World Journal of Internal Medicine and Surgery
ISSN (O): 3048-510X ISSN (P): 3051-2565
Review Article
Impact Factor 5.014
2026, Volume 3, Issue 9, Page: 12-18. www.wjims.com

MYOSITIS-ASSOCIATED INTERSTITIAL LUNG DISEASE: A COMPREHENSIVE REVIEW OF NURSING ASSESSMENT, MANAGEMENT, AND PATIENT EDUCATION

Mrs. Gowthami B. N.*[1], Mr. Nandeesh Kumar P. R.[2], Ms. Deepu B. N.[3]

[1,2]Assistant Professor, Department of Medical Surgical Nursing, Cauvery College of Nursing, Mysuru, Karnataka, India.
[3]Lecturer, Department of Community Health Nursing, Cauvery College of Nursing, Mysuru, Karnataka, India.

Article Info

Article Received: 04 Oct. 2026,
Article Revised: 25 Oct. 2026,
Published on: 01 Nov. 2026.

***Corresponding author:**

Mrs. Gowthami B. N.

Assistant Professor, Department of Medical Surgical Nursing, Cauvery College of Nursing, Mysuru, Karnataka, India.
gowthaminagaraj6807@gmail.com

https://doi.org/10.5281/zenodo.23849936

How to cite this Article: Mrs. Gowthami B. N.*[1], Mr. Nandeesh Kumar P. R.[2], Ms. Deepu B. N.[3]. (2026). Myositis-Associated Interstitial Lung Disease: A Comprehensive Review Of Nursing Assessment, Management, And Patient Education. World Journal of Internal Medicine and Surgery, 3(9), 12–18.

This work is licensed under Creative Commons Attribution 4.0 International license.

ABSTRACT

Background: Myositis-associated interstitial lung disease (M-ILD) is a clinically important pulmonary manifestation of idiopathic inflammatory myopathies (IIMs). Pulmonary involvement may range from asymptomatic radiological abnormalities to progressive respiratory impairment and rapidly progressive interstitial lung disease (RP-ILD). The unpredictable clinical course, combined with muscle weakness, fatigue, dysphagia, reduced mobility, and treatment-related complications, creates substantial challenges for comprehensive patient care. **Objective:** This narrative review aims to describe M-ILD with particular emphasis on nursing assessment, nursing management, patient safety, rehabilitation, and patient and family education. **Methods:** A narrative review approach was adopted. The clinical framework was developed from the existing manuscript and supplemented with contemporary evidence and professional guidance concerning ILD associated with idiopathic inflammatory myopathies. Particular attention was given to respiratory assessment, pulmonary monitoring, pharmacological treatment, supportive care, functional impairment, dysphagia, infection prevention, rehabilitation, and patient education. This article is presented as a narrative review and does not report fabricated systematic-review screening numbers or PRISMA study-selection data. **Results:** M-ILD requires continuous assessment because pulmonary disease may precede or occur independently of clinically prominent muscle disease. Nurses have an important role in identifying changes in respiratory status, monitoring oxygenation, assessing dyspnea and exercise tolerance, recognizing functional decline, supporting diagnostic procedures, administering prescribed therapies, monitoring adverse effects, preventing infection, assessing aspiration risk, promoting nutrition and mobility, and providing psychological support. Patient education is essential for medication adherence, oxygen safety, infection prevention, energy conservation, rehabilitation, follow-up, and recognition of warning signs. **Conclusion:** Nursing care is an integral component of multidisciplinary M-ILD management. A structured nursing approach combining respiratory surveillance, functional assessment, complication prevention, rehabilitation, patient education, and continuity of care can promote patient safety, self-management, functional independence, and quality of life.

KEYWORDS: Myositis-associated interstitial lung disease; nursing assessment; nursing management; patient education; respiratory nursing; dermatomyositis; antisynthetase syndrome; pulmonary rehabilitation; interstitial lung disease.

