



Yaron Perry MD, FACS
Clinical Professor
Chief Division of Thoracic Surgery
UB Department of Surgery

Building Thoracic Oncology program in the Midst of COVID-19 Pandemic



Building Thoracic Oncology program in the Midst of COVID-19 Pandemic

Agenda:

- **Why** are we here?
- **What** is needed?
- **Who** is participating?
- **How** to do it? – especially with COVID!



Building Thoracic Oncology program in the Midst of COVID-19 Pandemic

Why?

- Great Lakes Cancer Center
- Buffalo General Medical Center
 - Academic medical center
 - Community network : Kaleida, GPPC, BMG.
 - Medical School: Education, Research and drug development
 - Community outreach and Professional education

But No Cancer Service Line - which is the main component of any health system.

No Multidisciplinary Thoracic team and Tumor Board.



What is needed?

Making Our Own Assessment

Lung Program Resource Grid¹

Program Feature	Basic	Intermediate	Advanced
Physician Expertise	<ul style="list-style-type: none"> General surgeons Radiologists Pulmonologists Radiation oncologists 	<ul style="list-style-type: none"> Cardiothoracic surgeons Pulmonologists committed to supporting oncology Radiologists Radiation oncologists 	<ul style="list-style-type: none"> Dedicated thoracic surgeon Interventional pulmonologist dedicated to oncology Subspecialized medical oncologists and radiation oncologists Interventional radiologist
Diagnostic Technology	<ul style="list-style-type: none"> Chest x-ray Bronchoscopy Bone scan Mediastinoscopy 	<ul style="list-style-type: none"> Core needle biopsy Multidetector CT² 	<ul style="list-style-type: none"> Transbronchial needle aspiration Endobronchial ultrasound fine-needle aspiration Electromagnetic navigation bronchoscopy
Treatment Technology	<ul style="list-style-type: none"> 3D-CRT IMRT IGRT 	<ul style="list-style-type: none"> HDR brachytherapy Stereotactic radiosurgery Multidetector PET/CT 4-D CT simulation Respiratory gating 	<ul style="list-style-type: none"> Interventional oncology (RFA, etc.) Proton beam therapy Pharmacogenetics
Support Services	<ul style="list-style-type: none"> Survivor support groups 	<ul style="list-style-type: none"> Palliative and supportive services for end-of-life care 	<ul style="list-style-type: none"> Palliative and supportive services integrated across entire continuum of care

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What is needed?

