Examination Specifications

Name of Credential	Ventricular Assist Device Certification (VAD-C [™])
Name of Credentialing Body	Ventricular Assist Device Certification Board (VAD-CB)
Designation Awarded	VAD-C TM
Target Population	Healthcare Clinicians who work with Durable Ventricular Assist Devices
Level of Proficiency	Specialty Certification
Scoring Method	Objectively Scored; Number Correct
Decision Outcome Method	Single Hurdle
Total Number of Items	100
Number of Scored Items	80
Number of Pretest Items	20
Administration Time	120 Minutes
Year ECO Created	2021



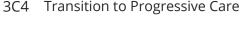
Examination Content Outline

1	Pre-Operative Management	16
1A	Patient Assessment and Diagnostics	4
1A1	Indications for VAD Candidacy	
1A2	Absolute Contraindications for VAD Candidacy	
1A3	Relative Contraindications for VAD Candidacy	
1B	Cardiac Comorbidities	3
1B1	Arrhythmia	
1B2	Valve and Root Disease	
1B3	Intracardiac Thrombus	
1B4	Valvular Insufficiency	
1B5	Left Ventricular Cavity Dimension	
1C	Non-Cardiac Comorbidities	3
1C1	Pulmonary Hypertension	
1C2	Diabetes	
1C3	Neurological Disorders	
1C4	Malignancies	
1C5	Arterial Disease	
1D	Pre-Operative Optimization	3
1D1	Renal	
1D2	Hepatic and Gastrointestinal	
1D3	Pulmonary	
1D4	Coagulation	
1D5	Metabolic and Endocrine	
1D6	Resolution of Active Infection	~
1E	Operative Technique and Procedures	3
1E1	Sternotomy	
1E2	Thoracotomy Conditional Anna Anna Anna Anna Anna Anna Anna A	
1E3	Cardiopulmonary Bypass	
1E4	Concomitant Procedures	26
2 2A	Pump Factors affecting Flow	26 5
2A 2A1	Cannula Position	5
2A1 2A2	Pump Thrombus	
2A2 2A3	RPM	
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- 2A4 Hematocrit
- 2A5 Outflow-Graft Integrity



	2B	Physiological Factors affecting Flow	5
	2B1	Aortic Valve	
	2B2	Hydration Status	
	2B3	Tamponade	
	2B4	Afterload	
	2C	Power Sources for VAD	4
	2C1	Direct Current (Battery) versus Alternating Current (Wall)	
	2C2	Battery Hygiene	
	2C3	Grounding	
	2D	Parameters for VAD	4
	2D1	Flow	
	2D2	Power	
	2D3	Speed	
	2D4	Pulsatility / Peak-Trough	
	2E	Driveline Management	4
	2E1	Standardized Dressing Supplies	
	2E2	Stabilization	
	2E3	Velour-Burying	
	2F	Safety Measures	4
	2F1	Avoidance of Water Submersion	
	2F2	Avoidance of Electrostatic Discharge	
	2F3	Avoidance of Electromagnetic Fields (e.g., MRI, scrap-metal magnet, metal	
		detectors)	
	2F4	Availability of Power Sources	
	2F5	Avoidance of High-Impact Activity (e.g., contact sports)	
	2F6	Travel Considerations (e.g. electrical outlets, travel security)	
	3	Peri-Operative Management	19
	ЗA	Anticoagulation Management	3
	3A1	Anticoagulation and Antiplatelet Medications	
	3A2	Intravenous Anticoagulation	
	3A3	Long-Term Anticoagulation	
	3A4	Anticoagulation Metrics	
	3A5	Factors affecting INR	
	3A6	Bridging and Reversing	2
	3B	Post-Operative Hemodynamics Shock	3
	3B1		
	3B2	Hemodynamic Parameters	
	3B3	Right Ventricular Failure	2
	3C	Post-Surgical Care	3
	3C1	Incision Management	
	3C2	Arterial Blood Gas	
	3C3	Blood Pressure	
	3C4	Transition to Progressive Care	





	3D	Driveline Exit Site	3
	3D1	Aseptic Technique for Dressing Changes	
	3D2	Exit Site Assessment and Diagnostics	
	3D3	Modalities to Treat Exit Site Infections	
	3D4	Adverse Outcomes of Exit Site Infections	
	3E	Complications	7
	3E1	Driveline Integrity/Fracture	
	3E2	Pump Thrombosis	
	3E3	Cerebrovascular Accidents	
	3E4	Bleeding Diatheses	
	3E5	Arrhythmias	
	3E6	Valvular Insufficiency (e.g., aortic, tricuspid)	
	4	Continuation of Care	19
	4A	Community-Based Health Services	3
	4A1	Healthcare Professionals (e.g., cardiology, dialysis, cardiac rehab, home health)	
	4A2	Extended Care Facilities (e.g., acute, sub-acute, long-term)	
	4A3	Outpatient Follow-Up	
	4B	Pre-Hospital Emergency Management	3
	4B1	Emergency Protocols (e.g., ACLS, BLS)	
	4B2	Emergency Patient Assessment (e.g., hemodynamics, perfusion, device alarms)	
	4B3	Emergency Transport (e.g., selecting destination, transportation methods)	
	4B4	Emergency Management of Pump Stop (e.g., power loss, restart)	
	4C	Myocardial Recovery	3
	4C1	Testing for Myocardial Recovery	
	4C2	Diagnoses Associated with Myocardial Recovery	
	4C3	Medical Therapy Optimization to Promote Recovery	
	4C4	Explant and Post-Explant Care	
	4D	End-of-Life Care	4
	4D1	Advanced Directives	
	4D2	Ethics pertaining to End-of-Life Care	
	4D3	Pump Deactivation	
	4D4	Palliative Care	ſ
	4E	Quality of Life Patient and Caregiver Education	3
	4E1 4E2	Patient and Caregiver Education Patient and Caregiver Advocacy (e.g., goals of care, caregiver burden)	
	4E2 4E3	Functional Status (e.g., ADLs, IADLs)	
	4E3 4E4	Community-Based Support Systems (e.g., school, work, support groups)	
	464 4F	Transplant Eligibility	3
	4r 4F1	Monitoring for transplant eligibility	5
	4F1 4F2	Optimizing for transplant eligibility	
	4F3	Maintaining transplant eligibility	