INTRODUCTION

Idiopathic inflammatory myopathies are uncommon systemic autoimmune disorders characterized predominantly by muscle inflammation or immune-mediated muscle injury and may involve several extramuscular organs. Interstitial lung disease is one of the most clinically significant complications because pulmonary involvement can substantially influence morbidity, functional status, quality of life, and survival.[1]

Myositis-associated interstitial lung disease represents a heterogeneous spectrum of pulmonary disease occurring in patients with inflammatory myopathies. Pulmonary manifestations may develop before clinically apparent muscle weakness, occur simultaneously with muscular disease, or emerge during the subsequent course of illness.[2] This variability can delay recognition and emphasizes the importance of systematic assessment.

The clinical phenotype is influenced by myositis subtype, autoantibody profile, radiological pattern, and disease severity. Antisynthetase antibodies, particularly anti-Jo-1, are strongly associated with pulmonary involvement, whereas anti-MDA5

is associated with clinically amyopathic dermatomyositis and an increased risk of rapidly progressive ILD.[3]

Recent advances in myositis-specific autoantibody testing, pulmonary function testing, high-resolution computed tomography (HRCT), and immunomodulatory treatment have improved diagnosis and disease management. Current ACR/CHEST guidance recommends pulmonary function tests and HRCT for screening patients with systemic autoimmune rheumatic diseases who are at increased risk of ILD and recommends these modalities as important tools for monitoring established disease.[4]

The complexity of M-ILD extends beyond pulmonary pathology. Patients may experience muscle weakness, fatigue, impaired mobility, dysphagia, nutritional difficulties, anxiety, medication-related adverse effects, infection risk, and dependence on caregivers. Consequently, nursing care must be comprehensive and individualized.

Nurses are continuously involved in patient assessment and are therefore well positioned to identify early changes in respiratory status and functional capacity. Nursing responsibilities include respiratory monitoring, oxygen therapy, medication administration and safety surveillance, aspiration prevention, infection prevention, mobility support, rehabilitation, symptom management, psychological support, and patient education.

This review therefore focuses on M-ILD from a nursing perspective, integrating disease-specific clinical knowledge with practical nursing assessment, management, patient education, and continuity-of-care considerations.

REVIEW APPROACH

This article is presented as a **narrative review**. The existing manuscript provided the foundational information regarding epidemiology, classification, pathogenesis, autoantibodies, clinical manifestations, diagnostic evaluation, management, prognosis, and recent developments.

Contemporary clinical guidelines and peer-reviewed literature were considered to strengthen the discussion of ILD screening, monitoring, treatment, and nursing implications. The ACR/CHEST screening and monitoring guideline was developed using systematic evidence review and GRADE methodology and specifically includes idiopathic inflammatory myopathies among the systemic autoimmune rheumatic diseases considered at risk for ILD.[4]

The purpose of this review is not to provide a formal systematic review or meta-analysis. Therefore, no artificial PRISMA counts, fabricated study-selection results, or unsupported quality-assessment findings are presented.

OVERVIEW OF MYOSITIS-ASSOCIATED INTERSTITIAL LUNG DISEASE

M-ILD refers to interstitial pulmonary involvement associated with idiopathic inflammatory myopathies. The clinical spectrum ranges from limited radiological disease to severe pulmonary impairment and respiratory failure.

The original clinical framework identifies ILD as one of the major complications of inflammatory myopathies and emphasizes that pulmonary manifestations may precede muscle weakness.

The disease course may be chronic, progressive, or rapidly progressive. The presence of specific myositis-associated autoantibodies can help clinicians identify phenotypes associated with different patterns of pulmonary involvement.

For nursing practice, this variability means that assessment should be based on both the patient's current clinical status and the potential for deterioration.

Classification Of Myositis Relevant To Nursing Care

Dermatomyositis

Dermatomyositis involves skeletal muscle and skin. Patients may experience symmetrical proximal muscle weakness, difficulty climbing stairs, rising from a chair, lifting objects, and performing overhead activities. Characteristic manifestations include heliotrope rash, Gottron papules, shawl sign, and V-sign.

Nursing implications: Assessment should include respiratory status, muscle strength, mobility, skin integrity, fatigue, pain, functional independence, and ability to perform activities of daily living.

Polymyositis

Polymyositis predominantly affects skeletal muscles and may produce progressive proximal weakness. Dysphagia may occur when swallowing muscles are involved.

