

Impact of patient factors on length of hospital stay following VATS lobectomy

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Objective

Enhanced Recovery after Surgery (ERAS) has been shown to improve outcomes following thoracic surgery. One of the key components of ERAS is day of surgery admission, however this is often not easily achievable due to patient and hospital factors. The aim of this study was to audit the admission practice and outcome in patients undergoing VATS lobectomy for cancer.

Methods

We retrospectively audited consecutive patients undergoing VATS lobectomy at one centre between June and August 2015. Electronic Patient Records were analysed and patients were divided into Day Before Admission (DBA) and On Day Admission (ODA). Patients who underwent sublobar resection, bilobectomy, complex resection, conversion to thoracotomy and those who were admitted more than one day before surgery for investigations or to optimise a pre-existing co-morbidity were also excluded.

Results

34 patients who underwent VATS lobectomy were identified. 25 patients (74%) were admitted the day before of surgery. There was no difference in age, however there was a higher ratio of male ODA than DBA patients (67% vs 28%). DBA patients tended to live further away from the hospital and have a higher Thoracscore than ODA patients. The overall median length of post operative stay was 4 days, but DBA patients tended to stay an average of one extra day (mean 5.68+/-4.3 vs 4.89+/-3.14 days).

Conclusion

This small retrospective audit demonstrates that the majority of patients undergoing VATS lobectomy are still being admitted a day before surgery at our surgical centre. The impact of increased length of hospital stay for elective surgical patients has significant cost and service implication particularly in the current financial climate. We identified the distance from the surgical centre, gender and general fitness as factors affecting current admission practice.

| | Day before (DBA) | On day (ODA) |
|------------------------------------|------------------|----------------|
| Total number of patients | 25 | 9 |
| Male: Female | 7:18 (28% male) | 6:3 (67% male) |
| Mean Age | 71+/-7 | 71+/-5 |
| Mean Distance | 14.3+/-15.6 | 9.7+/-4.3 |
| Mean THORACOSCORE, % | 1.93+/-1.11 | 1.44+/-0.51 |
| Mean LOS from surgery, days | 5.68+/-4.3 | 4.89+/-3.14 |