**RATIONAL**

To assess the impact of early protein intake and nutritional status with the length of stay in the intensive care unit (ICU), days on invasive mechanical ventilation (IMV) and clinical outcome in the ICU - death or survival. It is important to assess nutritional status in critically ill patients. The time of protein and calorie target achievement should be considered separately.

**METHODS**

Retrospective observational analytical study of critically ill adult patients, who received exclusively enteral and/or parenteral nutrition, admitted to the ICU for at least 72h, between March 1st 2019 and February 29th 2020 (N=107).

Patients included *received nutrition* with:

- A protein target of 1.2-2 g/kg/day, not exceeding 70% of energy need in the early phase of acute illness5.2

The *nutritional status* was assessed by:

- Body Mass Index (BMI)1.4

**RESULTS**

Of the 107 patients evaluated (34 female, mean age 68y), 55.1% reached the protein target in the first 4 days (R=4.56±2.07). Normal weight was the most frequent BMI (34.6%); patients BMI mean was 27.8±15.88. Patients severity scores are shown in Table 1. Delayed (>4 days) protein target reach (p=0.038) and underweight (p=0.009) were related with mortality occurrence in the ICU – Table 2. It was observed a positive correlation (n=67; r=0.331; p=0.006) between the time that protein target was reached and the length of stay in the ICU (figure 1).

<table>
<thead>
<tr>
<th>Table 1. Patients severity Scores</th>
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<tr>
<td><strong>N [%]</strong></td>
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<td>N 107 (%)</td>
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<tr>
<td>SOFA score, mean</td>
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<td>APACHE II score, mean</td>
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<td>SAPS II score, mean</td>
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**CONCLUSIONS**

Delayed protein target provision and underweight were associated with the occurrence of mortality in the ICU. Patients who reached the protein intake target later stayed more days in the ICU. The IMV days were not affected by BMI and early protein intake.

**REFERENCES**