Nursing implications: Particular attention should be given to swallowing, nutritional intake, mobility, fall risk, respiratory status, and self-care ability.

Clinically Amyopathic Dermatomyositis

Clinically amyopathic dermatomyositis is characterized by typical skin manifestations with minimal or absent clinically apparent muscle weakness. Despite limited muscle manifestations, pulmonary involvement can be severe, particularly in anti-MDA5-positive patients.

Nursing implications: Absence of marked muscle weakness should not reduce respiratory surveillance.

Antisynthetase Syndrome

Antisynthetase syndrome may present with ILD, myositis, arthritis, fever, Raynaud phenomenon, and mechanic's hands. ILD may be the dominant clinical manifestation.

Nursing implications: Assessment should encompass respiratory function, muscle strength, joint symptoms, skin condition, peripheral circulation, fever, and functional status.

Immune-Mediated Necrotizing Myopathy
Immune-mediated necrotizing myopathy may produce severe proximal muscle weakness and marked functional impairment. Anti-SRP and anti-HMGCR antibodies may be associated with this phenotype.

Nursing implications: Mobility assistance, fall prevention, positioning, pressure-injury prevention, energy conservation, and rehabilitation are priorities.

Inclusion Body Myositis
Inclusion body myositis commonly progresses slowly and may involve finger flexors and quadriceps. Falls, impaired grip, and dysphagia can occur. ILD is less characteristic of this condition.

Nursing implications: Functional assessment, fall prevention, swallowing assessment, and support for activities of daily living are important.

PATHOGENESIS

M-ILD results from complex interactions involving genetic susceptibility, environmental factors, immune dysregulation, autoantibodies, inflammatory mediators, pulmonary injury, and fibrosis. Persistent inflammatory injury can cause interstitial damage and impaired gas exchange.[2]

The original manuscript describes involvement of T cells, B cells, macrophages, inflammatory cytokines, endothelial injury, fibroblast activation, and collagen deposition as components of the disease process.
From a nursing perspective, the pathophysiology provides the basis for understanding dyspnea, hypoxemia, fatigue, exercise intolerance, and progressive respiratory impairment.

MYOSITIS-SPECIFIC AUTOANTIBODIES AND RISK STRATIFICATION

Myositis-specific autoantibodies are useful for classification and assessment of pulmonary risk. Anti-Jo-1 is strongly associated with antisynthetase syndrome, while anti-MDA5 is associated with clinically amyopathic dermatomyositis and rapidly progressive ILD.[3]

The original manuscript also identifies anti-PL-7, anti-PL-12, and anti-EJ as antibodies associated with significant pulmonary involvement.

For nurses, knowledge of the patient's antibody-associated phenotype can support appropriate vigilance and communication with the multidisciplinary team. A patient at increased risk of rapidly progressive pulmonary disease requires particular attention to subtle changes in dyspnea, cough, oxygenation, and exercise tolerance.

CLINICAL MANIFESTATIONS

Respiratory manifestations include progressive dyspnea, dry cough, fatigue, reduced exercise tolerance, and hypoxemia. Muscular manifestations include proximal weakness, myalgia, difficulty climbing stairs, difficulty rising from a chair, and difficulty lifting objects.

Patients may also experience dysphagia, fever, weight loss, arthritis, Raynaud phenomenon, skin manifestations, and general malaise.

Nursing significance
A change in respiratory symptoms should be assessed against the patient's baseline. New or worsening breathlessness, falling oxygen saturation, increased oxygen requirement, new confusion, cyanosis, or severe respiratory distress should prompt immediate clinical escalation.

DIAGNOSTIC EVALUATION

Diagnostic assessment generally includes laboratory investigations, myositis-specific autoantibody testing, pulmonary function tests, and HRCT. The original manuscript identifies complete blood count, inflammatory markers, creatine kinase, aldolase, lactate dehydrogenase, ANA, PFTs, and HRCT among important investigations.

