Objectives: To identify potential factors predicting recurrence after talc pleurodesis for malignant pleural effusion.

Methods: Retrospective study of two cohorts of consecutive patients undergoing surgery for malignant pleural effusion (TVATS/talc pleurodesis number of procedures $n=41$, IPC VATS/indwelling pleural catheter $n=41$). Data analysed: ASA, performance status, underlying histology, amount of effusion drained at initial procedure, morbidity, recurrence of effusion (RecEff), redo surgery due to recurrence. The definition of RecEff was based on imaging (at least CXR) and related report issued by a senior radiologist. Median radiological follow-up of both groups was identical (8 months). Statistical analysis was done through SPSS ver 21.

Results: The RecEff rate was 20% in the IPC group and 32% in the T group. Fifty percent (4/8) of patients with failed pleurodesis in the IPC group required redo surgery compared to 92% (12/13) in the T group, which was significant. Median time to recurrence in the IPC group was 9 months, in the T group 4 months. In the T group the only relevant factor associated with recurrence was lung cancer histology ($P=0.055$). The statistical significance of ASA score $>2$ ($P=0.042$) and performance status 2 ($P=0.019$) in this context is difficult to interpret. There were no significant differences between cohorts in age (69.5 years [60-78.2]), gender (41 males and 41 females), ASA (3 [2-3]), performance status (1 [1-2]), millilitres of effusion drained (1600 [1000-2550]), site of primary (mesothelioma 32% of patients, lung Ca 21%) and morbidity (7%).

Conclusions: The recurrence rate after talc pleurodesis was notably higher compared to the IPC group in our study and a significant number of patients affected required redo surgery. Lung cancer histology was the only clinically relevant predictor of recurrence in the talc group, potentially favouring the choice of a primary IPC insertion for these patients rather than chemical pleurodesis.

Disclosure: No significant relationships.