Low-Dose Ketamine for Pain Management, AW

SCOPE

Ascension Wisconsin Emergency Departments

PURPOSE/RATIONALE

To provide standardization for administration of low-dose ketamine (LDK) by the Registered Nurse (RN) to adult patients for pain management in the Emergency Department.

This policy does not apply to ketamine sedation, defined as ≥ 1 mg/kg slow IVP (ACEP, 2018); intranasal administration of ketamine (sedation and analgesic dosing); and palliative sedation, defined as intentional lowering of awareness towards, and including, unconsciousness for terminal patients with severe and refractory symptoms.

This policy is in accordance with the joint policy statement, Sub-dissociative Dose Ketamine for Analgesia, by the American College of Emergency Physicians, the Emergency Nurses Association, and the Society of Emergency Medicine Physician Assistants (January 2018).

Sub-dissociative dose ketamine (SDK), also referred to as low-dose ketamine, is safe and effective for analgesic use in emergency departments...Benefits of SDK over opioids and other common analgesics include improved pain relief, less respiratory depression, and maintenance of cardiac output...SDK administration may trigger generally minor transient adverse effects, including nausea and temporary dysphoria.

Because of SDK's excellent safety profile and activity as an analgesic, not an anesthetic, special administration procedures and monitoring are not required. SDK may be safely ordered or administered by emergency care providers under the same policies and procedures as other typical analgesics.

In accordance with the Ethical and Religious Directives for Catholic Health Care Services, the following directives are applicable to this policy:

27. Free and informed consent requires that the person or the person's surrogate receive all reasonable information about the essential nature of the proposed treatment and its benefits; its risk, side-effects, consequences, and cost; and any reasonable and morally legitimate alternatives, including no treatment at all.

33. The well-being of the whole person must be taken into account in deciding about any
therapeutic intervention or use of technology. Therapeutic procedures that are likely to cause harm or undesirable side-effects can be justified only by a proportionate benefit to the patient.

DEFINITIONS

NA

POLICY

1. An order for low-dose ketamine (LDK), also referred to as sub-dissociative dose ketamine, may be ordered for pain management by an Emergency Medicine provider.

2. A Registered Nurse (RN) or licensed paramedic can administer LDK via IV slow infusion (IV piggyback by secure infusion) for pain management by order of an Emergency Medicine provider.

3. Recommended dosing: 0.3 mg/kg (up to a max dose of 40 mg) in 100 mL 0.9% sodium chloride IVPB over 20 minutes.
   ◦ No renal dose adjustments required
   ◦ No repeat doses
   ◦ To minimize risk of adverse effects, not to be given by IV push

4. Patient must be 18 years of age or older.

5. Populations that may benefit from LDK include, but not limited to:
   ◦ Abdominal pain (nontraumatic and traumatic)
   ◦ Back pain (non-radicular)
   ◦ Burns
   ◦ Refractory headache
   ◦ Musculoskeletal pain (nontraumatic and traumatic)
   ◦ Neuropathic pain
   ◦ Renal colic
   ◦ Sickle cell crisis

6. Absolute contraindication – allergy to ketamine

7. Relative contraindications:
   ◦ Pregnancy, breastfeeding
   ◦ Altered mental status
   ◦ Systolic blood pressure > 180 mmHg
   ◦ Pulse rate > 150 beats/min
   ◦ Medical history of acute head or eye injury, seizures, intracranial hypertension, alcohol or drug abuse, or psychiatric illness

8. LDK given for the treatment of pain should be administered under the same policies as
other analgesics (AAEM, 2018; ACEP, 2018).

9. RN monitors and documents the following:
   a. Pain assessment and sedation score prior to administration and 15 minutes post administration.
   b. Vital signs (blood pressure, heart rate, respiratory rate and oxygen saturation) prior to administration, every 15 minutes until infusion is completed, and 15 minutes after completion of infusion.
   c. Monitor for adverse effects. Adverse effects are less likely to occur with LDK but may include:
      i. Hypertension, tachycardia, nausea, dizziness, dreamlike state/unreality
      ii. Increase secretions, somnolence, excitement, hallucinations, vivid imagery, confusion

10. Ketamine is a controlled substance and will be wasted with two RN's by local policy.

REFERENCES


ATTACHMENT NAMES

Attachments: No Attachments

Approval Signatures

<table>
<thead>
<tr>
<th>Approver</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peggy Lutz: RN Dir-Nursing</td>
<td>5/20/2019</td>
</tr>
<tr>
<td>Julianna Doniere: Emergency Medicine</td>
<td>5/20/2019</td>
</tr>
<tr>
<td>Tina Nielsen: Clinical Nurse Specialist</td>
<td>4/25/2019</td>
</tr>
<tr>
<td>Angela Zivkovic: Pharmacist-NE</td>
<td>4/16/2019</td>
</tr>
</tbody>
</table>

Applicability

Affinity Health System, Affinity Medical Group, Ascension All Saints Hospital, Ascension Calumet Hospital, Ascension Eagle River Hospital, Ascension Good Samaritan Hospital, Ascension NE Wisconsin-Mercy Campus, Ascension NE Wisconsin–St. Elizabeth Campus, Ascension Our Lady of Victory Hospital, Ascension SE Wisconsin Hospital-Franklin Campus, Ascension SE Wisconsin Hsptl–Elmbrk/St Jsph Cmpus, Ascension Sacred Heart-St. Mary's Hospitals, Ascension St. Clare's Hospital, Ascension St. Francis Hospital, Ascension St. Michael's Hospital, Ascension Wisconsin, Columbia St. Mary’s Hospital Milwaukee, Columbia St. Mary’s Hospital Ozaukee, Howard Young Medical Center, Midwest Orthopedic Specialty Hospital, Ministry Health Care, Ministry Medical Group, Ministry Spirit Medical Transportation, Sacred Heart Rehabilitation Institute, Saint Elizabeth’s Medical Center, Wheaton Franciscan Healthcare-Southeast Wisconsin, Wheaton Franciscan Medical Group