Approved 9/2/26, Effective 1/15/27, replaces all prior versions

16L – DOPAMINE (INTROPIN®)

PARAMEDIC

Class: Vasoconstrictor

Actions/Pharmacodynamics: Dose dependent. Higher doses (5+ mcg/kg/min) increasingly stimulate alpha receptors in the peripheral vasculature, producing vasoconstriction-related increases in system blood pressure. Concurrent beta receptor stimulation may produce increases in heart rate and mild bronchodilation. Lower doses (<5 mcg/kg/min), as may be encountered infrequently in interhospital transfers, produce mesenteric (intestinal) and renal vascular dilation to ensure continued perfusion to these organ systems in complicated medical illness that would otherwise sacrifice such circulation.

Indications:
Dyspnea - Congestive Heart Failure (Cardiogenic Shock) (3E)
Post Cardiac Arrest Treatment (Cardiogenic Shock) (4J)
Acute Coronary Syndrome (Cardiogenic Shock) (5C)
Sepsis (Septic Shock) (9B)
Dialysis-Related Issues (9E)
For all listed situations, indication is hypotension (adult = systolic < 100 mmHg) due to cardiogenic, septic, or neurogenic shock either refractory to intravascular fluid boluses or in which intravascular fluid bolusing is contraindicated (eg. pulmonary edema).

Contraindications: Hypertension

Pharmacokinetics: Onset of action within 5 minutes after IV/IO infusion initiated. Rapid metabolism, requiring ongoing IV/IO infusion to maintain clinical effects.

Side Effects: Palpitations, tachycardia, chest pain, and hypertension if not titrated.

Dosage:

Dyspnea - Congestive Heart Failure (Cardiogenic Shock) - Adult (3E)
Post Cardiac Arrest Treatment (Cardiogenic Shock) - Adult (4J)
Acute Coronary Syndrome (Cardiogenic Shock) - Adult (5C)
Sepsis (Septic Shock) - Adult (9B)
Dialysis-Related Issues - Adult (9E)
For hypotension (shock) refractory to fluids or fluids contraindicated
5 – 20 mcg/kg/minute - see dosage chart - titrate to a sys B/P ≥ 100 mmHg.

Dyspnea - Congestive Heart Failure (Cardiogenic Shock) - Pediatric (3E)
Post Cardiac Arrest Treatment (Cardiogenic Shock) - Pediatric (4J)
Sepsis (Septic Shock) - Pediatric (9B)
Dialysis-Related Issues - Pediatric (9E)
For hypotension (shock) refractory to fluids or fluids contraindicated
****OLMC Order Only.**

PROTOCOL 16L: Dopamine (Intropin®), cont

Dopamine Infusion Adult Dosage Chart

Dopamine		Dose in mcg				
		5	10	15	20	
Patient Weight in Kilograms	40	8	15	23	30	mL/hr or drips/minute (for 1600 mcg concentration only)
	50	9	19	28	38	
	60	11	23	34	45	
	70	13	26	39	53	
	80	15	30	45	60	
	90	17	34	51	68	
	100	19	38	56	75	
	110	21	41	62	83	
	120	23	45	68	90	
	130	24	49	73	98	
	140	26	53	79	105	
	150	28	56	84	113	
	160	30	60	90	120	
	170	32	64	96	128	
	180	34	68	101	135	
	190	36	71	107	143	
	200	38	75	113	150	
	210	39	79	118	158	
	220	41	83	124	165	
	230	43	86	129	173	
	240	45	90	135	180	
	250	47	94	141	188	

How Supplied: 400 mg/10 mL vial to be mixed into 250 mL D5W. (1600 mcg/mL concentration)
OR pre-mixed dopamine infusion at 1600 mcg/mL concentration.
(Always check concentration and dose per container at time of patient medication administration)

Special Comments: Relative caution should be exercised prior to use in the setting of marked tachydysrhythmias, due to the potential for further increase in heart rates. In the setting of tachydysrhythmia-induced cardiogenic shock, treat per Protocol 5G - Tachycardia - Unstable. Ensure aggressive fluid resuscitation is accomplished (unless contraindicated) prior to dopamine use.