



## EMS System for Metropolitan Oklahoma City and Tulsa 2018 Medical Control Board Treatment Protocols



 EMS SECTION

Review and Approval 1/3/2018, Effective 4/1/18 replaces all prior versions

### 16V – HYDROMORPHONE (DILAUDID®)

#### PARAMEDIC

**Class:** Narcotic analgesic

**Actions/Pharmacodynamics:** Stimulates central nervous system opiate receptors, producing systemic analgesia. Modest vasodilation effects increase peripheral venous capacitance, and reduce venous return, myocardial workload, and myocardial oxygen demand. Hydromorphone is roughly 10 times more potent than morphine. An IV dose of 1 mg of hydromorphone is equivalent to an IV dose of 10 mg of morphine.

**Indications:**

- Chest Pain – Uncertain Etiology (5A)
- Acute Coronary Syndrome (5C)
- Snakebites (8E)
- Abdominal Pain/Nausea/Vomiting/Diarrhea (9A)
- Pain Management (Acute Onset & Chronic Type) (9D)
- Eye Injury (10B)
- Dental Injury/Pain (10C)
- Chest/Abdomen/Pelvis Injury (10D)
- Extremity/Amputation Injury (10G)
- Compartment Syndrome (10J)
- Crush Injury Syndrome (10K)
- Burns (10L)
- Lightning/Electrical Injury (11C)
- Pelvic Pain (13E)

For all listed situations, indication is acute pain control in alert, hemodynamically stable patient.

**Contraindications:**

- Hypotension
- Respiratory Depression
- Minor Degrees of Pain
- Pain Assessed as Factitious

**Side Effects:** Hypotension, respiratory depression, euphoria, dizziness. Nausea and/or vomiting are rarely seen if administration is slow IVP. Rapid IVP will lead to an accompanying histamine release, producing the nausea and/or vomiting often erroneously attributed to hydromorphone itself.

**Pharmacokinetics:** Onset of action within 5-10 minutes after IV administration. Duration of effect can reach 4 - 6 hours depending upon end-organ function.



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### PROTOCOL 16V: Hydromorphone (Dilaudid®), cont.

**Dosage:**      **Chest Pain – Uncertain Etiology – Adult (5A)**  
                    **Acute Coronary Syndrome – Adult (5C)**  
                    0.25 mg slow IVP  
                    May repeat every 10 minutes to a maximum cumulative dose of 1 mg

**Snakebites – Adult (8E)**  
**Abdominal Pain/Nausea/Vomiting/Diarrhea – Adult (9A)**  
**Pain Management (Acute Onset & Chronic Type) – Adult (9D)**  
**Eye Injury – Adult (10B)**  
**Dental Injury/Pain – Adult (10C)**  
**Chest/Abdomen/Pelvis Injury – Adult (10D)**  
**Extremity/Amputation Injury – Adult (10G)**  
**Compartment Syndrome – Adult (10J)**  
**Crush Injury Syndrome – Adult (10K)**  
**Burns – Adult (10L)**  
**Lightning/Electrical Injury – Adult (11C)**  
**Pelvic Pain – Adult (13E)**

For all listed situations, indication is acute pain control in alert,  
hemodynamically stable patient.

0.5 – 1 mg slow IVP  
May repeat every 10 minutes to a maximum cumulative dose of 2 mg

**Chest Pain – Uncertain Etiology – Pediatric (5A)**  
**Snakebites – Pediatric (8E)**  
**Abdominal Pain/Nausea/Vomiting/Diarrhea – Pediatric (9A)**  
**Pain Management (Acute Onset & Chronic Type) – Pediatric (9D)**  
**Eye Injury – Pediatric (10B)**  
**Dental Injury/Pain – Pediatric (10C)**  
**Chest/Abdomen/Pelvis Injury – Pediatric (10D)**  
**Extremity/Amputation Injury – Pediatric (10G)**  
**Compartment Syndrome – Pediatric (10J)**  
**Crush Injury Syndrome – Pediatric (10K)**  
**Burns – Pediatric (10L)**  
**Lightning/Electrical Injury – Pediatric (11C)**  
**Pelvic Pain – Pediatric (13E)**

For all listed situations, indication is acute pain control in alert,  
hemodynamically stable patient

**\*\*OLMC Order Only** – Typical dose is 0.01 mg/kg up to 0.5 mg per dose.

**How Supplied:**      2 mg/1 mL vial or pre-filled syringe  
                                  (Always check concentration and dose per container at time of patient  
                                  medication administration)