MANAGEMENT OF ELDERLY PATIENTS WITH CHRONIC MYELOPROLIFERATIVE HEMOPATHIES - ACTUAL ISSUE OF INTERNAL MEDICINE AND PUBLIC HEALTH

Vasile Musteata [1, 2], **Valentina Stratan** [2], **Larisa Catrinici** [2],
Larisa Musteata [1], **Cristina Dudnic** [1]
[1] *State University of Medicine and Pharmacy "N. Testemitanu",*
[2] *Institute of Oncology*

Introduction

Chronic myeloproliferative hemopathies (CMPH) as a whole are the most common chronic leukemias in the elderlies in the structure of morbidity by hematological malignancies with primary bone marrow involvement, being characterized in the advanced stages by recurrent evolution and negative socio-economic impact.

Keywords: chronic myeloproliferative hemopathies, elderly patients, diagnosis, management, survival.

Purpose: Diagnosis identification and evaluation of management of CMPH.

Material and methods

A clinico-analytical, descriptive, study was realized along with the narrative review of the international literature on the subject. The study enrolled 91 elderly patients with different phases of chronic myeloid leukemia (CML), primary myelofibrosis (PMF) and polycythemia vera (PV), who were followed up and treated at the PMSI Institute of Oncology in the period of 1995 – 2020. The following research methods were used: epidemiological, decsriptive, comparative, clinical-analytical, and cohort statistics. More than 50 reference bibliographic sources have been studied. According to the impact score, 25 relevant primary sources were identified and selected with a scientific, reproducible and transparent approach.
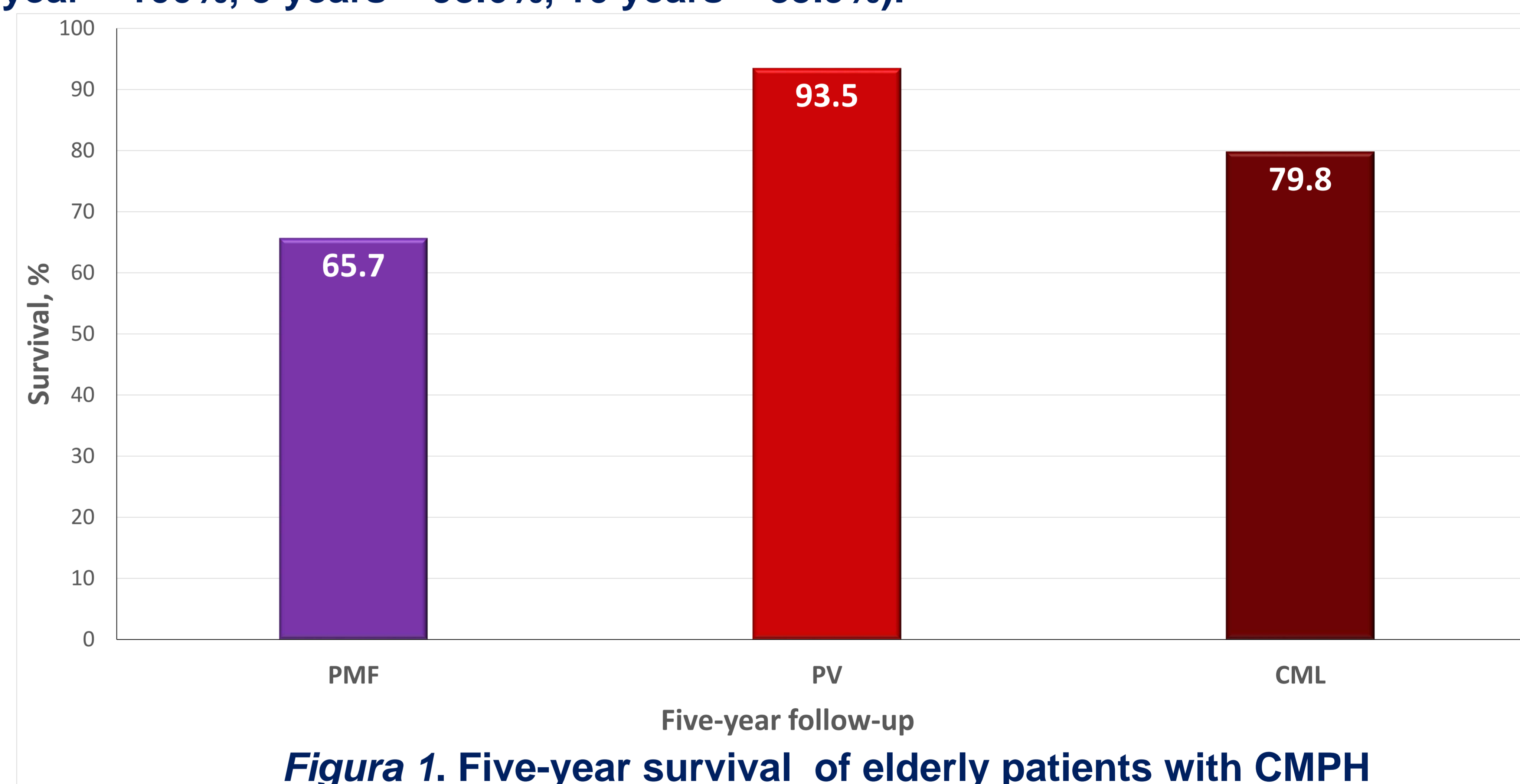
Results

