

## Obesity as a risk factor for stroke in the population of the Republic of Moldova

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### Abstract

**Background:** Obesity is a risk factor for various cardiovascular diseases, including stroke, which can be efficiently prevented. Several studies have evidenced abdominal obesity as an independent risk factor for stroke, being a stronger predictor of stroke than the body mass index. The study aims to explore the relationship between obesity and other stroke risk factors in the general population of the Republic of Moldova.

**Material and methods:** In November 2015, was initiated an epidemiological study in the population of the Republic of Moldova. The study protocol included: questionnaire, clinical examination, electrocardiography, laboratory examinations, and Doppler/Duplex ultrasound of the carotid arteries.

**Results:** In the study were included 1274 subjects (mean age  $47.9 \pm 13.6$  years), among which 757 (59%) women and 517 (41%) men. The most common identified risk factors were abdominal obesity in 938 (74%), dyslipidemia in 758 (59%), and general obesity of different degrees in 508 (40%) subjects. Abdominal circumference significantly correlated with the systolic ( $r = 0.44$ ,  $p < 0.001$ ) and diastolic ( $r = 0.46$ ,  $p < 0.001$ ) blood pressure, body mass index ( $r=0.84$ ,  $p<0.001$ ), and uric acid ( $r=0.42$ ,  $p<0.001$ ). Body mass index significantly correlated with the systolic ( $r = 0.41$ ,  $p < 0.001$ ) and diastolic ( $r = 0.39$ ,  $p < 0.001$ ) blood pressure, abdominal circumference ( $r = 0.84$ ,  $p < 0.001$ ), and uric acid ( $r = 0.33$ ,  $p < 0.001$ ).

**Conclusions:** Dyslipidemia, abdominal and general obesity were the most commonly identified modifiable risk factors. Abdominal and general obesity were significantly associated with other stroke risk factors. Prevention of obesity and weight reduction need a greater emphasis in stroke prevention programs.

**Key words:** stroke, stroke prevention, obesity.

## Acute disseminated encephalomyelitis with bilateral optic nerve involvement

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### Abstract

**Background:** Acute disseminated encephalomyelitis (ADEM), possibly demyelinating is an acute, rapidly progressive autoimmune process characterized by CNS demyelination (frequently associated with involvement of optic nerves) due to immune-mediated inflammation, which requires rapid diagnosis and selection of appropriate early treatment. The aim of the study was to present an unusual case of ADEM with bilateral involvement of optic nerves.

**Material and methods:** A case study presentation.

**Results:** Case report study of a 47-year-old man presented with progressive loss of vision in both eyes, numbness in the upper and lower limbs, static and gait disorders, urinary retention. The clinical onset was preceded by a Covid-19 infection 3 weeks before presentation. ENG demonstrated sensitive axonal polyneuropathy, brain MRI – demyelination in left frontal lobe area; cervical and thoracic contrast MRI – without pathological changes, visual evoked potentials results suggestive of prechiasmatic demyelinating involvement on the right side, lumbar puncture – impossible to perform, ophthalmological examination – neuroophthalmopathy of unknown etiology, anti-MOG, anti-AQP4 antibodies – negative. Progressive evolution of the disease, following the first-line treatment (Prednizolon 500 mg, N8) and plasmapheresis. Home discharge with second-line treatment with Azathioprine 50 mg without positive dynamics.

**Conclusions:** The presented case of ADEM proved no therapeutic effects to plasmapheresis and immunosuppressive treatment in spite of its autoimmune pathogenesis. Other therapy options to be considered: mofetil mycophenolate, IV IG, calcineurin inhibitors or other immunomodulatory agents.

**Key words:** encephalomyelitis, demyelination, antibodies, immunotherapy.