The Prognostic Value of Nutritional Status in Acute Pancreatitis

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INTRODUCTION

Our study aimed to explore the relationship between nutritional status at admission and the prognosis of acute pancreatitis during hospitalisation.

Malnutrition is associated with worse clinical outcomes such as length of hospital stay and increased mortality. However, the evidence linking malnutrition to outcomes in acute pancreatitis (AP) remains limited due to the retrospective nature of previous studies.

METHODS

This prospective cohort study included patients hospitalized with acute pancreatitis at a national tertiary center from October 2021 to May 2025. Malnutrition, defined as BMI <18.5 kg/m² and/or moderate to severe GLIM criteria, was analyzed for associations with AP severity (Revised Atlanta Criteria), mortality, and hospital stay.

RESULTS

-Total number of patients: 2,216

- Data available : 2040 patients

- Mean age : 56 ± 17 years, Sex: 56% were male.

-GLIM-based malnutrition (n=1642) : 14.6% moderate and 11,4 % severe malnutrition.

-AP severity : severe - 27,8 % malnourished

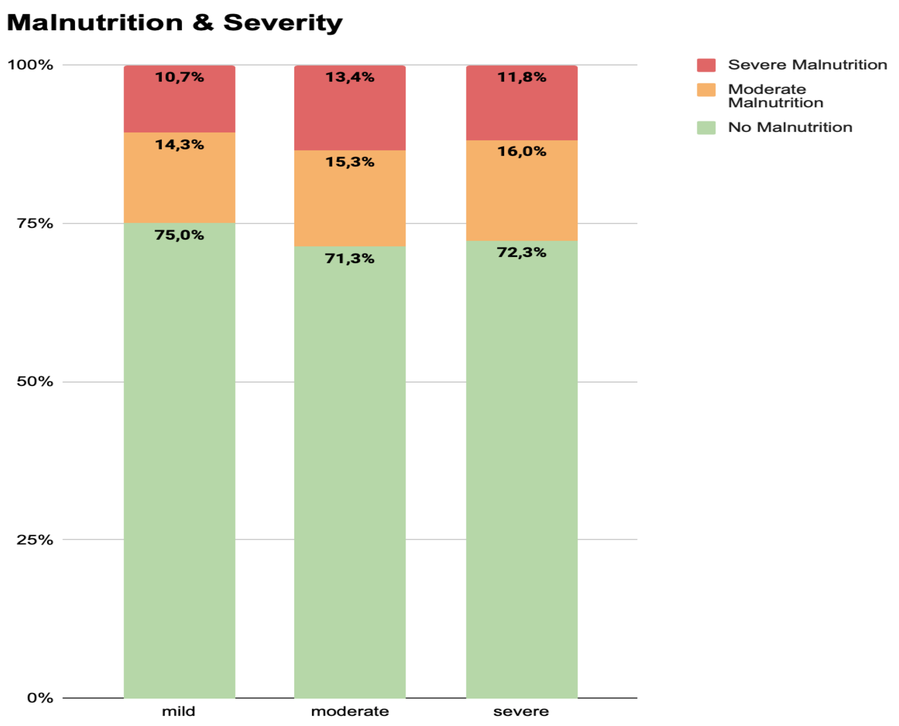
- Obesity : common in severe AP (44%)

-Pre-existing malnutrition did not correlate with AP severity.

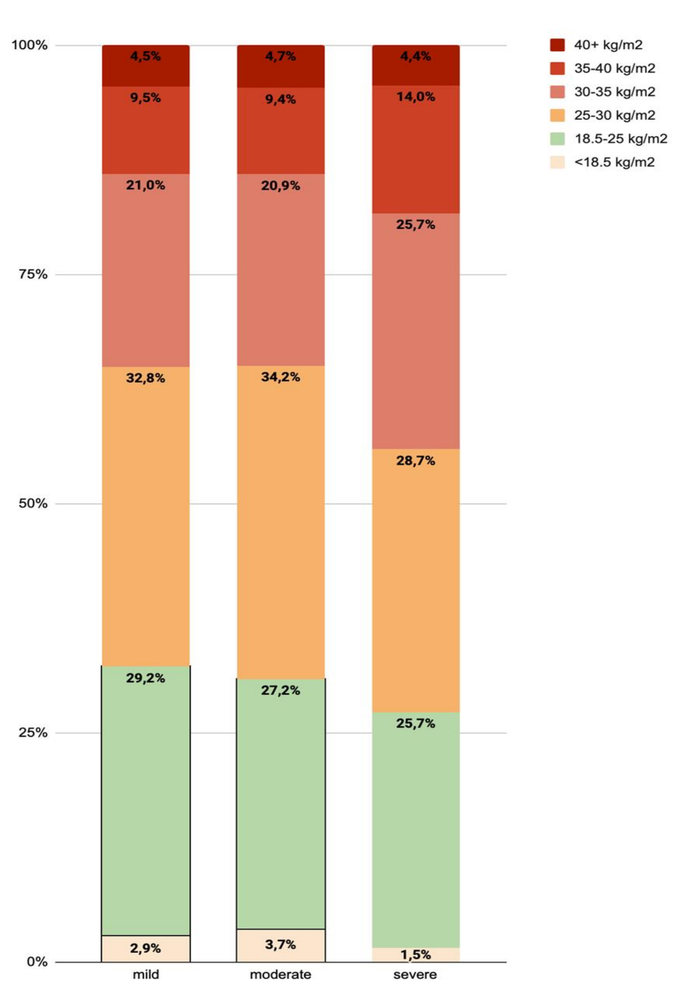
-Mortality : 33,3 % of patients who died, were malnourished

MORTALITY & MALNUTRITION

Malnutrition & Severity



BMI & SEVERITY



CONCLUSIONS

Pre-existing malnutrition is associated increased mortality but not with AP severity. Conversely, obesity is linked to severe AP and prolonged hospital stays, but not mortality. Both unhealthy extremes of nutritional status are linked to poorer prognosis in AP.