Title: Symptom occurrence in lung cancer patients prior to surgery

Body: Only three studies evaluated the occurrence of symptoms in patients prior to lung cancer surgery. No information is available on differences in symptom occurrence rates between younger and older patients. The purpose of this study was to evaluate for differences in symptom occurrence between older (≥65 years) and younger (<65 years) patients using a multidimensional symptom assessment scale. Patients were recruited from three university hospitals in Norway. They completed a number of self-report questionnaires before surgery that provided information on demographic and clinical characteristics and symptoms. Patients’ medical records were reviewed for disease and treatment information. Descriptive statistics were used to present demographic and clinical characteristic of the sample. Logistic regression was used to evaluate the effect of increasing age on the occurrence rate of each symptom. Significant differences, between the two age groups in the occurrence rate of each symptom were evaluated with binary logistic regression analyses. The sample consisted of 158 (58 %) men and 112 (42 %) women. Their mean age was 65.8 years, range 30 to 87. Regardless of age, patients reported a mean of 9.55 symptoms (SD 7.37). Of the 32 MSAS symptoms, older patients reported significant lower occurrence rates for difficulty concentrating, feeling drowsy, worrying and, feeling sad prior to surgery. No age-related differences were found in the remaining 28 symptoms. Findings from this study suggest that regardless of age, an evaluation of multiple symptoms might be a useful clinical tool to assist clinicians to determine patients’ “fitness for lung cancer surgery. (Supported by a grant from The Norwegian Cancer Society).