Management of malignant pleural effusion

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Comments on:
Predictors of Clinical Use of Pleurodesis and/or Indwelling Pleural Catheter Therapy for Malignant Pleural Effusion

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To the editor,

With great interest we read the study by Fysh et al. Using both patient and fluid characteristics they have been able to select patients who are likely to undergo definitive pleural therapy. The authors claim that this knowledge allows early selection of patients avoiding repeated pleural procedures.

As Fysh commented, these results are “a real-life prescription behavior of clinicians regarding definitive therapy”. Decisions to undertake definitive therapy are made by physician together with patient.

We question the use of a treatment modality as primary endpoint as it is influenced by the physician himself. Decisions whether to perform pleurodesis, insert an Indwelling Pleural Catheter (IPC) or not are not solely based on pH, large size pleural effusion, mesothelioma or age. For instance, we demonstrated prospectively that changes in patient reported dyspnea scores after therapeutic thoracentesis were related to the need for reintervention too. Thus, these predictors can be used together with the objective need for definitive pleural therapy.

We prospectively collected a database from patients with pleural effusions. Over 500 patients with pleural effusions were included. As is expected from a comprehensive cancer center, the majority of patients suffered from malignant pleural effusion. After excluding non-malignant effusions, 381 patients were enrolled for this analysis. In this cohort, the majority was female (232/381). Median age of patients was 61 years. Pleural effusion was predominantly right-sided (213/381). In contrast to the population described by Fysh, our database consisted of more patients suffering from breast cancer (103/381), as previously reported. At the time of analysis 42 patients were still alive without either pleurodesis or IPC insertion, 170 patients (45%) underwent definitive treatment for recurrent MPE, and 169 patients died without a definitive treatment for pleural effusion. No data was available on recurrent thoracenteses.

Inspired by the referred study, univariate analysis of our data showed also a significant correlation with age (OR 0.979, p= 0.017). Besides, patients with higher protein levels were more likely to undergo definitive treatment for pleural effusion at some stage during their disease (OR 1.021, p=0.048). No information was available on pleural fluid pH.

We identified one other variable. Patients with bilateral pleural effusion (52/381) were more prone for definitive pleural treatment than patients with unilateral pleural effusion. (OR 3.884, p< 0.0001).

Understanding their own clinical decisions, clinicians may be able to inform patient more detailed on future therapies.