

TSI Care Pathway Standardization: Pneumonectomy

To supplement TSI BestPractice components

Points of Care Endorsed by: TSI Executive Committee 12/09/14 & TSI 4th Meeting 2/23/15

1. Dx / Staging
 - a. Usual diagnostic / staging algorithm as per TSI pulmonary resection standardized care document
 - i. Invasive mediastinal staging
 - b. Definitive pathologic diagnosis prior to performing pneumonectomy
 - i. If not, clear documentation wrt reason
2. Risk assessment
 - a. ppo FEV1 or DLCO < 50% predicted
 - i. Quantitative perfusion scan &/or CPET
 - b. Cardiac optimization
 - i. ECHO &/or cardiology consult
 - c. Laryngeal dysfunction assessed
3. Preop
 - a. Anesthesia coordination
4. Intraop
 - a. Afib prophylaxis
 - i. Consider amiodarone
 - ii. Electrolyte optimization
 - iii. Assure continuity of preop B blocker
 1. JTCVS 2014 148:772-91.
 - b. Protective ventilation
 - i. F IO₂ 0.5,
 - ii. VT 6 mL/kg

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- iii. positive end-expiratory pressure 5 cm H₂O
 - iv. pressure-controlled ventilation
 - 1. CHEST 2011; 139:530–537
 - c. Minimize intraop fluid administration
 - d. Bronchial stump
 - i. Reinforcement w flap
 - 1. Especially R
5. Postop
- a. Telemetry
 - b. NPO until VC function assessed (L resections or R EPP) to minimize aspiration risk
 - c. CXR on discharge
6. Out patient
- a. Weekly clinic visits for 1 month encouraged
 - i. CXR each visit
 - 1. ATS 2001;72:1855-60.
7. Additional points of consideration but not mandated (honorable mention)
- a. Risk assessment
 - i. CPET
 - ii. Stair climbing
 - iii. Hgb
 - iv. Phrenic nerve function
 - b. Preop
 - i. Pulmonary rehab
 - ii. Smoking cessation
 - iii. Consultations prn:
 - 1. Pulmonary
 - 2. Cardiology
 - 3. Infectious Disease if septic lung disease

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- iv. Nasal mupirocin
- c. Intraop
 - i. LN dissection & FS evaluation prior to pulmonary parenchymal resection
 - ii. Pulmonary artery management
 - 1. Control early in case
 - ii. Trial clamping main PA
 - 1. 3 min
 - ii. Solumedrol 250 mg 5 min prior to clamping/dividing PA
 - 1. ATS 2003;76:1029 –35
- d. Outpatient
 - i. Rehab