Multi-Centred, Prospective, Audit to Identify Readmission Causes and Complications Within 30 days of Primary Lung Cancer Surgery

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DISCLOSURE SLIDE

No conflicts of interests to declare
Aims

1. To identify the readmission rates of patients undergoing major lung cancer surgery
2. Reasons for readmission
3. Common factors for readmission between centres
4. Lessons learnt to facilitate service improvement

Methods

- Data collection over 3 months
- Primary lung cancer resection
- 1 month post discharge by telephone
- Data collection included:
  - Socioeconomic
  - Comorbidities
  - Surgery type
  - Postoperative recovery
  - Discharge satisfaction
  - Readmission details
Results

Total of 268 patients between 1<sup>st</sup> May - 31<sup>st</sup> July 2017

- Patients readmitted n=30 patients, rate 11% (range 3-24%)
- Readmitted within 7 days of discharge 14/30 (47%)
- Length readmission stay longer than initial surgical stay, median 8 (range 0-94) vs 5 (range 2-27)
- Readmitted to the same hospital that performed the surgery 17/30 (57%)
- Of the readmitted patients 37% was discharged home with a chest drain (11/30)
- Patients ≥2 post operative complications significantly more likely to be readmitted (p=0.02)
- Patients were admitted through emergency department 70%
- In hospital mortality 0%, patients readmitted 3/30 died with in 30 days of discharge
Risk factors?

- Gender
- Social situation
- Comorbidities
- Performance status
- Age
- Surgical approach

Not risk factors for readmission

Except current smoking

<table>
<thead>
<tr>
<th>Smoking status</th>
<th>Re-admission risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>8%</td>
</tr>
<tr>
<td>Ex&gt;6 weeks</td>
<td>8.5%</td>
</tr>
<tr>
<td>Current</td>
<td>16%</td>
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</tbody>
</table>
Involvement of patient in decisions regarding follow up and care. Competing interests regarding discharge process.


12/268 did not feel ready for discharge. That accounts 1/3 of the readmission group (10/30) (P=0.003)
Take Home Message

- Most readmission occurred within 7 days of discharge
- Patients being readmitted to a hospital that did not perform the procedure
- Cause of readmission was mainly pulmonary related
- Readmission was associated with current smoking, post-operative complications, discharge with chest drain and the patient’s readiness for discharge
- Earlier follow up for high risk patients and smoking cessation prior to surgery may significantly reduce these readmission related factors
- **Incorporating patient feedback related to overall experience and readiness for discharge should be our number one priority when discharging patients!**
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