Sex-related differences in the clinical characteristics and treatment of elderly patients with acute coronary syndrome

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Introduction: With increasing age, the proportion of men and women affected by acute coronary syndrome (ACS) becomes more equal. Women with ACS tend to have more comorbidities compared to men, are less likely to undergo revascularization therapy, and experience a higher incidence of adverse cardiovascular events.[1]

Patients and Methods: This retrospective study included consecutive patients aged 80 or older with ACS, treated at University Hospital Centre Zagreb from November 2018 to October 2023. Medical records were used to conduct the statistical analysis.[2] This study aimed to assess sex-related differences in clinical characteristics, treatment strategies, and outcomes in elderly patients with ACS.

Results: Among the 488 patients with ACS, 245 (50.2%) were women. No significant difference in age was observed between male and female patients (84 [81–86] vs. 84 [82–87], p = 0.137). Men had more often a history of previous ACS and revascularization, smoking, chronic kidney disease, and chronic obstructive pulmonary disease. ST-elevation myocardial infarction (STEMI) was more commonly diagnosed in women (60.3% vs. 39.7%), while men were more frequently diagnosed with non-ST-elevation acute coronary syndrome (NSTE-ACS; 57.7% vs. 42.3%, p < 0.001). In the STEMI group, no significant sex-based differences were observed in the choice of therapeutic strategy or survival outcomes. However, women with NSTE-ACS were less likely to receive invasive treatment compared to men (41.4% vs. 55.7%, p = 0.019). Logistic regression analysis identified female sex as an independent predictor associated with a lower likelihood of receiving invasive treatment in the NSTE-ACS group (OR = 0.52; 95% CI: 0.30–0.90; p = 0.020). Six-month mortality was significantly higher among conservatively treated women with NSTE-ACS compared to those who received invasive treatment (32.4% vs. 14.6%, p = 0.029), as well as in the male population (32.9% vs. 4.5%, p < 0.001).

Conclusion: In our cohort of patients over 80 with ACS, women had fewer comorbidities but were less frequently treated with an invasive strategy. Female patients with ACS exhibited lower survival rates during follow-up compared to male patients, regardless of the treatment strategy, though this difference was not statistically significant.

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LITERATURE

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