

SCOPE: ALS, CCT	
MEDICATION:	DOPAMINE
INTERVENTION:	<p><u>Classification:</u> Adrenergic Agonist Agent; Inotrope</p> <p><u>Actions:</u> Stimulates both adrenergic and dopaminergic receptors, lower doses are mainly dopaminergic stimulating and produce renal and mesenteric vasodilation, higher doses also are both dopaminergic and beta₁-adrenergic stimulating and produce cardiac stimulation and renal vasodilation; large doses stimulate alpha-adrenergic receptors causing vasoconstriction</p> <p><u>Contraindications:</u></p> <ul style="list-style-type: none"> • Hypersensitivity to sulfites (commercial preparation contains sodium bisulfite) • Pheochromocytoma • Uncorrected tachyarrhythmia • Ventricular fibrillation <p><u>Precautions:</u></p> <ul style="list-style-type: none"> • May cause increases in heart rate, increasing the risk of tachycardia and other tachyarrhythmias including ventricular arrhythmias • Vessel vesicant; ensure proper needle or catheter placement prior to and during infusion • Use with caution in patients with active myocardial ischemia or recent myocardial infarction; may increase myocardial oxygen consumption • MAOIs may cause prolonged hypertension with concurrent use <p><u>Dosage:</u></p> <ol style="list-style-type: none"> I. <u>Neurogenic shock/Cardiogenic Shock/Decompensated Heart Failure:</u> <ol style="list-style-type: none"> a. <u>Adult:</u> <ol style="list-style-type: none"> i. IV/IO: 5-20 mcg/kg/min II. <u>Symptomatic Bradycardia not responsive to external pacing</u> <ol style="list-style-type: none"> a. <u>Adult:</u> <ol style="list-style-type: none"> i. IV/IO: 5-20 mcg/kg/min III. <u>Pediatric Septic Shock (COLD) /Pediatric Cardiogenic Shock:</u> <ol style="list-style-type: none"> a. <u>Pediatric:</u> <ol style="list-style-type: none"> i. IV/IO: 5-20 mcg/kg/min, titrate by 5 mcg/kg/min <p><u>Onset of Action:</u> ~5 minutes (Adult)</p> <p><u>Duration:</u> <10 minutes (Adult)</p> <p><u>Adverse Effects:</u> Cardiovascular: Angina pectoris, atrial fibrillation, bradycardia, ectopic beats, hypertension, hypotension, palpitations, tachycardia, vasoconstriction, ventricular arrhythmia, ventricular conduction, widened QRS complex on ECG, anxiety, headache, gangrene (high dose), piloerection, increased serum glucose, nausea, vomiting, azotemia, increased intraocular pressure, mydriasis, polyuria, dyspnea</p> <p><u>Special Considerations:</u></p>

If this is a patient care policy, the information contained herein is used to provide guidance in the care of patients, but should not, and does not replace or preclude the use of clinical judgment.

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Revised Date:	
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PROTOCOL

	<ul style="list-style-type: none">I. Low-dose dopamine for “renal protection” is no longer supported and has no effect on renal functionII. Dopamine has exhibited nonlinear kinetics in children; with dose changes, may not achieve steady-state for ~1 hour rather than 20 minutes