN; Claire Zimmerman,
RN, BSN, CPAN; Lourdes Maningat, RN, BSN, CCRN, CPAN; Erlien Sutedja, RN, Maria
Aguda, RN, BSN, CPAN; & Emma Morales, RN

University of Texas M.D. Anderson Cancer Center

The use of epidural analgesia is widely utilized in the management of acute pain in Post
Anesthesia Care Units. Benefits of epidural analgesia are often not achieved due to inadequate
pain assessment, lack of knowledge, and medication interactions. The problem identified was
whether cold stimulation using the ice method to check the sensory block dermatome levels
provides reliable estimation in determining the effectiveness of epidural analgesia. The purpose
was to standardize the use of ice as a method for testing sensory block dermatome levels and
establish an evidence-based clinical nursing practice policy for patients receiving epidural
anesthesia. A literature review of best practices was conducted by searching the PubMed,
CINAHL, and Science Direct databases. The literature provided evidence that cold sensation
using the “ice test method” is reliable, noninvasive, and safe. Using ice to test and estimate the
sensory block is the best practice to monitor surgical pain. PACU nurses incorporated sensory
block assessment using the ice test method as standard practice in adult patients receiving
epidural analgesia at our institution. Interdisciplinary communication was enhanced which
improved pain management, increased patient satisfaction, and promoted recovery time. An
evidence-based practice change was initiated and developed at the unit level. Work in progress
includes a Pain Champion Nurse Program, and a hospital-wide interdisciplinary policy.