SHOULD "CONFOUNDERS" AFFECTING HOSPITAL ADMISSION AND DISCHARGE BE CONSIDERED WHEN EVALUATING THE ROLE OF HOSPITALIZATION IN SYNCOPE PROGNOSIS?

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Background. The rate of Hospital admission for syncope vary considerably among countries (from 12% in Canada to 83% in Academic U.S Medical Center). Different risk stratification approaches in Emergency Department (ED) and/or reasons not strictly related to syncope itself may be also involved in the decision to admit or discharge patients. Elderly, frailty, presence of multiple comorbidities and lack of social/familial support may play a relevant role in ED physicians' decision making to admit or discharge and bias results on role of hospitalization on syncope prognosis.
Aim. To assess the main reason for admitting or discharging patients with syncope in the ED and to investigate the role of alternative factors not strictly related to syncope, "Confounders", in determining the decision of ED physicians.
Methods. Cross-sectional study conducted in 5 hospital ED's in the north of Italy, looked at consecutive patients (age >18 yrs) admitted to the ED for syncope over a 2 month period. An anonymous questionnaire, used to identify the main final reason for admitting or discharging these patients, was presented to the ED physician at the end of diagnostic workup. Data were analyzed using descriptive statistics.
Results. Out of 263 syncope patients (51% M, 62±21yrs), 33.5% were admitted (74±14yrs) and 66.5% were discharged (56±21yrs). Among admitted patients, 11% were hospitalized to treat an acute disease unrelated to syncope. Eight%, although diagnosed with benign syncope, were admitted just for the presence of comorbidities or frailty. In 30% of patients syncope etiology remained unknown after ED evaluation and they were admitted because considered at high clinical risk. Only 48% of patients had an etiologic diagnosis for syncope in ED and were admitted for specific treatment or observation. Among discharged patients, who were not low risk, 5% were discharged against medical advice and 2% because were considered too clinically compromised to be admitted.
Conclusions. These data indicate that, in Italy the reasons driving the decision making of ED physicians to admit or discharge patients with syncope are partially unrelated to syncope. This suggests that "Confounders" should be considered when approaching the role of hospital admission on syncope prognosis.