Making Our Own Assessment

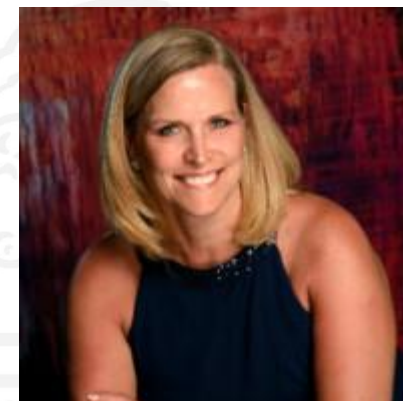
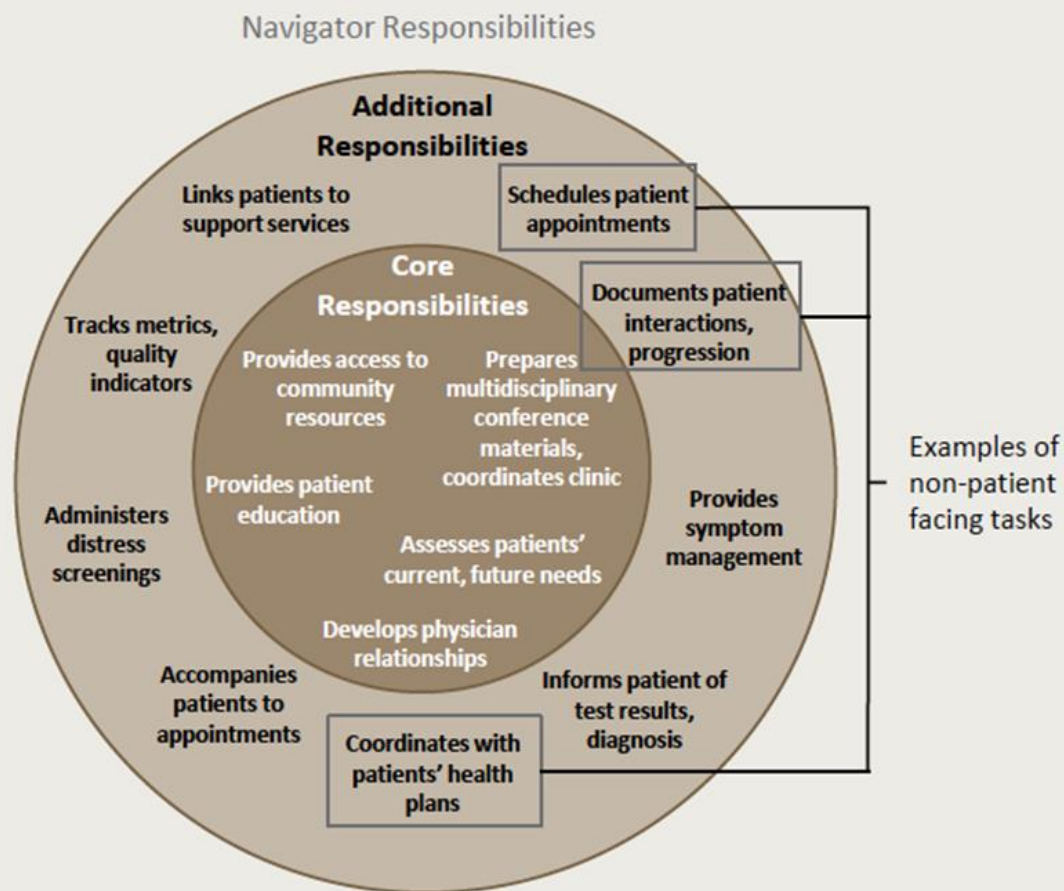
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What is needed? Thoracic Oncology Tumor Board

Enough on Their Plate

Navigator Responsibilities Extend Far Beyond Coordinating Clinical Care



Michele Hubert-Fiscus MSN, RN, CCM

Who?



Who?



Sandip Saha, MD



Celestino Pietrantoni, DO



Manoj Mammen, MD



Alberto F. Monegro MD



James Lampasso, MD



Sanjay Sethi, MD



John McGrath, MD



Christopher Nicholas, MD



Omar Chohan, DO



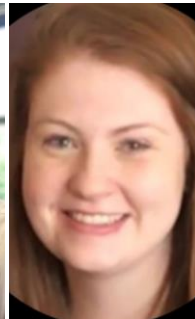
Steven Schwartzberg MD



Victor Filadora MD



Amanda Aikin



Samantha Gunn RN



Ryanne Dugan, PaC



Yaron Perry, MD



Dhiren Shah, MD



Matthew Thurman, MD



Michael Duff, MD



Ramon Rivera, MD



James Corasanti, MD



John Tomaszewski, MD



Hassan Nakhla, MD



Lucia Balos, MD



Jenny Romero, MD



Basem Goueli, MD, PhD



Herbert Duvivier, MD



Naheed Alam, MD



Haider Khadim, MD



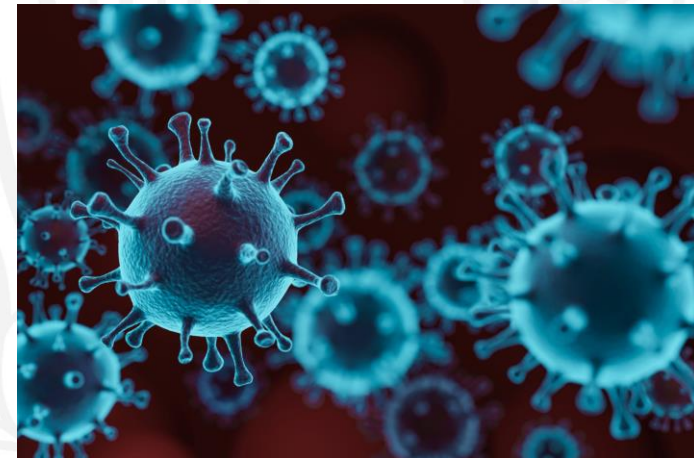
Roberto Pili, MD

Building Thoracic Oncology program in the Midst of COVID-19 Pandemic

How?

