Retrospective review on mid-term surgical outcome of early stage non-small cell lung cancer (NSCLC) surgery in a single university affiliated tertiary referral centre

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Introduction
Lung cancer is the leading cause of cancer death in Hong Kong. Majority of cases were NSCLC and surgical resection is the standard of care for early stage NSCLC

Objectives
To review the mid term outcome of surgical resection for early stage NSCLC

Methodology
A total of 195 consecutive patients with surgical resection for early stage NSCLC at a university affiliated tertiary referral centre from June 2010 to July 2012 were analyzed retrospectively. All patients received anatomical resection either by video-assisted thoracoscopic or open thoracotomy approach and were followed by adjuvant therapy if clinically indicated. Patients were then followed-up according to a standard follow-up protocol which consists of clinic visit every 3 months, or more if indicated. History taking, physical examination and chest X-ray would be done routinely in every visit. Blood tests and further radiological studies including CT and PET scan would be requested where there is clinical suspicion of cancer recurrence

Result
There were a total of 258 surgical resections for NSCLC during the study period. 195(75.6%) of them were pathologically confirmed early stage lung cancer of which 143(73.3%) patients had stage I and 52(26.7%) patients had stage II disease. Mean follow-up time was 46.1 months. The overall 5-year survival for early stage NSCLC (stage I and II) was 72.9%. The 3-year overall survival were 86.0% and 80.8% for stage I and stage II disease respectively. Cancers recurrence was observed in 53(25.6%) patients of which 23(43.4%), 16(30.2%) and 14(26.4%) were local recurrence, distant metastasis and both local and distant recurrence respectively. 66.0% of disease recurrence occurred within 2 years from surgical resection. 3(1.5%) out of 195 patients developed metachronous lung cancer. The results demonstrated that our outcome of surgical resection of NSCLC is on par with the internationally published data. Disease relapse usually manifests as local recurrence and majority of
cases will happen within 2 years from operation.