Current ACR/CHEST guidance conditionally recommends PFTs and HRCT for screening patients with systemic autoimmune rheumatic diseases at increased risk of ILD and recommends PFTs, HRCT, and ambulatory desaturation assessment as tools for monitoring established ILD.[4]

Nursing responsibilities during diagnostic evaluation
Nurses should:

- Establish baseline respiratory observations.
- Monitor oxygen saturation when clinically indicated.
- Explain investigations to reduce anxiety.
- Assist with preparation and positioning.
- Observe for clinical deterioration.
- Ensure appropriate documentation.
- Communicate significant changes promptly.
- Reinforce the importance of scheduled monitoring.

COMPREHENSIVE NURSING ASSESSMENT

Respiratory assessment
Assessment should include:

- Respiratory rate and pattern.
- Depth and effort of breathing.
- Oxygen saturation.
- Oxygen requirement.
- Breath sounds.
- Dyspnea severity.
- Cough characteristics.
- Exercise tolerance.
- Signs of respiratory distress.

Trend monitoring is more informative than isolated observations.

Musculoskeletal and functional assessment
The nurse should assess:

- Muscle strength.
- Gait and balance.
- Transfer ability.
- Ability to perform activities of daily living.
- Fatigue.
- Falls history.

- Need for mobility aids.
- Degree of dependence.

Swallowing assessment
Dysphagia requires particular attention because aspiration can produce significant respiratory complications.

Assessment should include coughing during meals, choking, prolonged eating time, wet voice, difficulty swallowing medications, recurrent chest symptoms, and reduced oral intake.

Nutritional assessment
Assessment should include weight, appetite, dietary intake, hydration, swallowing ability, and fatigue during meals.

Psychosocial assessment
The nurse should assess anxiety, depression, fear associated with breathlessness, body-image concerns, social isolation, family support, coping mechanisms, and understanding of illness.

NURSING MANAGEMENT

Respiratory monitoring
Respiratory monitoring is a priority nursing responsibility. Baseline respiratory findings should be documented and compared with subsequent assessments.

Patients with worsening symptoms require timely communication with the medical team because progression may occur rapidly in selected phenotypes.

Oxygen therapy
Oxygen should be administered according to the prescribed indication and target. The nurse should assess oxygen saturation, respiratory effort, response to treatment, comfort, and equipment safety.

For patients receiving oxygen at home, education should include safe equipment handling, avoidance of smoking and open flames, and adherence to prescribed use.

Recognition of respiratory deterioration
Warning signs include:

- Increasing dyspnea.
- Increasing respiratory rate.
- Falling oxygen saturation.
- Increasing oxygen requirement.
- Cyanosis.
- New confusion.
- Severe fatigue.
- Reduced exercise tolerance.
- Acute respiratory distress.

Rapid recognition is particularly important in patients at risk for rapidly progressive ILD.

Positioning
Upright positioning and supported positioning may improve comfort and facilitate breathing. Position should be individualized according to respiratory status and tolerance.

Energy conservation
Nurses should teach patients to:

- Pace activities.
- Alternate activity with rest.
- Prioritize essential tasks.
- Avoid unnecessary exertion.
- Use assistive devices appropriately.
- Coordinate activity with periods of better energy.

Mobility and fall prevention
Muscle weakness and fatigue increase the risk of falls. Nursing interventions include environmental modification, assistance with transfers, safe footwear, adequate lighting, mobility aids, and individualized fall-prevention education.

Dysphagia and aspiration prevention
Patients with suspected dysphagia should receive appropriate assessment. Nursing interventions include safe positioning during meals, adherence to prescribed dietary modifications, appropriate feeding assistance, and observation for aspiration-related symptoms.

Nutritional care
Nurses should monitor intake and weight and coordinate dietetic assessment when required. Patients who experience fatigue or breathlessness during meals may benefit from smaller meals, appropriate rest before meals, and individualized dietary planning.

Medication management
The ACR/CHEST treatment guideline provides contemporary recommendations for treatment of systemic autoimmune rheumatic disease-associated ILD, including first-line therapy, management of disease progression, and rapidly progressive ILD.[5]

Nursing responsibilities include

- Administering medications as prescribed.
- Monitoring therapeutic response.
- Monitoring adverse effects.
- Reviewing relevant laboratory findings.
- Assessing adherence.
- Educating patients about medication precautions.
- Identifying potential infection.