- Clinical Practice Group – call center, marketing, staffing.
- Tumor Board – all inclusive.
- Outreach – PCP's offices, Kaleida system.
- Availability, Affability, Accountability.

But COVID 19- Came!



Building Thoracic Oncology program in the Midst of COVID-19 Pandemic

The Barriers:

- No personal communications -
- Co-ordination between Medical Oncology, Radiation Oncology and Thoracic Surgery.
- Staging – CT scans, PET/CT, pulmonary function test.
- Preadmission testing.
- Getting immunosuppressed patients into the hospital with COVID+ patients.

The Solution:

Zoom outpatient Clinic

Virtual Tumor Board via Oncolens



All done locally in a near home Facility

Done – including COVID test

Building Thoracic Oncology program in the Midst of COVID-19 Pandemic

The Barriers:

- Limited resources – OR, ICU beds, Ventilators
- Decrease in number of house staff and nursing
- Aerosolized procedure
- COVID-19 testing and timing
- No visitors – Discharge planning

The Solution:

Prioritization system

Limited # patients

Appropriate protection

Timing and isolation

Daily phone calls

Building Thoracic Oncology program in the Midst of COVID-19 Pandemic

COVID-19 Guidance for Triage of Operations for Thoracic Malignancies:

A Consensus Statement from Thoracic Surgery Outcomes Research Network.

Thoracic Surgery Patients Groups:

- Surgery performed as soon as feasible
- Surgery deferred (estimate 3 months)
- Alternative treatment CONSIDERED

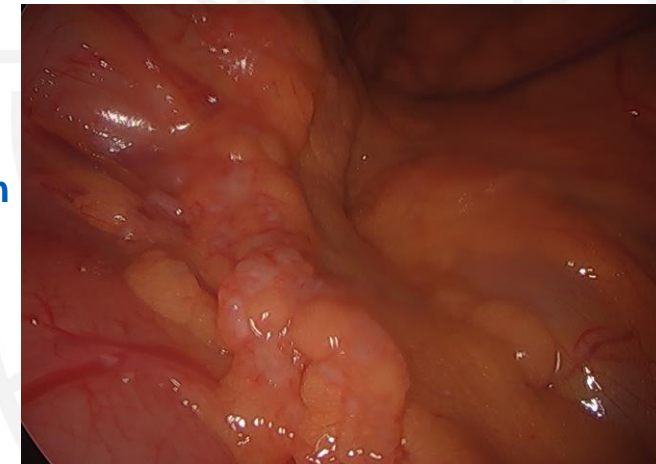


Building Thoracic Oncology program in the Midst of COVID-19 Pandemic

COVID-19 Guidance for Triage of Operations for Thoracic Malignancies: A Consensus Statement from Thoracic Surgery Outcomes Research Network

Phase I - Few COVID 19 patents in hospital - Hospital resources intact (e.g. ICU beds, ventilators, clinicians, Personal Protective Equipment PPE) - COVID-19 trajectory not in rapid escalation phase.

- Surgery restricted to patients whose survivorship likely to be compromised by surgical delay of 3 months.
 - ☐ Solid or predominantly solid (>50%) lung cancer or presumed lung cancer >2cm, clinical node negative
 - ☐ Node positive lung cancer
 - ☐ Post induction therapy for cancer
 - ☐ Esophageal cancer T1b or greater
 - ☐ Chest wall tumors of high malignant potential
 - ☐ Stenting for obstructing esophageal tumor
 - ☐ Staging to start treatment (EBUS, mediastinoscopy, diagnostic VATS for pleural dissemination)
 - ☐ Symptomatic mediastinal tumors – diagnosis not amenable to needle biopsy
 - ☐ Patients enrolled in therapeutic clinical trials

