5.21 Pleural pathology in a North Dublin Cohort: Experience of a Tertiary pleural service.

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Abstract

Rationale: Accurate clinical, biochemical and cytological data is vital in the understanding of downstream molecular analysis of patients with pleural effusion.

Methods:

We prospectively recruited individuals who presented with a pleural effusion between May 2023 to July 2024. Information on demographics, clinical characteristics, radiological appearance, pleural biochemistry, cytology and further management were collected.

Results

Eighty-eight patients in total were recruited: 23 (26%) malignant pleural effusion (MPE), 17 (19%) pleural infections, 22 (25%) other benign pathologies, 18 (21%) cytologically negative malignant pleural effusion (CNMPE) and 8 (9%) unclassified to date. In those with pleural infection septations were significantly higher while pleural fluid culture only yielded a pathogenic organism in 18% of cases. Pleural diaphragmatic nodularity, large size on ultrasound and pleural thickening was statistically more prevalent in MPE. Pleural thickness and nodularity elsewhere were not significantly different between the groups. Interestingly, of all cohort survival was worse in the cytologically negative malignant pleural effusion.

Conclusion

This study provides information on the pleural pathology presenting to a tertiary hospital in Dublin, Ireland. It also highlights inadequacies in current diagnostics namely pleural culture and cytology. Diagnostics may be improved by the application of molecular methods, particularly in those too frail for invasive investigations.