PRMC
Interventional Pulmonology
The First 2 Years

Yashvir Singh Sangwan MBBS
Director of Interventional Pulmonology
Conflicts of Interest

I get a RVU based salary
I have never received a RVU bonus
I have had salary cuts for not making enough RVUs

I have no other Conflict of Interest as a Physician
Bronchoscopy
Pleural Procedures

- 2016-2017
- 2017-2018
- 2018-2019
A World-Class Service?

Quantity Vs. Quality
# Pleural Outcomes

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>62%</td>
<td>60%</td>
<td>Thoracentesis</td>
<td>9.5%</td>
<td>15%</td>
</tr>
<tr>
<td>23%</td>
<td>25%</td>
<td>Chest Tube</td>
<td>34%</td>
<td>33%</td>
</tr>
<tr>
<td>12%</td>
<td>11%</td>
<td>PleurX</td>
<td>35%</td>
<td>28.5%</td>
</tr>
<tr>
<td>3%</td>
<td>4%</td>
<td>Tpa-DNase</td>
<td>12%</td>
<td>15%</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>Pleurodesis</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>Pleuroscopy</td>
<td>9.5%</td>
<td>8.5%</td>
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Definitive first procedure - 38% vs 90%
Clinicians can correctly distinguish 84% of effusions as transudate / exudate and identify 94% of exudates before thoracentesis – So...why not go straightaway to definitive treatment of the most likely cause?

Romero et al. Chest 2002; 122 : 1524 - 29

Flowchart:

1. History, clinical examination & CXR
2. Does the clinical picture suggest a transudate? e.g. LVF, hypoalbuminaemia, dialysis
   - YES: Treat the cause
   - NO: Pleural aspiration (with ultrasound guidance)
3. Send for: cytology, protein, LDH, pH
5. (Additional tests if warranted - see text box)
6. Resolved?
   - YES: STOP
   - NO: Repeat process
Protocol Day One

History, clinical examination & CXR

Does the clinical picture suggest a transudate? e.g. LVF, hypoalbuminaemia, dialysis

YES

Treat the cause

Resolved?

YES

STOP

NO

What is your clinical diagnosis?

Malignancy

I don’t know

Infection

Ultrasound

Pleur al mass

I don’t know

Loculations/Adhesions/Plankton

IPC/Pleuroscopy

Diagnostic Tap

chest tube
LOS down 3 days, Readmission down 60%
Repeat Procedures = 0
Complications = 0
# of Procedures / Effusion = 1.28
## Regular protocol performance

<table>
<thead>
<tr>
<th>Number of procedures per Effusion</th>
<th># of procedures per effusion = 2.04</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>&gt;=2</td>
<td>50%</td>
</tr>
<tr>
<td>&gt;=3</td>
<td>33%</td>
</tr>
<tr>
<td>&gt;=4</td>
<td>17%</td>
</tr>
</tbody>
</table>

Pneumothorax = 4.3%

People still living with effusions (failure rate ) = 28.2%
Both our volume & our outcomes have improved
Publications


➢ Sangwan YS. Defining an ideal technique for percutaneous dilatational tracheostomy--is real-time ultrasound guidance the final piece of the puzzle? J Crit Care. 2015 Apr;30(2):429.


Abstracts


➢ Hersi K, Sangwan YS et al. 10082 - Multi-Modality Management of a Lone Mediastinal Silicosis Presenting as an Extremely Rare Case of Chylothorax. ATS 2018.


➢ Hersi K, Sangwan YS et al. 10190 - Occam’s Razor: An Extremely Rare Presentation of a Very Rare Pulmonary Manifestation of Lupus. ATS 2018.

➢ Hersi K, Sangwan YS et al. 15459 - Flu Vaccine Associated ANCA Vasculitis: A Rare Entity. ATS 2018.
ATS 2019

➢ J Crossan et al. How empowering endoscopy staff decreased our EBUS Scope damages

➢ J Crossan et al. Outcomes of outpatient povidone iodine pleurodesis via IPC

➢ S Kalluri et al. A Chest Tube preferred approach to inpatient pleural effusions

➢ J Crossan et al. Intra-pleural lytics- how low can we go?

➢ S Kalluri et al. A rare case of Bronchiectasis
Even our patients are Innovative
The Future - Robots?
Asthma & COPD
Thanks