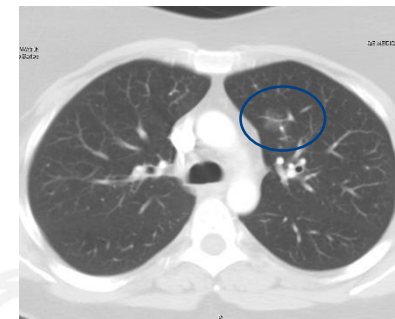


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COVID-19 Guidance for Triage of Operations for Thoracic Malignancies: A Consensus Statement from Thoracic Surgery Outcomes Research Network

- **Surgery deferred estimate 3 months.**

- ☐ Predominantly ground glass (<50% solid) nodules or cancers
- ☐ Solid nodule or lung cancer < 2 cm
- ☐ Indolent histology (e.g. carcinoid, slowly enlarging nodule)
- ☐ Thymoma (non-bulky, asymptomatic)
- ☐ Pulmonary Oligometastases unless clinically necessary for pressing therapeutic or diagnostic indications (i.e. surgery will impact treatment)
- ☐ Patients likely to require prolonged ICU needs (i.e. particularly high-risk patients)
- ☐ Tracheal resection (unless aggressive histology)
- ☐ Bronchoscopy
- ☐ Upper Endoscopy
- ☐ Tracheostomy



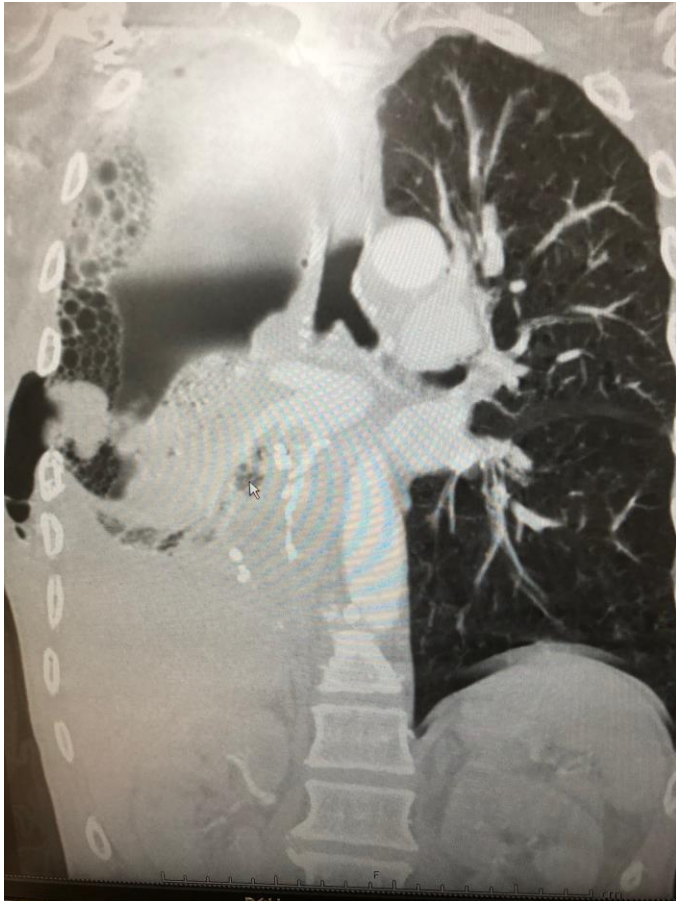
But – the COVID-19 related restrictions started in beginning of March 2020 – It lasted away more than 3 months unlike the initial prediction...

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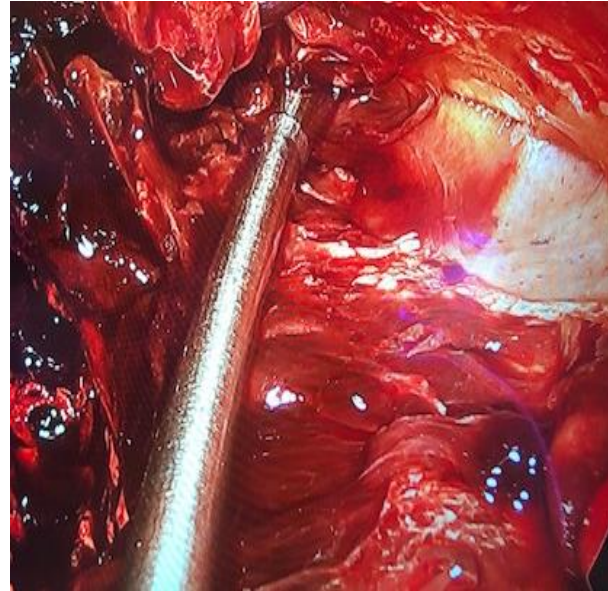
COVID-19 Guidance for Triage of Operations for Thoracic Malignancies: A Consensus Statement from Thoracic Surgery Outcomes Research Network

