Practical Approach to Interventional Bronchoscopy Procedural Decision Making: Scenario # 6: Rigid bronchoscopy with laser resection and stent for esophageal cancer invading the trachea

Based on the information presented below, please describe your procedural decision making using The Practical Approach to Procedural Decision making. Do your best to complete each item of the Four Boxes. If the case scenario contains no information pertaining to an item, please address it as NOT AVAILABLE. Note that each case scenario may have greater emphasis on one or more items listed in the "Practical Approach".

FF is a 70 year old truck driver with a history of severe rheumatoid arthritis, dysphagia, and shortness of breath. He has been recently diagnosed with esophageal cancer and has a gastric feeding tube in place. He has not yet had therapy because increasing dyspnea prompted flexible bronchoscopy which revealed an exophytic mass with necrosis from the posterior wall of the trachea extending along a distance of 3 cm, beginning 5 cm above the main carina and ending 7 cm below the vocal cords (see photo). Physical examination reveals limited range of the neck motion, severe rheumatoid changes of the hands. The patient has no teeth and wears dentures. Oxygen saturation is 90% on 2 liters nasal canula. Karnofsky performance score is 70. Laboratory data are normal. Chest radiograph and computed tomography scan show a large esophageal mass with extrinsic compression of the mid trachea causing 80% obstruction. Medical history also includes emphysema with an FEV1 of 40% predicted. The patient is accompanied by his elderly wife who hopes that her husband will live until their 50th wedding anniversary in four months.



After addressing items of the four boxes, please consider the following:

- 1. List three potential complications of rigid intubation. How might the limited range of neck motion affect you decisions?
- 2. What are the benefits and dangers of laser resection in this case?
- 3. If you cannot intubate the patient with the rigid bronchoscope what will you do?
- 4. What treatment would you recommend for the patient's esophageal cancer? Why?

Initial Evaluation	Procedural Strategies
 Physical examination, complementary tests, and functional status assessment Patient's significant co-morbidities patient's support system (also includes family) Patient preferences and expectations (also includes family) 	 Indications, contraindications, and expected results Operator and team experience and expertise Risk-benefits analysis and therapeutic alternatives Respect for persons (Informed Consent)
Procedural Techniques and results	Long term Management Plan
 Anesthesia and other perioperative care Techniques and instrumentation Anatomic dangers and other risks Results and procedure-related complications 	 Outcome assessment Follow-up tests, visits, and procedures Referrals to medical, surgical, or palliative/end of life subspecialty care Quality improvement and team evaluation of clinical encounter

INITIAL EVALUATION

PROCEDURAL STRATEGIES

PROCEDURAL TECHNQUES AND RESULTS

LONG TERM MANAGEMENT PLAN