Corticosteroid monitoring
Patients receiving corticosteroids require monitoring for clinically important adverse effects, including hyperglycemia, hypertension, infection, gastrointestinal symptoms, mood changes, and other treatment-related complications.

Immunosuppressive therapy
Immunosuppressive treatment requires careful monitoring for infection and treatment-related complications. New fever,

worsening cough, urinary symptoms, unexplained deterioration, or other signs of infection should be promptly evaluated.

Infection prevention
Nurses should reinforce:
- Hand hygiene.
- Respiratory hygiene.
- Appropriate vaccination.
- Avoidance of unnecessary exposure to infectious illness.
- Early reporting of fever.
- Early reporting of new respiratory symptoms.
- Appropriate follow-up.

Skin care
Patients with dermatomyositis may have photosensitive and inflammatory skin lesions. Nursing care should include skin assessment, protection from excessive ultraviolet exposure, and monitoring for breakdown or secondary infection.

Fatigue management
Fatigue should be assessed as an important symptom affecting function and quality of life.
Interventions include activity pacing, rest periods, adequate sleep, nutritional support, realistic activity goals, and assistance with activities when required.

Psychological support
Chronic breathlessness, muscle weakness, dependence, altered appearance, and uncertainty regarding disease progression can cause psychological distress.
Nurses should use therapeutic communication, active listening, emotional support, family involvement, and referral to appropriate psychological services when indicated.

Pulmonary Rehabilitation And Functional Recovery
Pulmonary rehabilitation and physical rehabilitation should be individualized according to disease severity, oxygenation, muscle strength, fatigue, and functional capacity.

The nurse's role includes assessing baseline function, reinforcing prescribed exercise and rehabilitation programmes, monitoring symptoms during activity, encouraging adherence, and identifying barriers to participation.

Energy conservation is particularly important when pulmonary limitation and muscle weakness coexist.

PATIENT AND FAMILY EDUCATION
Patient education should be continuous rather than limited to discharge.

Key educational areas include
1. Understanding M-ILD and its relationship to inflammatory myopathy.
2. Importance of prescribed medication.
3. Medication adverse effects.
4. Warning signs of respiratory deterioration.
5. Correct oxygen use and safety.
6. Infection prevention.
7. Vaccination as clinically appropriate.
8. Smoking cessation.
9. Energy conservation.
10. Safe physical activity.
11. Nutrition and swallowing precautions.
12. Fall prevention.
13. Follow-up investigations.
14. When to seek urgent medical attention.

Education should be individualized according to health literacy, language, family support, functional status, and treatment complexity.

DISCHARGE PLANNING AND CONTINUITY OF CARE
Discharge planning should begin early and should address respiratory stability, medication management, oxygen requirements, mobility, nutrition, swallowing, infection prevention, psychological needs, and follow-up.

Before discharge, patients and caregivers should understand:
- Medication schedule.
- Oxygen requirements.
- Oxygen safety.
- Respiratory warning signs.
- Infection warning signs.
- Follow-up appointments.
- Rehabilitation recommendations.
- Emergency contact procedures.

Continuity of care is especially important because M-ILD can progress after hospital discharge.

MULTIDISCIPLINARY ROLE OF NURSING
M-ILD requires collaboration among rheumatologists, pulmonologists, neurologists, nurses, physiotherapists, respiratory specialists, dietitians, pharmacists, rehabilitation professionals, and psychosocial services.

The nurse serves as an important link between the patient and multidisciplinary team. Continuous bedside observation may identify changes in respiratory status, mobility, swallowing, nutrition, or psychological condition before they become apparent during periodic medical review.

Effective communication, accurate documentation, and timely escalation are therefore essential components of nursing practice.

PRIORITY NURSING DIAGNOSES AND CARE
Impaired Gas Exchange
Related to: Interstitial pulmonary involvement.

Nursing interventions
- Monitor respiratory rate and oxygen saturation.
- Assess work of breathing.
- Administer oxygen as prescribed.
- Position for optimal respiratory comfort.
- Monitor for deterioration.
- Escalate significant changes promptly.

Expected outcome: The patient maintains clinically appropriate oxygenation and demonstrates reduced respiratory distress.