- **Alternative treatment CONSIDERED**
 - ☐ Endoscopic therapy for Early stage esophageal cancer (stage T1a/b superficial)
 - ☐ If eligible for adjuvant therapy, then consider neoadjuvant therapy (e.g. chemotherapy for 5cm lung cancer)
 - ☐ Stereotactic Ablative Radiotherapy (SABR)
 - ☐ Ablation(e.g. cryotherapy, radiofrequency ablation)
 - ☐ Stent for obstructing cancers then treat with chemoradiation
 - ☐ Debulking (endobronchial tumor) only in circumstance where alternative therapy is not an option due to increased risk of aerosolization
(e.g. stridor post obstructive pneumonia not responsive to antibiotics)

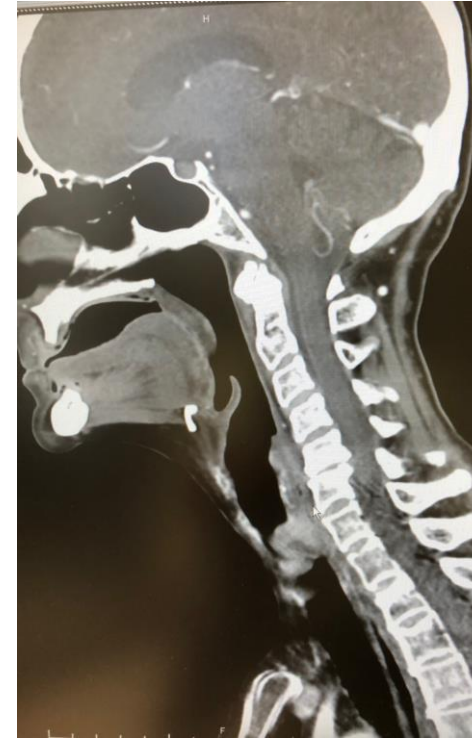
Thoracic Emergencies:



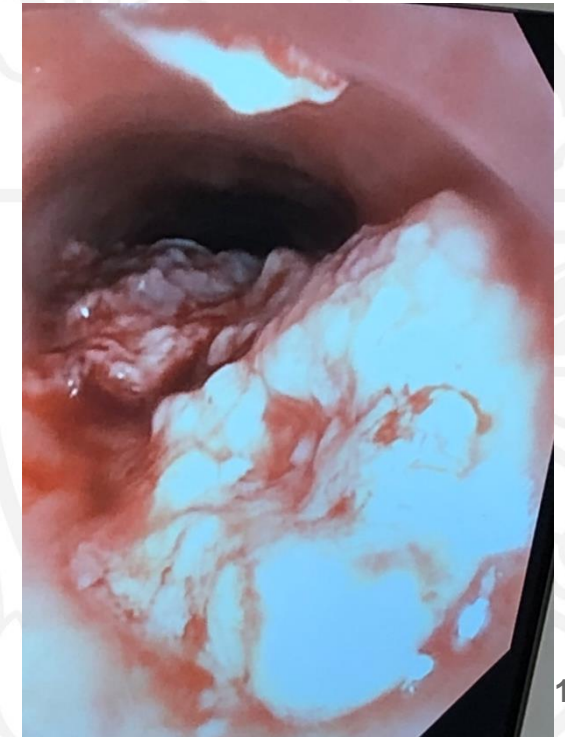
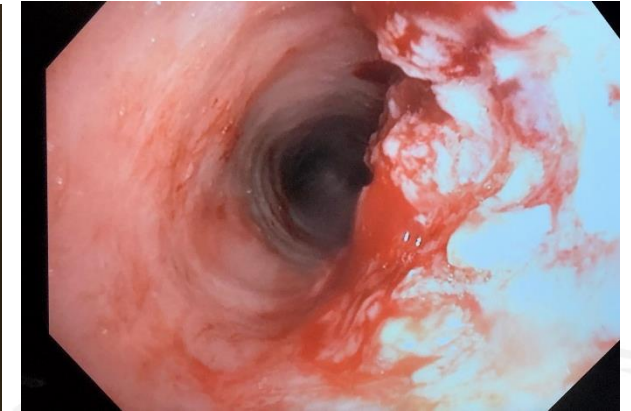
72yO m, severe SOB.
2 weeks after Bilobectomy in
RPCC.
Large PTX, Atelectasis and
pleural effusion.



