

333 Phrenic nerve neuropathy discovered with cardiopulmonary exercise test in long-COVID-19 syndrome

Marco Masè, Cosimo Carriere, Irena Tavcar, and Gianfranco Sinagra
Dipartimento Cardioracovascolare, Azienda Sanitaria Universitaria Giuliano
Isontina (Asugi), Trieste, Italy

Corona virus disease of 2019 (COVID19) is an ongoing global pandemic caused by SARS-CoV-2 virus. COVID-19 typically involves the respiratory tract with a wide spectrum of disease severity. Long-Covid19 syndrome refers to a series of symptoms that sometimes persist after COVID-19 infection. We describe a case of unilateral phrenic nerve palsy in a young woman with Long-COVID-19 syndrome. a 28-year-old woman admitted for COVID-19 presented persistent exertional dyspnoea. All the examinations performed were normal. At Cardiopulmonary exercise test (CPET) however, the ventilation plot was characterized by a lack of increase of the tidal volume compensated with a premature and continuous rise in respiratory frequency. Suspecting a ventilation abnormality, an electroneurography of the diaphragmatic nerves was conducted showing a right phrenic nerve palsy. Long-COVID-19 syndrome is a growing entity in clinical practice and dyspnoea is one of the most common symptoms. In this setting, phrenic nerve palsy should be ruled out, especially in patients with unexplained dyspnoea. CPET is a complete technique that assesses both pulmonary and cardiac performance. Since it might give important clues in the recognition of the cause of persistent symptoms after COVID-19 it should be extensively performed in these patients.