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ERS/ESTS statement on the management of pleural infection in adults

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Intrapleural fibrinolytic-based therapy has revolutionised pleural infection management, but surgical intervention remains vital in select patients. Studies into early and targeted escalation of treatment based on risk stratification are now required. https://bit.ly/3y6rZ8a

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Abstract

Pleural infection is a common condition encountered by respiratory physicians and thoracic surgeons alike. The European Respiratory Society (ERS) and European Society of Thoracic Surgeons (ESTS) established a multidisciplinary collaboration of clinicians with expertise in managing pleural infection with the aim of producing a comprehensive review of the scientific literature. Six areas of interest were identified: 1) epidemiology of pleural infection, 2) optimal antibiotic strategy, 3) diagnostic parameters for chest tube drainage, 4) status of intrapleural therapies, 5) role of surgery and 6) current place of outcome prediction in management. The literature revealed that recently updated epidemiological data continue to show an overall upwards trend in incidence, but there is an urgent need for a more comprehensive characterisation of the burden of pleural infection in specific populations such as immunocompromised hosts. There is a sparsity of regular analyses and documentation of microbiological patterns at a local level to inform geographical

variation, and ongoing research efforts are needed to improve antibiotic stewardship. The evidence remains in favour of a small-bore chest tube optimally placed under image guidance as an appropriate initial intervention for most cases of pleural infection. With a growing body of data suggesting delays to treatment are key contributors to poor outcomes, this suggests that earlier consideration of combination intrapleural enzyme therapy (IET) with concurrent surgical consultation should remain a priority. Since publication of the MIST-2 study, there has been considerable data supporting safety and efficacy of IET, but further studies are needed to optimise dosing using individualised biomarkers of treatment failure. Pending further prospective evaluation, the MIST-2 regimen remains the most evidence based. Several studies have externally validated the RAPID score, but it requires incorporating into prospective intervention studies prior to adopting into clinical practice.