61yOM, CRF on HD with
Rt. Empyema.

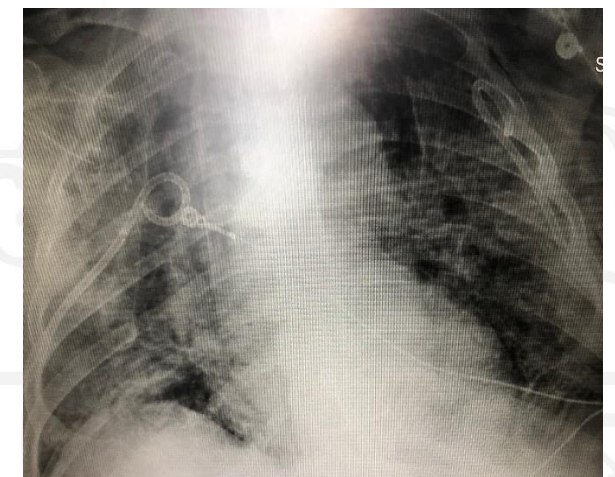
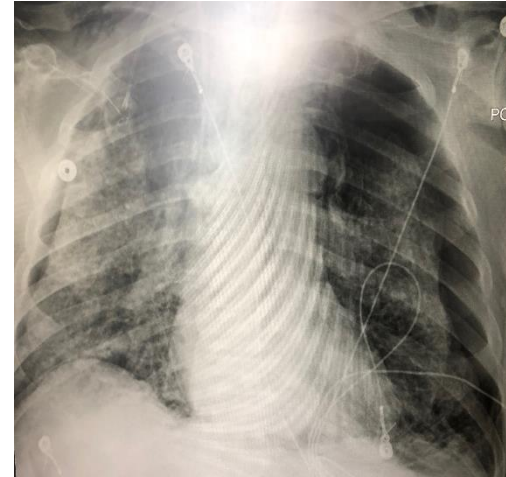
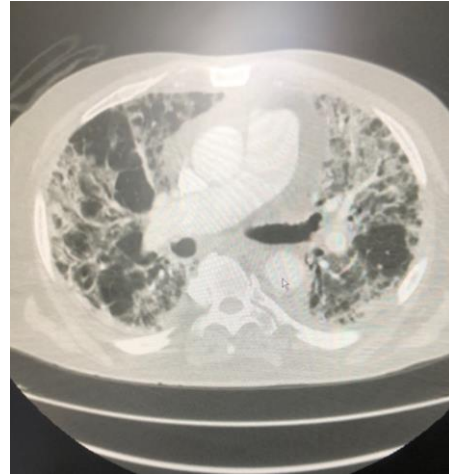
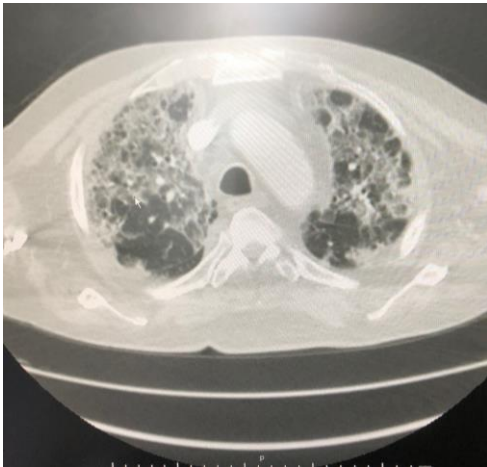


56 yO F, Obstructing
Tracheal Squamous
cell cancer.



