Georgian Scientists
ქართველი მეცნიერები
Vol. 8 Issue 4(1), 2026
https://doi.org/10.52340/gs.2026.08.04(1).26

RHEUMATOLOGICAL DISEASES AS A CAUSE OF EMERGENCY HOSPITALIZATIONS: ANALYSIS OF BAU HOSPITAL EXPERIENCE

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ICU admissions among the patients with respiratory diseases are of considerable clinical importance worldwide, because of the severity of these conditions. Although pulmonary emergencies associated with systemic autoimmune rheumatic diseases (SARDs) are relatively uncommon in general emergency settings, they are associated with high mortality rates and frequently mimic more common critical conditions, such as sepsis or pneumonia. They may manifest with the features of ARDS (diffuse alveolar hemorrhage, acute lupus pneumonitis, antisynthetase syndrome and anti-MDA5 antibody-associated diseases), sometimes even in the absence of overt systemic autoimmune manifestations. Another important challenge is the immunocompromised status of patients with longstanding SARDs, many of whom require prolonged treatment with glucocorticoids and immunosuppressive agents and increased risk of Pneumocystis jirovecii pneumonia, which may also present with bilateral pulmonary infiltrates. Early identification of this infection using appropriate diagnostic methods, including polymerase chain reaction testing of respiratory specimens or bronchoalveolar lavage, followed by prompt initiation of pathogen-specific treatment, is essential to avoid inappropriate escalation of glucocorticoid therapy.

Diagnostic challenges may also arise in patients presenting with severe bilateral cavitating pulmonary lesions, which may reflect not only primary pulmonary infection but also pulmonary involvement associated with newly diagnosed granulomatosis with polyangiitis. In rare cases, respiratory emergencies in patients with SARDs may be associated with biological or targeted synthetic disease-modifying antirheumatic drugs (DMARDs), including adalimumab, rituximab,

tocilizumab, and other agents. Other potential causes of ICU admission include spontaneous pneumothorax, potentially reversible shrinking lung syndrome, severe progressive respiratory muscle weakness and wasting associated with inflammatory myopathies. Overall, hospital-based studies suggest that SARD-related pulmonary emergencies are relatively uncommon but potentially life-threatening conditions requiring early recognition, accurate diagnosis, and disease-specific treatment. In our study, we present the analysis of ICU admissions due to the pulmonary and SARD-related emergencies and discuss some clinical cases. As the uncontrolled flares, especially in patients with systemic vasculitides, are described as considerable factors of mortality risk, we would also share our proposals concerning the use of cloud-based ePROM system for remote monitoring of patients' condition, which is especially important in in geographically remote and difficult-to-access mountainous areas of Adjara.

Keywords: pulmonary emergencies, rheumatology, retrospective hospital-based study, eProm in patients monitoring