Activity Intolerance
Related to: Dyspnea, hypoxemia, muscle weakness, and fatigue.

Nursing interventions
- Assess activity tolerance.
- Provide rest periods.
- Assist with activities of daily living.
- Teach energy conservation.
- Encourage prescribed rehabilitation.

Expected outcome: The patient performs appropriate activities within individual tolerance.

Risk for Aspiration
Related to: Dysphagia and impaired swallowing musculature.

Nursing interventions
- Assess swallowing.
- Maintain safe positioning.
- Follow prescribed dietary modifications.
- Monitor for coughing or choking.
- Refer for specialist swallowing assessment when indicated.

Expected outcome: The patient demonstrates safe swallowing without evidence of aspiration.

Risk for Infection
Related to: Immunosuppressive therapy.

Nursing interventions
- Monitor temperature and symptoms.
- Reinforce hand hygiene.
- Promote appropriate preventive care.
- Educate regarding early reporting of infection.

Expected outcome: The patient remains free from preventable infection and recognizes early warning signs.

Risk for Falls
Related to: Muscle weakness, impaired balance, and fatigue.

Nursing interventions
- Assess fall risk.
- Provide assistance with mobility.
- Maintain environmental safety.
- Encourage appropriate assistive devices.
- Educate patient and caregivers.

Expected outcome: The patient remains free from falls and demonstrates safe mobility.

RECENT ADVANCES AND IMPLICATIONS FOR NURSING PRACTICE

Advances in myositis-specific autoantibody testing, HRCT, pulmonary function assessment, targeted immunomodulatory therapy, and antifibrotic strategies have changed the clinical management of M-ILD.

Current ACR/CHEST guidance supports structured screening and monitoring of ILD in patients with systemic autoimmune rheumatic diseases who are at risk.[4] The treatment guideline provides evidence-based recommendations for first-line therapy, progression despite treatment, and rapidly progressive disease.[5]

These developments increase the need for nurses to understand disease phenotype, treatment objectives, expected therapeutic response, adverse effects, infection risks, and warning signs requiring escalation.

Future nursing practice should increasingly incorporate structured symptom assessment, patient-reported outcomes, rehabilitation support, medication-safety monitoring, individualized education, and coordinated follow-up.

FUTURE DIRECTIONS FOR NURSING RESEARCH

There is a need for nursing research specifically addressing M-ILD. Priority areas include:
- Nurse-led respiratory surveillance.
- Structured patient education programmes.
- Self-management interventions.
- Rehabilitation adherence.
- Energy-conservation programmes.
- Dysphagia and aspiration-prevention strategies.
- Medication-safety interventions.
- Telehealth follow-up.
- Patient-reported outcome monitoring.
- Quality-of-life interventions.
- Early-warning systems for respiratory deterioration.

Future studies should evaluate whether structured nursing interventions improve functional independence, treatment adherence, symptom burden, quality of life, hospital utilization, and timely recognition of disease progression.

CONCLUSION

Myositis-associated interstitial lung disease is a complex manifestation of idiopathic inflammatory myopathies in which pulmonary involvement may significantly affect respiratory function, mobility, independence, quality of life, and survival.

The clinical course can vary considerably, and pulmonary disease may precede prominent muscle manifestations. Consequently, nurses require a high level of vigilance and should undertake systematic respiratory, functional, nutritional, swallowing, psychological, and medication-related assessment.

Comprehensive nursing management includes respiratory monitoring, oxygen therapy, recognition of deterioration, energy conservation, mobility and fall prevention, aspiration prevention, nutritional support, medication monitoring, infection prevention, skin care, psychological support, rehabilitation, and patient education.

Patient education should empower individuals and families to recognize warning signs, adhere to treatment, use oxygen safely, prevent infection, conserve energy, maintain appropriate activity, attend follow-up appointments, and seek timely medical assistance.

Ultimately, nursing care should be integrated into the multidisciplinary management of M-ILD rather than viewed as an adjunct to medical treatment. A structured, individualized, patient-centred nursing approach can promote safety, improve self-management, preserve functional independence, and support quality of life.

