5.09 Pleural Predictions: Navigating The Diagnosis, Management And Prognosis Of Malignant Pleural Effusions

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Background: Malignant pleural effusion (MPE) complicate 15% of solid cancers. We sought to review approach to MPE in our centre. **Methods:** Pleural fluid specimens received in the SJH Cytology laboratory from 1st January 2021 to 31st December 2023 were included. Positive cytology results were reviewed and adequacy of cell block for ancillary testing for NSCLCa MPE assessed. Chart review of MPE cases in 2023 was performed. **Results:** 184/723 (24%) pleural fluid specimens yielded positive cytology – 45% NSCLCa (adenocarcinoma), 20% gynaecological malignancy, 14% breast malignancy, 10% upper GI malignancy, 11% other. Where commented upon in cytology report, 54% and 43% of NSCLCa pleural fluid specimens provided a cell block adequate for PDL1 and molecular analyses, respectively. Of 35 MPE case charts reviewed, 69% underwent drain insertion, 26% thoracocentesis, and 6% VATS as first intervention. Of 26 patients who survived >28 days, 16 (62%) required further intervention. Addian survival post MPE diagnosis was 46 days. **Conclusion:** In practice, pleural fluid specimens are adequate for ancillary testing in approximately half of lung adenocarcinoma MPEs. In SJH, MPE management relies heavily upon chest drain insertion. **Conflict of Interest:** The authors declare that they have no conflict of interest.