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Thoracic complications in COVID-19 Patients:



Pneumothorax – Tension Pneumothorax
Pneumomediastinum
Pneumo-peritoneum
Empyema
Airway control – Tracheostomies

Building Thoracic Oncology program in the Midst of COVID-19 Pandemic

What about the mission?

Lung cancer screening program

- Virtual Zoom CPG's implementing it in the community.
- Smoking cessation education – online advertising
- Lung nodule clinic – Zoom and virtual clinic while reviewing the scans online.
- Navigational and Robotic program –
First Robotic pneumonectomy in western NY done here in GVI couple of weeks ago.
- Research program:
Getting equipment and building the research laboratory in Jacobs School of Medicine and Biomedical Sciences.



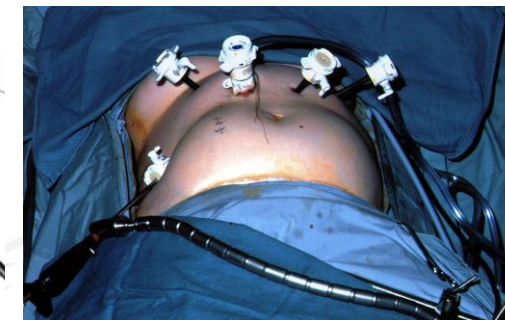
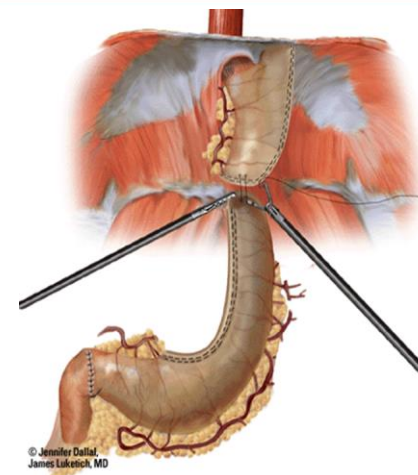
Building Thoracic Oncology program in the Midst of COVID-19 Pandemic

What about the mission?

MIE and RAMIE – the first Minimally Invasive Esophagectomy in BGH was done in the midst of COVID, the patient was discharged after 5 days.

Palliation program – stents and laparoscopic feeding jejunostomy.

PleurX Catheter for malignant effusions.



Thoracic Robotic Cases - 14

7/9/2020	<u>Thoracic</u>	<u>Pulmonary Lobectomy</u>
7/2/2020	<u>Thoracic</u>	<u>Thymectomy</u>
6/25/2020	<u>Thoracic</u>	<u>Pulmonary Wedge Resection</u>
6/18/2020	<u>Thoracic</u>	<u>Pulmonary Lobectomy</u>
6/15/2020	<u>Thoracic</u>	<u>Pulmonary Lobectomy</u>
6/1/2020	<u>General Surgery</u>	<u>Heller Myotomy</u>
5/14/2020	<u>Thoracic</u>	<u>Pulmonary Wedge Resection</u>
5/12/2020	<u>Thoracic</u>	<u>Pulmonary Lobectomy</u>
5/7/2020	<u>Thoracic</u>	<u>Pulmonary Lobectomy</u>
4/27/2020	<u>Thoracic</u>	<u>Pulmonary Lobectomy</u>
4/23/2020	<u>Thoracic</u>	<u>Pulmonary Wedge Resection</u>
4/13/2020	<u>Thoracic</u>	<u>Pulmonary Lobectomy</u>
3/26/2020	<u>Thoracic</u>	<u>Pulmonary Wedge Resection</u>
3/19/2020	<u>Thoracic</u>	<u>Pulmonary Wedge Resection</u>



Building Thoracic Oncology program in the Midst of COVID-19 Pandemic

- Address the challenges
- Paradigm shift in patients' care from hands on to remote communication
- Different prioritization
- Protect ourselves, Protect our patients
- Innovate and adapt
- Life is not going to be the same - Changes are faster than ever
- Stay safe!



Thank You!

