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Institutional Comparison of VATS Segmentectomy to VATS Lobectomy

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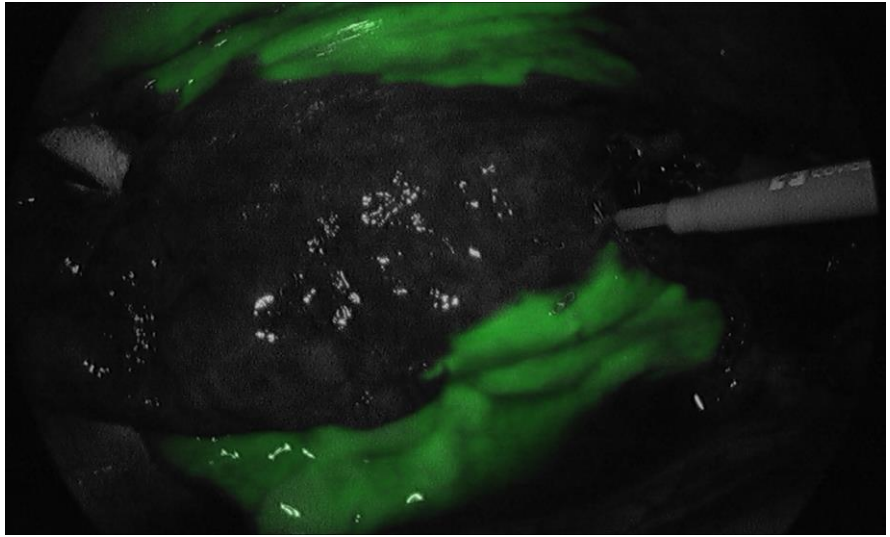
BACKGROUND

- **Rising demand for anatomic segmentectomy**
  - Functionally impaired patients
  - Rising number of early stage lung cancer
- **Limited literature**
- **Aim: perioperative and long-term outcome after VATS segmentectomy vs VATS lobectomy**

METHODS

- **Institutional VATS database**
- **Exclusion criteria:**
  - More complex procedures than VATS lobectomy
  - Neoadjuvant therapy
  - Clinically nodal positive patients
  - Tumor diameter > 30 mm
- **Indocyanine green for identification of segment border**



ICG perfusion for a right –sided VATS S8 resection, S8 artery already cut

RESULTS

Factor	Segmentectomy	Lobectomy	p-value
Time at postoperative recovery room (mins)	228	250	**0.005**
Chest drain duration (days)	3	4	**0.001**
Airleak rate (%)	3.2	17.1	**0.005**
Length of stay (days)	7	8	0.74
Recurrence rate (%)	12.5	19.3	**0.258**

- Median follow-up: 55 months
  - No difference in progression free survival

CONCLUSIONS

- VATS segmentectomy is feasible
- Segmentectomy shows a lower air leak rate
- Segmentectomy results in comparable oncologic outcome in carefully selected patients