



For Immediate Release

Contact:

Ami Knoefler
Spark BioComm
650-739-9952

Study Shows Improved Absorption of Frequently-Used Anticonvulsant Medication Delivered Via Macy Catheter® Compared to Suppository

Findings May Help Reduce Cost of Medication Administration During End-of-Life Care

Newark, Calif., June 16, 2016 (PR NEWSWIRE) – Hospi Corporation today announced the publication of a study in the *Journal of Pain and Symptom Management* demonstrating that use of its Macy Catheter device resulted in improved absorption of the sedative anticonvulsant phenobarbital, as compared to administration via suppository. The Macy Catheter is a specialized catheter that enables rapid, discreet and comfortable administration of medications via the rectum. The results show the absorption kinetics of Macy Catheter-administered phenobarbital were superior to phenobarbital suppositories based upon the rate of early absorption, overall absorption, variability, and comfort of administration. The study, which can be accessed at [www.jpsmjournal.com/article/S0885-3924\(16\)30047-1/pdf](http://www.jpsmjournal.com/article/S0885-3924(16)30047-1/pdf), was funded by the National Science Foundation and completed in partnership with the University of Texas Health Science Center at San Antonio.

“These results are extremely important to hospice care in the home setting as phenobarbital is used extensively in the care of patients experiencing severe symptoms such as agitation, seizures or intractable suffering,” said Brad Macy, RN, BSN, CHPN, inventor of the Macy Catheter and Hospi Corporation’s President. “This pharmacokinetic study comparing micro-enema delivered phenobarbital versus suppositories will help clinicians to make good treatment choices and facilitate

quick and easy administration of medications to assist patients. Effective symptom management helps keep patients comfortable in the home, while decreasing the burden of care on caregivers and the health care system as a whole. Hospi is committed to enhancing the scientific evidence base and continuing to raise the standard of care in symptom management.”

The study was a randomized, open label, cross over study with three arms: a phenobarbital suppository (194.4 mg) and two different micro-enema suspensions with the same dose of phenobarbital tablets administered via the Macy Catheter. The catheter-administered doses were crushed and suspended in 6 ml (MC-6) and 20 ml (MC-20) of tap water, respectively. The results showed:

- After ten minutes, the mean plasma concentrations were 12 times higher for the MC-20 and 8 times higher for the MC-6 demonstrating a more rapid early absorption compared to the phenobarbital suppository. Concentrations achieved in 30 minutes via MC-20 took almost three hours to achieve by suppository.
- Less variability in the extent of drug absorption for both MC administrations (1.4-fold to 1.9-fold difference) compared to a 4.4-fold difference with administration via suppository.
- Participants of the study described the Macy Catheter to be a “comfortable” way to give medication compared to suppository, rated to be “mildly uncomfortable.”

Helping Reduce Cost of End-of-Life Care

In 2014, the Institute of Medicine (IOM) released an extensive and detailed report on “The State of Dying In America,” highlighting that the last few months of life are characterized by “frequent hospital and intensive care stays.” IOM reported that the health care system has room for improvement in meeting “the needs, values and preference of our patients” and that the healthcare system spends too much on end of life care in “unneeded and unwanted acute care services” rather than other ways to

improve the quality of end of life care.¹

“In addition to the clinical effectiveness of the Macy Catheter, the potential savings to healthcare providers in medication costs and care burden is of great import given the fiscal challenges facing the industry today,” said Igal Ladabaum, Hospi Corporation’s CEO. “If hospice clinicians have an option for medication administration that allows for dignified end-of-life care in the home setting when the oral route is compromised, we can potentially avoid the suffering and costs associated with more invasive methods, including transport to inpatient settings.”

The Macy Catheter is a quick, cost-effective alternative for medication and fluids administration when the oral route is compromised and IV access is difficult or not indicated. While it is particularly useful for patients who wish to remain at home and cannot swallow medications, it also has broad applications in the emergency room and other acute care settings as a bridge to IV access or to facilitate discharge to a lower acuity setting.

About the Macy Catheter®

The Macy Catheter leverages the known benefits of the rectal route of administration by enabling rectal delivery in a dignified and discreet manner. The catheter allows clinicians and caregivers to comfortably administer medication repeatedly from a medication port secured to the leg or abdomen, maintaining patient privacy and without having to reposition the patient.

¹ Institute of Medicine. “Dying in America: Improving quality and honoring individual preferences near the end of life.” www.nationalacademies.org/hmd/Reports/2014/Dying-In-America-Improving-Quality-and-Honoring-Individual-Preferences-Near-the-End-of-Life.aspx
Accessed: April 2016

The Macy Catheter is the only device with regulatory clearance solely for the ongoing rectal delivery of medications and fluids. It is currently used in the hospice/palliative care settings in the United States where it offers clinicians and patients an easy, comfortable and cost-effective alternative to IV or oral administration. Recently published case reports (*American Journal of Emergency Medicine*, August 2015) support its use in the emergency room and intensive care unit (ICU) settings and it is now being adopted in the emergency/acute care arena. In addition to the hospice setting, the Macy Catheter can be an attractive option for emergency/acute care patients with difficult IV access who are in pain, agitated, dehydrated, febrile, nauseated or vomiting.

About Hospi Corporation

Hospi Corporation is an ISO-certified medical device company that improves quality of life by innovating practical, high-impact medical devices that enhance patient comfort and wellbeing, ease caregiver burden, and reduce cost. The company is dedicated to providing medical devices that enable compassionate care of patients. The company's patient-centric focus, which is inspired by a nursing perspective, guided the development of the Macy Catheter. The Macy Catheter—which has received Food and Drug Administration (FDA) clearance (2014) and CE Mark approval (2015)— is the only device designed solely for ongoing rectal delivery of medications and fluids. For more information, visit

www.hospicorp.com.