

## OPTIMIZING TRAUMA RESPONSE: THE ROLE OF A STRUCTURED TRAUMA TEAM IN MOLDOVAN EMERGENCY DEPARTMENTS

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**Background.** Poly traumatism is one of the most causes of the death in any country let ales Moldova. Having one of the biggest projects corresponding to poly traumatism adding a new unite to emergency department naming trauma team. A multi-disciplinary specialist who attends to the most critical patients in time of need.

**Objective(s).** To unfold the impact of implementing a structured trauma team on the efficiency and the coordination of trauma care in the emergency department of the institute of emergency medicine.

**Materials and methods.** Trauma team is a well-structured multi-disciplinary team of doctors that collaborate in examining a patient and recognizing life threatening conditions, coordinated by a leader that takes swift decisions to improve the outcomes of patients, based on ATLS guides and equipped with various important instruments. All based on criteria of activation.

**Results.** The introduction of a structured trauma team in Moldovan emergency department led to a noticeable improvement in trauma care delivery. Clinical outcomes were enhanced, with patients receiving more timely and rapid interventions. The trauma response became more efficient, reducing delays in assessment and treatment. Staff reported better coordination, clearer roles, and improved communication during trauma cases, contributing to a more cohesive and effective team dynamic. Trauma team the pilot project is consisted of an emergency doctor, a surgeon, an orthopedic and a neurosurgeon, all report to the Trauma team leader.

**Conclusion(s).** Structured trauma team implementation enhanced trauma care delivery in Moldovan emergency department. Improved teamwork, defined roles, and streamlined coordination led to timely, effective interventions—highlighting the value of trauma teams in limited-resource settings.

**Keywords:** trauma team, emergency medicine, polytraumatism, ER

## AUTOIMMUNE CONDITIONS ASSOCIATED WITH PATIENTS WITH SYSTEMIC SCLEROSIS

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**Background.** Systemic sclerosis is a diffuse connective tissue disorder with immune-mediated pathogenesis, marked by skin fibrosis, multisystem involvement, associated with obliterative microangiopathy. Coexisting autoimmune diseases may significantly influence disease course and therapeutic decisions.

**Objective(s).** Analysis of frequency and types of autoimmune diseases associated with systemic sclerosis patients to understand their impact on disease progression and the need for multidisciplinary management.

**Materials and methods.** The study included 212 patients with systemic sclerosis hospitalized at the Republican Clinical Hospital between 2020 and 2025. The cohort consisted of 201 women and 11 men, with a mean age of 52. Diffuse form was seen in 54 cases (25.5%), and limited form in 158 (74.5%). Data were retrospectively collected and

descriptively analyzed.

**Results.** Out of the total 212 patients studied, 37 (17.45%) were identified with associated autoimmune conditions, including: autoimmune thyroiditis – 13 cases (6.13%), primary biliary cholangitis – 2 cases (0.94%), antiphospholipid syndrome – 1 case (0.47%), Sjögren's syndrome – 7 cases (3.3%), and overlap syndromes – 14 cases (6.6%), including 7 with systemic lupus erythematosus, 6 with rheumatoid arthritis, and 1 with polymyositis. Most affected patients were female. No statistically significant difference was found in the frequency of associated autoimmune conditions between the limited and diffuse subtypes of the disease.

**Conclusion(s).** The presence of autoimmune disorders in 17.45% of systemic sclerosis patients confirms the increased frequency of overlapping autoimmune conditions. Periodic immunologic evaluation and multidisciplinary collaboration are essential for early diagnosis and personalized treatment.

**Keywords:** scleroderma, autoimmunity, association, overlap, treatment

## **CHRONIC MYELOID LEUKEMIA: CONTEMPORARY APPROACHES TO DIAGNOSIS MANAGEMENT**

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**Background.** Chronic myeloid leukemia (CML) is characterized by excessive proliferation of myeloid cells, with an increase in the circulating mass and global reservoir of granulocytes, constituting 15-20% of all leukemia cases in adults, being the most common and complexly diagnosed chronic myeloproliferative neoplasm.

**Objective(s).** The aim of the research was to evaluate contemporary biological patterns of CML in order to update managerial-diagnostic approaches, taking into account gaps in the early diagnosis of this neoplasm.

**Materials and methods.** This cross-sectional cohort study enrolled 134 patients with CML, treated in the Oncological Institute of Moldova between 2015–2024. The age range was 14–82 years (mean age –  $47.91 \pm 2.13$  years). Quantitative real-time PCR was used to determine the expression of BCR-ABL p210 and p190 gene transcripts while processing the CML diagnosis.

**Results.** The diagnosis was established in the chronic phase in 122 ( $91.04 \pm 2.32\%$ ) cases, in the accelerated and acute phase – in 12 ( $8.96 \pm 2.03\%$ ) cases. In 69.8% of cases, the expression of BCR-ABL1 gene transcripts exceeded 65%. The dynamics of the percentage of cells bearing BCR-ABL1 gene transcripts was observed as CML transformed from the early chronic phase (48,2%) to the late chronic phase (56,9%) and accelerated phase (66,5%), which demonstrates the value of this diagnostic indicator. The b3a2 transcript (68 patients or 56.7%) turned out to be the most frequent ( $<0.001$ ). The b3a3 transcript was identified as the rarest (2 cases or 1.7%).

**Conclusion(s).** Contemporary diagnosis management in CML includes cytogenetic and molecular-genetic investigations of peripheral blood regardless of the evolutionary phase, with FISH and RT-PCR as decision-making options. The expression of BCR-ABL1 transcripts grows as the diagnosis progresses to advanced phases.

**Keywords:** chronic myeloid leukemia, phase, diagnosis, transcript

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