Thirty-four (37.3%) patients with PMF, 26 (28.6%) – with CML and 31 (34.1%) – with PV were diagnosed in the elderly age groups and followed up by our study. The age group of 60-69 years was more numerous in CML (22 cases, or 84.6%), constituting 25 (80.6%) cases in PV, and 25 (73.5%) cases in PMF.

Tabel 1. Disease span until diagnosis in CMPH

Type of CMPH	Range of the disease span until diagnosis, month	Median of the disease span until diagnosis, months
CML	1.5-12	2.1±0.37
PMF	1.4-7	3.7±0.63
PV	1-7	3.8±0.54

Thirty-four (37.3%) patients with PMF, 26 (28.6%) – with CML and 31 (34.1%) – with PV were diagnosed in the elderly age groups and followed up by our study. The age group of 60-69 years was more numerous in CML (22 cases, or 84.6%), constituting 25 (80.6%) cases in PV, and 25 (73.5%) cases in PMF. The duration of the disease from the time of onset of the initial clinical symptoms to diagnosis ranged in PMF between 1.4-7 months (median – 3.7±0.63 months), in CML between 1.5-12 months (median – 2.1±0.37 months) and in PV between 1-7 months (median – 3.8±0.54 months). Under the combination of chemotherapy and phlebotomies the clinico-hematological remission was achieved in all 31 patients with PV. The duration of response ranged from 3 to 9 months (median – 5.8 months). In all cases, the disease relapsed, with plethoric syndrome and thrombocytosis, which required the resumption of induction chemotherapy with busulfan, hydroxycarbamide, with regaining remissions. In elderly patients the overall survival over one year constituted 100%, over 5 years – 93.5%, over 10 years – 76.4% , being lower than those registered in all patients with PV (over one year – 100%, 5 years – 98.6%, 10 years – 85.9%).

Figura 1. Five-year survival of elderly patients with CMPH

Conclusions

The long-term results of treatment in elderly patients with CMPH fail to those in the CMPH totality because of the development of age-related diseases and vascular accidents on the account of leuko-, thrombocytosis. The targeted treatment with TKIs remains a curative option of choice for CML patients of 60 years and more. In the elderly PV patients no significant difference was revealed in short- and long-term outcomes of chemotherapy with busulfan and hydroxycarbamide in combination with phlebotomy, being totally superior to those in PMF patients. The review of the literature shows that the patients with CMPH, especially those elderly, may endure a sizeable unfavorable impact on their employment status, which in turn may be associated with the reduced annual household income.