SCALENUS SYNDROME

Neznaico Victoria¹, Istrati Nina¹

¹Department of Neurology N.1, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova.

Introduction. Scalenus Syndrome is a clinical entity characterized by symptoms resulting from the compression of the subclavian vessels and branches of the brachial plexus in the scalene triangle. The syndrome takes its name from the muscles between which the compression occurs. Most cases are located unilaterally, on the right side. It occurs predominantly in women.

Materials and methods: In carrying out the study, various bibliographical sources and online medical databases, such as NCBI, PubMed, HINARI and Science Direct, were consulted and analyzed.

Results. In Scalenus Syndrome, among the most common causes are: congenital anomalies, osteochondrosis, hypertrophy of the anterior scalene muscle, hyperextension of the neck, repetitive stress injuries, trauma and high-performance sports (tennis, basketball, swimming). The clinical picture includes paresthesias of the upper extremities and neck, shoulder and/or arm pain, occipital headache (in neurogenic involvement), paleness, cyanosis, hypothermia and numbness, edema (in vascular involvement). Doctors should consider this pathology in the differential diagnosis of shoulder and upper extremity pain, so that patients are appropriately guided for timely therapeutic interventions. Roots, Adson, Whright, Elevated Arm Stress tests are often used to detect this syndrome, which have a specificity of 70-100%. Besides these tests, electrophysiological and imaging studies can provide useful information for the diagnosis. Treatment is prescribed depending on the ethiology. FIrst-line therapy for Scalenus Syndrome is a conservative treatment, and may include non-steroidal anti-inflammatory drugs in combination with sedatives and botulinum toxin injections. Patients who have failed conservative therapy are considered for surgical treatment: scalenotomy, resection of the first rib.

Conclusion. In our study, we have highlighted that Scalenus Syndrome involves theccompression of nerves and vessels in the scalene triangle, leading to various clinical manifestations. It is a complex clinical syndrome, with anatomical variations and multifactorial mechanisms contributing to the development of symptoms. Diagnosis involves patients history, clinical exam, functional tests and imaging studies. The treatment ranges from non-drug therapy to surgical decompression, the treatment of choice being the use of minimally invasive treatment.

Keywords: compression, pain, scalene triangle, scalene muscles, cervical rib.