NC DEPARTMENT OF
HEALTH AND
HUMAN SERVICES
Division of Health Service Regulation

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK PAYNE • Director

11/8/2024

To: NC EMS Systems

Re: Change to Promethazine administration

Attention Medical Directors:

Due to a recent change in FDA guidance NCCEP has updated the UP 3 protocol for Promethazine administration due to the very high risk of severe tissue damage and limb loss when given IV. If possible other agents should be given instead of Promethazine.

Protocol UP 3 “Abdominal Pain Vomiting and Diarrhea” has been changed to reflect FDA guidance and ensure patient safety. If Promethazine is administered IV, it should be diluted in 100 cc of normal saline and given over a minimum of 20 minutes. The FDA recommends health care professionals administer Promethazine by deep intramuscular administration instead of intravenous administration.

Sincerely,

Tripp Winslow, MD
North Carolina EMS State Medical Director
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cc: EMS System Administrators
NCOEMS Central Regional Managers
NCOEMS Regional Specialists

# Abdominal Pain Vomiting and Diarrhea

## History
- Age
- Time of last meal
- Last bowel movement/emesis
- Improvement or worsening with food or activity
- Duration of problem
- Other sick contacts
- Past medical history
- Past surgical history
- Medications
- Menstrual history (pregnancy)
- Travel history
- Bloody emesis / diarrhea

## Signs and Symptoms
- Pain
- Character of pain (constant, intermittent, sharp, dull, etc.)
- Distention
- Constipation
- Diarrhea
- Anorexia
- Radiation

**Associated symptoms:**
Fever, headache, blurred vision, weakness, malaise, myalgias, cough, headache, dysuria, mental status changes, rash

## Differential
- CNS (increased pressure, headache, stroke, CNS lesions, trauma or hemorrhage, vestibular)
- Myocardial infarction
- Drugs (NSAID's, antibiotics, narcotics, chemotherapy)
- GI or Renal disorders
- Diabetic ketoacidosis
- OB-Gyn disease (ovarian cyst, PID, Pregnancy)
- Infections (pneumonia, influenza)
- Electrolyte abnormalities
- Food or toxin induced
- Medication or Substance abuse
- Psychological

| | |
|---|---|
| | Consider Blood Glucose Analysis Procedure |
| B | 12 Lead ECG Procedure |
| | IV or IO Access Protocol UP 6 |
| P | Cardiac Montior |
| | Age Appropriate Diabetic Protocol AM 2/ PM 2 ***if indicated*** |
| | Pain Control Protocol UP 11 ***if indicated*** |
| | Age Appropriate Cardiac Protocol(s) ***if indicated*** |

**Age Specific Blood Pressure indicating possible shock**

**Age 0 – 28 days: SBP < 60**
**Ages ≥ 1 month: SBP < 70**
**Age 1 – 9: SBP < 70 + (2*x* Age)**

**Ages 10 – 64: SBP < 90**
**Ages ≥ 65: SBP < 110**

**All ages Shock Index: HR > SBP**

Serious Signs/ Symptoms Hypotension, poor perfusion, shock

YES

| | |
|---|---|
| | IV or IO Access Protocol UP 6 Consider 2 Large Bore sites |
| A | **Normal Saline 500 mL Bolus** Repeat as needed Titrate SPB ≥ 90 mmHg **Maximum 2 L** **Peds: 20 mL/kg IV / IO** Repeat as needed Titrate to Age Appropriate SBP ≥ 70 + (2 x Age) **Maximum 60 mL/kg** |
| P | **Ondansetron 4 mg IV / IO / ODT / PO / IM Peds: 0.2 mg/kg Peds Maximum 4 mg** May repeat in 15 minutes |
| | Age Appropriate Hypotension/ Shock Protocol AM 5/ PM 3 ***if indicated*** |

NO

| | |
|---|---|
| A | **Normal Saline IV TKO Or Saline Lock** |
| P | **Ondansetron 4 mg IV / IO / ODT / PO / IM Peds: 0.2 mg/kg Peds Maximum 4 mg** May repeat in 15 minutes<br><br>If no response in adults **Promethazine 12.5 mg PO / IM / IVPB** May repeat x 1 as needed |

**Promethazine:**
FDA advises that deep intramuscular (IM) administration or intravenous piggyback (IVPB) are acceptable under strict adherence to the new guidelines
(see pearls)

Monitor and Reassess

**Notify Destination or Contact Medical Control**

Universal Protocol Section

# Abdominal Pain
# Vomiting and Diarrhea



**Pearls**

- **Recommended Exam: Mental Status, Skin, HEENT, Neck, Heart, Lungs, Abdomen, Back, Extremities, Neuro**
- **Abdominal/ back pain in women of childbearing age should be treated as pregnancy related until proven otherwise.**
- **The diagnosis of abdominal aneurysm should be considered with abdominal pain, with or without back and/ or lower extremity pain or diminished pulses, especially in patients over 50 and/ or patients with shock/ poor perfusion. Notify receiving facility early with suspected abdominal aneurysm.**
- **Consider cardiac etiology in patients > 35, diabetics and/ or women, especially with upper abdominal complaints.**
- **Heart Rate: Tachycardia is one of the first clinical signs of dehydration and volume depletion and typically increases as dehydration becomes more severe.**
- **Nausea without vomiting should be treated like vomiting. Patient will benefit from symptom control with antiemetic even if not actively vomiting.**
- **<u>Promethazine (Phenergan):</u>**
  **May cause sedative effects in pediatric patients and in ages ≥ 65, and the debilitated, etc.)**
  **When giving promethazine, PO and IM is preferred over IV administration. If giving IV, dilute with 100 mL of normal saline and administer slowly over at least 20 minutes as it can cause severe chemical irritation and tissue damage. Promethazine should be administered through large patent veins, avoid veins in the hand and wrist.**
- Isolated vomiting in children is common but can be a sign of more serious pathology. Pyloric stenosis, bowel obstruction, and CNS processes (bleeding, tumors, or increased CSF pressures) all often present with vomiting.
- Vomiting and diarrhea are common symptoms, but can be the symptoms of uncommon and serious pathology such as stroke, CO poisoning, acute MI, new onset diabetes, diabetic ketoacidosis (DKA), and organophosphate poisoning. Maintain a high index of suspicion for serious patholgy.