Limited utility of physical counterpressure manoeuvres in preventing syncopal recurrence in patients older than 40 years with recurrent neurally-mediated syncopes. An analysis from the third international study on syncope of uncertain etiology (Issue-3)

M. Tomaino (Bolzano), C. Romeo, E. Vitale, T. Kus, A. Moya, N. van Dijk, S. Giuli, A. Gentili, R. Sutton

Aims.
Physical counter-pressure maneuvers are effective in young patients with vasovagal syncope and recognizable prodromal symptoms. Aim of this study was to investigate their effectiveness in patients ≥40 years with severe neurally mediated syncope (NMS) enrolled in the Third International Study on Syncope of Uncertain Etiology (ISSUE-3).

Methods and results.
In the ISSUE-3 study, 63 out of 162 patients had a diagnosis of hypotensive NMS (type 2,3 and 4A) documented by implantable loop recorder (ILR); of these, 40 were instructed to perform isometric leg and arm physical counter-pressure maneuver (PCM) therapy. Their mean age was 62±13 years; 71% of patients had a history of some episodes without prodrome. A group of 45 untreated patients acted as controls. During follow-up, syncope recurred in 15 PC patients (39%) and in 24 control patients (53%). At 21 months, the estimated product-limit syncope recurrence rates were 42% (95%CI 29-62) and 64% (95%CI 48-80) respectively (p=0.30), (Figure).

Conclusions.
The benefit of PC maneuvers was limited in ISSUE-3 patients affected by hypotensive NMS. The likely factors that hampered effectiveness of PC therapy were older age and absence of sufficiently long recognizable prodromal symptoms in the ISSUE-3 population.