METHYLPREDNISOLONE [SOLU-MEDROL]

DRUG CLASSIFICATION	Synthetic Adrenal Glucocorticoid Anti-Inflammatory Corticosteroid
MECHANISM OF ACTION	Methylprednisolone sodium succinate, a synthetic glucocorticoid, is a highly potent steroid with greater anti-inflammatory activity than prednisolone and lesser tendency to induce sodium and water retention, causing profound and diverse metabolic effects, modifying the body's immune responses to various stimuli, decreasing inflammation by suppression of migration of polymorphonuclear leukocytes and reversal of increased capillary permeability, modulating carbohydrate, protein, and lipid metabolism, further contributing to fluid and electrolyte homeostasis.
CLINICAL INDICATIONS	Acute Adrenal Insufficiency or Congenital Adrenal Hyperplasia Acute Respiratory Distress in Asthma or COPD Exacerbation Moderate-to-Severe Allergic Reaction
STANDARD CONTRAINDICATIONS	Hypersensitivity to Methylprednisolone, Sodium Succinate, or Other Relative Components Intramuscular Administration in Patients with Idiopathic Thrombocytopenic Purpura Systemic Fungal Infection Premature Infants TBI **/** Head Injury
POTENTIAL ADVERSE EFFECTS	Nausea **/** Vomiting **/** Headache **/** Hyperglycemia **/** Hypertension **/** Muscle Weakness **/** Cardiac Dysrhythmia **/** Adrenal Insufficiency
GENERAL RISKS & PRECAUTION	**1)** Use with extreme caution in patients with recent myocardial infarction due to risk of left ventricular free wall rupture. **2)** Blood pressure elevations may occur with average to large corticosteroid doses. **3)** Use caution in patients with congestive heart failure, hypertension, or renal insufficiency due to risk of fluid retention. **4)** Cardiac arrhythmia or cardiac arrest has been reported with rapid injection of high doses; proper administration technique advised. **5)** Avoid administering drug into deltoid muscle as this increases the risk of subcutaneous atrophy. **6)** Increased potassium excretion or sodium retention may occur with average to large corticosteroid doses in patients with CHF or HTN. **7)** May cause transient increases in BLS when administered to diabetic patients.
PROTOCOL INDEX	Allergic Reaction / Anaphylaxis (AM-1) Hypotension / Shock (AM-5) Adult COPD / Asthma Respiratory Distress (AR-4) Pediatric Asthma Respiratory Distress (AR-7) Pediatric Allergic Reaction (PM-1) Pediatric Hypotension / Shock (PM-3)

MEDICATION ADMINISTRATION

ADULT	PEDIATRIC
Adult Allergic Reaction / Anaphylaxis 125 mg [IV/IO]	**Pediatric Allergic Reaction / Anaphylaxis** 2 mg / kg [IV]; (Maximum Dose: 125 mg)
Acute Adrenal Insufficiency or Congenital Adrenal Hyperplasia 125 mg [IM/IV/IO] – See AM-5 Pearls	**Acute Adrenal Insufficiency or Congenital Adrenal Hyperplasia** 125 mg [IM/IV/IO] – See PM-3 Pearls
Adult COPD / Asthma Respiratory Distress 125 mg [IV/IO/IM]	**Pediatric Asthma / Respiratory Distress** 2 mg / kg [IV/IO/IM]; (Maximum Dose: 125 mg)