5.07 Discordant Exudates: A Clinical Conundrum

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Rationale: Light's criteria is a cornerstone in pleural effusion work-up. Diagnostic uncertainty arises where only one criterion is met –"discordant exudate".

We determined the proportion of discordant exudates treated in our centre and assessed utility of Serum/ Fluid Protein Gradient and Fluid LDH to improve classification.

Pleural fluid samples over 5 years were collated. Clinical case review was performed establishing the clinical classification for discordant exudates.

Results:Of 1203 samples,297(25%) had sufficient data. 33(11%) were discordant exudates. 11/33(33%) were clinical transudates, and 22/33(67%)clinical exudates.

The most common aetiology of clinical transudates was heart failure(n=8/11; 73%) and malignancy in clinical exudates(n=12/22;55%). Most clinical transudates were classified exudative based on Fluid/ Serum Protein Ratio(7/11;64%). The majority of clinical exudates were classified exudative based on Fluid/Serum LDH Ratio or Fluid LDH/ULN LDH Ratio(13/22;59%).

8/11(73%) and 10/11(91%) of clinical transudates were correctly reclassified based on application of SFPG and fLDH. However,10/22(45%) and 13/22(59%) of clinical exudates were incorrectly reclassified as transudates.

Conclusions: While SPFG and fLDH improved classification accuracy of clinical transudates, a substantial number of clinical exudates were incorrectly reclassified. Caution should be exercised when applying these criteria.