

## EVALUATION OF CLINICAL-PARACLINICAL PARTICULARITIES OF FRAILTY SYNDROME IN THE ELDERLY

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**Background.** The aging process presents a series of age-related physiological and pathophysiological changes, including geriatric syndromes, such as frailty syndrome (FS), which is characterized by a decrease in functionality accompanied by increased vulnerability, with multiple etio-pathogenesis mechanisms.

**Objective(s).** The purpose of the research work was to evaluate the clinical and paraclinical particularities of frailty syndrome in the elderly patients institutionalized in geriatric wards.

**Materials and methods.** The descriptive epidemiological study included 613 elderly patients ( $72.76 \pm 0.26$  years), aged  $\geq 65$  years, evaluated according to clinical examination, complex geriatric assessment (CGA), FS screening - Fried Frailty Criteria, FS severity - by CFS, as well as laboratory investigations. The results were analyzed in Soft Statistica 7.

**Results.** According to Fried criteria, the general group was divided into 3 groups: frail elderly - 47.53%, pre-frail - 29.39%, robust - 23.07%. The EGC results showed the lowest values for the frail elderly group: Katz -  $9.69 \pm 0.12$ , Lawton -  $10.89 \pm 0.23$ , Tinetti -  $17.56 \pm 0.35$ , MMSE -  $24.09 \pm 0.20$ , Hamilton -  $8.71 \pm 0.20$ , cardiovascular pathology prevailed - 96.05%, neurological - 96.05%, osteo-articular - 90.13% and digestive - 39.80%; laboratory parameters examined: serum albumin - min. 23 g/l, creatine kinase - max. 347 U/L, 25-OH-Vitamin D value min. - 4.98 ng/ml, parathyroid hormone max. - 229 pg/ml, highly sensitive PCR - 0.27-12.9 mg/L.

**Conclusion(s).** The study results reveal physical, cognitive and psycho-emotional decline in elderly people with FS, with altered autonomy and reduced functionality. FS presents an increased prevalence among the elderly with associated comorbidities and a risk factor for a low quality of life.

**Keywords:** frailty syndrome, aging process, elderly people, frail

## CLINICAL AND PARACLINICAL PARTICULARITIES IN BILATERAL INFILTRATIVE PULMONARY TUBERCULOSIS WITH DESTRUCTION

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**Background.** Early detection and prompt initiation of antiTB treatment represent the cornerstone of therapeutic success, especially in progressive forms of tuberculosis with multiple localizations and a high complication rate. This also helps prevent the persistence of an active infectious reservoir in the community.

**Objective(s).** To present a complex clinical case of bilateral infiltrative pulmonary tuberculosis with destructive lesions and extrapulmonary involvement in a socially vulnerable patient.

**Materials and methods.** The case of a 50-year-old male patient, hospitalized as scheduled in the Phthisiopneumology Clinical Municipal Hospital, Chișinău, with newly diagnosed

bilateral infiltrative pulmonary TB with unilateral destruction (evolutionary phase), was evaluated. Clinical, laboratory, imaging, and functional investigations were performed.

**Results.** The examinations revealed intoxication syndrome – CRP 109.84 mg/L, ESR 40 mm/h, LYM 29–31%, HGB 105 g/L; and pronounced bronchopulmonary syndrome – mucopurulent sputum, moderate fever, dyspnea mMRC-3, SpO<sub>2</sub> 94%, RR 22. Multiple bilateral peribronchovascular changes (nodular opacities) with destruction zones of 0.5–1.0 cm were identified. AFB was negative; Xpert MTB/RIF was positive and sensitive (sputum and pus from fistula). The TB process had multiple extrapulmonary sites including soft tissue and pleura, with formation of a pleuro-thoracic fistula. Specific RIPE therapy was initiated, alongside symptomatic treatment.

**Conclusion(s).** This case confirms the necessity of thorough and multidisciplinary evaluation in patients suspected of having TB with both pulmonary and extrapulmonary manifestations. The use of molecular testing (Xpert MTB/RIF) allowed for rapid diagnosis and initiation of appropriate treatment.

**Keywords:** tuberculosis, destruction, extrapulmonary, imaging, infiltration

## CHALLENGES IN INTERPRETING THE URINARY LIPOARABINOMANNAN TEST IN PATIENTS WITH MYCOBACTERIAL INFECTIONS

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**Background.** Detection of lipoarabinomannan (LAM) in urine is recommended for the diagnosis of tuberculosis (TB) in HIV patients with a CD4 level below 200 c/μl. Theoretically, a false positive result due to nontuberculous mycobacteria is justified, but in the literature we find a small number of cases.

**Objective(s).** Description of the causes of false positive results of the urinary LAM test in patients suspected of pulmonary TB and highlighting cross-reactivity with nontuberculous mycobacteria.

**Materials and methods.** The case of a patient hospitalized in the IMSP SCM of Phthisiopneumology in Chisinau, Moldova, living with HIV with a CD4 level below 200 c/μl, with a false positive urinary LAM test and a latter appearance of positive cultures for Mycobacteria Avium was analyzed, and a narrative review of the literature on this subject was performed.

**Results.** The case of a woman with HIV, CD4-24 c/μl. She presents with cough, fever, and chest X-ray with pulmonary condensation without improvement on antibiotic therapy. To exclude tuberculosis, sputum, bronchoalveolar lavage (BAL), urine and feces were collected, all of which was negative for AFB and Xpert MTB/RIF microscopy. At the same time, the urine LAM test was positive, justifying the initiation of antituberculosis treatment. On the 10th day of treatment, MGIT cultures from sputum and BAL were positive for M. avium. The diagnosis of pulmonary mycobacteriosis due to M. avium was established and the treatment was adjusted.

**Conclusion(s).** Pulmonary mycobacteriosis caused by M. avium can cause false-positive results of the urinary LAM test, which creates diagnostic and therapeutic dilemmas in patients living with HIV which have a CD4 level below 200 c/μl, for whom the urinary LAM test has a high specificity.

**Keywords:** nontuberculous mycobacteria, urinary lipoarabinomannan, HIV