TAVR Clinical Pathway Protocol

Transapical & Transaortic Approaches

July 2016

Timeframe (Post-Op)	Clinical Action

0-4 Hours	**NO Narcotics OR Sedatives**
	• Extubate within 1 hour
	• Wean off all drips within 1 hour of arrival
	  ▪ Saline lock all IVs except renal protection protocol fluids
	  ▪ Continue for 6 hours post-op (if ordered)
	• Remove PA catheter within 1 hours if present and continue central line
	• Continue IV Tylenol initiated in OR

4-12 Hours	**NO Narcotics OR Sedatives**
	• Remove arterial line within 4 hours
	• Restart oral antihypertensive medications in 4 hours (order PO if able)
	  ▪ Hold if SBP < 100
	  ▪ Avoid beta blockers
	• Restart BPH medications within 4 hours
	  ▪ Double dose for 1st dose
	• Begin incentive spirometry, cough, and deep breathe Q2 hours
	• Discontinue oxygen within 4 – 6 hours if O2 saturation ≥ 90%
	• OOB to chair within 4 – 6 hours after arrival
	  ▪ Discontinue Foley Catheter once patient has been OOB
	• RN bedside evaluation for dysphagia

	▪ ST consult if POD # fails • Begin ice chips ▪ Advance to clear liquids ▪ Advance to regular diet (if passed bedside evaluation) • Walk within 8 hours by RN • Reinforce early ambulation with family ▪ Educate family on how to mobilize patient
Post-Op Day 1	**NO Narcotics OR Sedatives** • Aggressive blood sugar control per individual hospital policy • Antiplatelets: ▪ Begin ASA 325 mg/day if not started pre-op ▪ Begin Plavix 75 mg/day unless contraindicated • Anticoagulation: ▪ Begin Coumadin POD #2 if patient was taking pre-op ▪ May DC home before INR is therapeutic • Insert peripheral IV and remove central line POD #1 ▪ Place PICC if central line is required • Remove CTs/drains POD #1 if no air leak, no PTX, and drainage < 300cc • If drain remains on POD #2, remove if drainage < 300cc or trending down and < 100cc for the last 8 hours • Remove EPWs POD #2 if patient has not required pacing for 24 hours • PT consult ▪ Ambulate x6 ▪ Family to participate in rehabilitation activities • Social work consult if needed • Discharge if criteria met on POD #3-5

TAVR Discharge Information

Discharge Criteria	• **<u>Discharge studies complete</u>:** TTE, CXR, EKG, BMP, BNP, PT, PTT
	• Baseline neurological function
	• Stable heart rhythm and has not required pacing within 24 hours
	• Vital signs stable
	  ▪ Heart rate: 60 – 90
	  ▪ Systolic BP: 90 – 140 (or at baseline)
	• Voiding without difficulty; emptying bladder
	  ▪ If discharged with Foley catheter, urology follow-up appointment is scheduled
	• Blood sugar < 150
	• Creatinine ≤ baseline
	• O2 weaned off
	  ▪ O2 saturation ≥ 90%
	  ▪ Effective cough and airway clearance
	• Effective pain control on oral medications, no narcotics or sedatives
	• Independent in ADLs and ambulation OR has appropriate assistance and devices
	• Able to ambulate 200 feet (or baseline)
	• Groin without bleed or hematoma
	• Patient and family voice appropriate understanding of post TAVR discharge instructions

Discharge & Follow Up	• Consider discharge to hotel for 1 – 2 days prior to returning home if the patient is from out of town
	• Return to Valve Clinic the first Friday after discharge for an office visit
	  ▪ Provide patient with date and time
	• Return to Valve Clinic for 30 day studies
	  ▪ Provide patient with date and time
	• Studies to be completed by/at 30 day Valve Clinic appointment
	  ▪ Five Meter Walk
	  ▪ 12 Lead ECG
	  ▪ KCCQ-12
	  ▪ Echocardiogram
	  • Aortic insufficiency addressing paravalvular severity
	  • LVEF
	  • Mean gradient
	  ▪ Elevated gradient on follow-up echocardiogram compared to pre-discharge TTE should consider subclinical leaflet thrombosis.
	  ▪ Further evaluation with Four-dimensional CT with a volume-rendered imaging protocol to assess for subclinical leaflet thrombosis.

Meduri, Christopher U., Potter, Brian J. (2015). Post – TAVR Optimization (Version 2.0). [Mobile application software]