DECLARATIONS

Ethical approval: Not applicable because this manuscript is a narrative review and does not involve primary research involving human participants.

Patient consent: Not applicable.

Funding: No specific funding was received for preparation of this review.

Conflict of interest: The author declares no conflict of interest.
This statement should be modified if the author has any relevant conflict to disclose.

Author contribution: The author contributed to the conception, literature review, preparation, revision, and finalization of the manuscript.

Data availability: Not applicable because this review is based on previously published literature.

REFERENCES

1. Hallowell RW, Danoff SK. Diagnosis and management of myositis-associated lung disease. Chest., 2023; 163(6): 1476-1491. doi:10.1016/j.chest.2023.01.031.
2. Lundberg IE, de Visser M. Idiopathic inflammatory myopathies. Lancet, 2024; 403: 1290-1305.
3. Betteridge ZE, McHugh NJ. Myositis-specific autoantibodies: clinical associations and diagnostic utility. Nat Rev Rheumatol, 2023; 19(2): 87-102.
4. Johnson SR, Bernstein EJ, Bolster MB, Chung JH, Danoff SK, George MD, et al. 2023 American College of Rheumatology/American College of Chest Physicians guideline for the screening and monitoring of interstitial lung disease in people with systemic autoimmune rheumatic diseases. Arthritis Rheumatol, 2024; 76(8): 1201-1213. doi:10.1002/art.42860.
5. Johnson SR, Bernstein EJ, Bolster MB, Chung JH, Danoff SK, George MD, et al. 2023 American College of Rheumatology/American College of Chest Physicians guideline for the treatment of interstitial lung disease in people with systemic autoimmune rheumatic diseases. Arthritis Rheumatol, 2024; 76(8): 1182-1200. doi:10.1002/art.42861.
6. Aggarwal R, Oddis CV. Therapeutic advances in idiopathic inflammatory myopathies. Nat Rev Rheumatol, 2023; 19(9): 563-579.
7. Tsuji H, Nakashima R, Mimori T. Perspectives in the treatment of interstitial lung disease accompanied with anti-MDA5-positive dermatomyositis. Int J Rheum Dis., 2024; 27(5). doi:10.1111/1756-185X.15201.
8. Lu X, Peng Q, Wang G. Anti-MDA5 antibody-positive dermatomyositis: pathogenesis and clinical progress. Nat Rev Rheumatol, 2024; 20: 48-62. doi:10.1038/s41584-023-01054-9.
9. Kannappan R, Kumar R, Cichelli K, Brent LH. A review of myositis-associated interstitial lung disease. J Clin Med., 2024; 13(14): 4055. doi:10.3390/jcm13144055.
10. Correia BP, Campanilho-Marques R, Dourado E, et al. Myositis-associated interstitial lung disease: the experience of a tertiary center. J Clin Med., 2024; 13(20): 6085. doi:10.3390/jcm13206085.
11. Sehgal S, Patel A, Chatterjee S, et al. Idiopathic inflammatory myopathies related lung disease in adults. Lancet Respir Med., 2025; 13(3): 272-288. doi:10.1016/S2213-2600(24)00267-4.
12. Dalakas MC. Inflammatory muscle diseases. N Engl J Med., 2024; 390: 1125-1138.
13. Marie I. Management of myositis-associated interstitial lung disease. Clin Rev Allergy Immunol, 2023; 65(2): 182-198.
14. American Thoracic Society; European Respiratory Society. International guideline for the diagnosis and management of connective tissue disease-associated interstitial lung disease. Am J Respir Crit Care Med., 2023.
15. Moda M, et al. Idiopathic inflammatory myopathies-associated interstitial lung disease: current concepts in diagnosis and management. J Clin Med., 2024.
16. Thong L, Lau EMT, et al. Management of myositis-associated interstitial lung disease. Curr Treat Options Rheumatol, 2023.
17. Lundberg IE, Tjärnlund A, Bottai M, Werth VP, Pilkington C, Visser M, et al. 2017 EULAR/ACR classification criteria for adult and juvenile idiopathic inflammatory myopathies and their major subgroups. Ann Rheum Dis., 2017; 76(12): 11955-1964.