

**C87 THE SHORT-TERM PROGNOSTIC SIGNIFICANCE OF BASELINE TROPONIN LEVELS IN PATIENTS HOSPITALIZED FOR COVID-19**

F. Di Maio, G. Baldin, N. Todde, N. Volpi, L. Basan, V. Vannucci, G. Ruzittu, A. Pisanu, S. Seddone, M. Santoru, G. Delogu, A. Favuzzi, M. Porcu  
INTERNAL MEDICINE MATER OLPIA HOSPITAL AND CATHOLIC UNIVERSITY OF THE SACRED HEART, OLPIA; CARDIOLOGY MATER OLPIA HOSPITAL AND CATHOLIC UNIVERSITY OF THE SACRED HEART, OLPIA; LABORATORY MEDICINE MATER OLPIA HOSPITAL AND CATHOLIC UNIVERSITY OF THE SACRED HEART, OLPIA; MATER OLPIA HOSPITAL, OLPIA

**Background:** Troponin (TN) is the biomarker of choice for the detection of cardiomyocyte injury. Elevation of TN has been noted in COVID-19 patients (pts), implicating myocardial injury as a possible pathogenic mechanism contributing to disease severity.

**Aim:** To assess the in-hospital prognostic significance of baseline TN levels in COVID-19 pts. **Methods:** The data of 192 consecutive COVID-19 individuals (mean age  $70 \pm 15$  yrs, 54.6% males) hospitalized in a single institution were retrospectively analysed. According to the baseline TN-I levels (normal value up to 34 pg/ml), the whole population was divided into normal (Group A) and elevated (Group B) TN-I. Demographic parameters, clinical history, pharmacological treatments and laboratory data at the admission were evaluated. The length-of-stay, rate of orotracheal intubation, non-invasive ventilation and in-hospital mortality were considered as prognostic parameters.

**Results:** One-hundred-fifty-seven pts belonged to Group A, while thirty-five pts to Group B. Group A pts were significantly younger ( $67 \pm 14$  vs  $79 \pm 12$  yrs,  $p < 0.001$ ). As expected, a better renal profile was observed in pts with normal TN-I levels (eGFR  $82 \pm 25$  ml/m<sup>2</sup> in Group A vs  $48 \pm 30$  ml/m<sup>2</sup> in Group B,  $p < 0.001$ ). No differences were noted between the two groups in the prevalence of diabetes, previous CAD, hypertension, ACE/ARBs treatment. The length-of-stay was similar ( $21 \pm 11$  days in Group A vs  $19 \pm 17$  days in Group B, respectively,  $p = ns$ ). Also, the need for orotracheal intubation (11.4% vs 11.5%  $p = ns$ ) and non-invasive ventilation (26.8% vs 28.6%,  $p = ns$ ), were not significantly different between Group A and Group B. However, the in-hospital mortality was considerably lower in pts with normal baseline TN-I, as compared to those with a definite level of cardiomyocyte damage (20/157 Group A pts, 12.7%, vs 15/35 Group B pts, 42.9%,  $p < 0.001$ ).

**Conclusion:** Our data demonstrate that high TN-I baseline level upon admission should be considered as a strong prognostic parameter in pts hospitalized for COVID-19. In our population, this observation seems not to be related to the different comorbidities, except for the renal function profile.