

“Impact of the Agreement Between Antinuclear Antibodies Indirect Immunofluorescence Patterns and Myositis Antibodies in Idiopathic Inflammatory Myopathies”

Proponents: C. Pinto Oliveira^{1, 2}, Mariana Silva^{3, 4}, Carolina Vilafanha^{1, 2}, Mariana Emília Santos^{5, 6}, Maria João Gonçalves^{5, 6}, Priscila Silva⁷, Vânia Fernandes⁸, Graça Costa¹, Tiago Meirinhos⁹, Catarina Almeida¹⁰, Ana Rita Prata^{1, 2}, Anabela Barcelos^{1, 2, 11, 12}, Raquel Campanilho-Marques^{3, 4}, Eduardo Dourado^{1, 2, 4}

¹Rheumatology Department, Unidade Local de Saúde da Região de Aveiro, Aveiro, Portugal.

²Centro de Investigação em Reumatologia de Aveiro, Centro Académico Clínico Egas Moniz Health Alliance, Aveiro, Portugal.

³Rheumatology Department, Unidade Local de Saúde Santa Maria, Centro Académico de Medicina de Lisboa, Lisboa, Portugal, Lisboa, Portugal.

⁴Rheumatology Research Unit, Instituto de Medicina Molecular, Faculdade de Medicina da Universidade de Lisboa, Lisboa, Portugal.

⁵Rheumatology Department, Unidade Local de Saúde de Lisboa Ocidental, Hospital Egas Moniz, Lisboa, Portugal.

⁶Universidade Nova de Lisboa, Nova Medical School, Lisboa, Portugal.

⁷Clinical Pathology Department, Unidade Local de Saúde Região de Aveiro, Aveiro, Portugal.

⁸Pulmonology Department, Unidade Local de Saúde Região de Aveiro, Aveiro, Portugal.

⁹Serviço de Reumatologia, Unidade Local de Saúde Gaia e Espinho, Vila Nova de Gaia, Portugal.

¹⁰Instituto de Biomedicina – iBiMED, Universidade de Aveiro, Aveiro, Portugal.

¹¹Comprehensive Health Research Center (CHRC), Universidade NOVA de Lisboa. Portugal, Lisboa, Portugal.

¹²EpiDoC Unit, NOVA Medical School | Faculdade de Ciências Médicas, NMS|FCM, Universidade Nova de Lisboa, Lisboa, Portugal.

Abstract

Idiopathic inflammatory myopathies (IIM) are a heterogeneous group of systemic autoimmune disorders in which chronic inflammation of skeletal muscle leads to muscle weakness. Many other organs, including the skin, heart, lungs, and joints, may be affected. Patients with IIM may be positive for myositis antibodies (MAs), including myositis-specific (MSAs) and/or associated (MAA) antibodies.





Although helpful for establishing the diagnosis of IIM in the appropriate clinical setting, the presence of MAs doesn't always predict the occurrence of connective tissue diseases. Additionally, commonly used techniques such as line blot are known to have high rates of false positivity, especially for rare MAs.

The accuracy of MAs tests such as line blot may be improved by cross-checking its results with antinuclear antibodies (ANA) patterns on HEp-2 indirect immunofluorescence (IIF). With this work, we intend to study the agreement between the ANA IIF pattern and MAs in a Portuguese cohort of IIM patients.

We will analyze whether agreement between methods correlates with a higher rate of IIM classification criteria fulfillment or higher disease severity.

