

and therefore assigned a LENT score. All patients were assigned to a DTA prognostic group. Median survival in each group compared with predicted survival is shown in table 1.

Overall, the observed median survival in our cohort groups appeared to be within the predicted range for both scores. There was significant difference in survival between the 4 prognostic groups using the DTA score ($p=0.003$) and LENT groups 0–1 and 2–4 ($p=0.03$).

Conclusion Overall, the 2 scores demonstrated a significant difference in survival between prognostic groups in our cohort of patients. The DTA score may be more useful as it is applicable to all patients, not just those with pleural effusions. The simple scores help clinicians recognise those patients who are likely to have a worse prognosis and who therefore should be managed more conservatively.

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THE BIOLOGICAL EFFECT OF TISSUE PLASMINOGEN (T-PA) ACTIVATOR AND DNASE INTRAPLEURAL DELIVERY IN PLEURAL INFECTION PATIENTS

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Background Pleural infection (PI) is a major global disease with an increasing incidence. Pleural fluid (PF) drainage is essential for the successful treatment of PI. The MIST 2 study showed that the intrapleural administration of t-PA and DNase, or t-PA alone increases the volume of drained PF. A mouse study suggested that the volume increase is due to the interaction of the pleura with the t-PA via the MCP-1 pathway.

Aim To test the hypothesis that PF volume induction is mediated by the MCP-1 pathway.

Methods For the MIST 2 study 210 PI patients were randomised to receive for 3 days either: t-PA and DNase, t-PA and placebo, DNase and placebo or double placebo. Daily PF drainage was recorded and samples of PF were stored. PF MCP-1 levels were measured by ELISA.

Results During treatment (days 1–3) t-PA +DNase and t-PA +placebo significantly increased (ANOVA $p<0.001$) the volume of drained PF compared to DNase +placebo or double placebo groups. There was no significant difference (ANOVA $p>0.05$) between any of the groups during the post-treatment period (days 5–7). t-PA +DNase and t-PA groups triggered significantly higher (ANOVA $p<0.001$) PF volumes during treatment compared to post-treatment period. The intrapleural administration of t-PA increased the MCP-1 PF levels during treatment however no statistically significant difference was detected between patients who received t-PA and those who did not. MCP-1 expression was not correlated to the drug given nor the volume of drained PF.

Conclusions Intrapleural administration of t-PA ($\pm$ DNase) stimulated a statistically significant rise of the volume of drained PF. The MCP-1 pathway did not correlate with PF volume output. We conclude that the PF increment seen with

the administration of t-PA does not occur solely via activation of the MCP-1 pathway.

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A DEDICATED PLEURAL SERVICE IN A LARGE TEACHING HOSPITAL: CAN WE PROVIDE A TIMELY IN-REACH RESPONSE?

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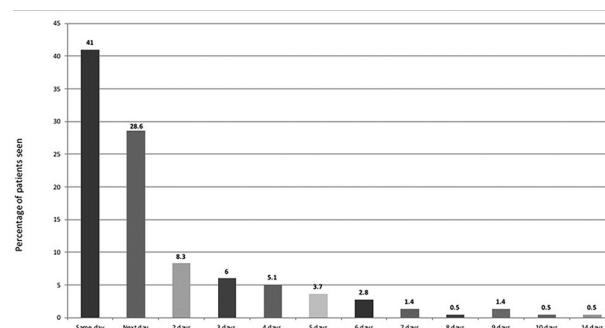
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Introduction Pleural disease affects a significant portion of the population with an incidence of 3000 people per million each year resulting in increased morbidity and mortality. Many patients present acutely to secondary care requiring timely pleural review and interventions as appropriate. Over the last decade, there has been a move towards enabling streamlined specialist management pathways through dedicated pleural services.

Aims We wish to review the in-reach activity of a dedicated 5 day pleural service (managed by 5 respiratory consultants with an interest in pleural diseases, clinical fellow in pleural and advanced bronchoscopic interventions and pleural nurses) in a large 1200 bedded university hospital focusing on the time from referral to pleural consultation.

Methods Consecutive inpatient referrals made to the pleural service via electronic referral system were reviewed between October 2017 and February 2018; referrals from Emergency Department (ED) and acute ambulatory care (AEC) were excluded. Referral source, time of referral to pleural review and interventions data was analysed.

Results Of the 509 patients reviewed by the pleural team, 217 were in-patient referrals. Mean (range) 70 (18–96) years; female: male 111 (52%): 106 (48%). Source of referral: acute medical unit 14 (6.5%), medical wards including short stay 173 (79.7%), surgical wards 13 (6%), oncology 17 (7.8%). Time of referral to pleural review (see figure 1); 89 (41%) were reviewed the same day and 62 (28.6%) the following day of referral. Pleural effusion 203 (93.5%), pneumothorax 7 (3.2%), hydropneumothorax 7 (3.2%). 92 (42.4%) had chest ultrasound assessment only; 72 (33.2%) diagnostic and therapeutic aspiration; 28 (12.9%) chest drain insertion; 10 (4.6%) chest drain removal; 2 indwelling pleural catheter (IPCs) insertion; 1 IPC removal; 1 required drainage and talc; 3 did not require any intervention.



Abstract P261 Figure 1 Time from referral to pleural review

Conclusion Our data demonstrates the role of a dedicated pleural service in providing expeditious inpatient reviews. More