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many diseases, there is not enough data about the effects on the course of COVID-19. In this study, we aimed to evaluate the relationship between the GNRI index and the prognosis of the disease in geriatric diabetic patients hospitalized in our hospital due to COVID-19.

**Methods:** The study included 110 diabetic patients aged 65-80 years who were hospitalized in our pandemic service due to COVID-19 infection. A detailed anamnesis was taken from all patients and physical examinations were performed. Biochemical blood tests (fasting plasma glucose, glycosylated hemoglobin, total cholesterol, high density lipoprotein cholesterol, triglyceride, creatinine, albumin, d-dimer, fibrinogen) were analyzed. GNRI index is calculated. As a result of GNRI, patients were divided into 4 groups according to their scores as <82: severe risk,> 82- <92: moderate risk,> 92- <98: low risk,> 98: no risk. By comparing all these parameters in these 4 groups, the relationship between the GNRI index and the prognosis of COVID-19 disease was evaluated.

**Results:** According to the GNRI index, while 11.8% of the patients had severe malnutrition risk, 20.9% moderate malnutrition risk and 8.1% mild malnutrition risk, 59.0% of the patients did not have a malnutrition risk. There was a statistically significant difference in age, urea, creatine, procalcitonin, calcium, leukocyte, lymphocyte, hemoglobin, thrombocyte, po2 and spo2 levels, intubation and transfer rates to intensive care between the GNRI groups (p<0,05). In the correlation analysis performed between the GNRI index and other parameters, we found a significant negative correlation between height, hospitalization time, crp, d-dimer, wbc, neutrophil, neutrophil lymphocyte ratio and type of discharge (Table 1).

**Table 1**Correlation analysis between GNRI index and other parameters

	GNRI İndeksi	
Height	r:-0,466	p:0,009
Kilo	r:+0,01	p:0,008
BMI	r:+0,315	p:0,037
Albumin	r:+0,01	p:0,005
Hospitalization Time	r:-0,366	p:0,049
C-reactive protein	r:-0,353	p:0,018
D-dimer	r:-0,450	p:0,045
Leukocyte	r:-0,445	p:0,040
Neutrophil	r:-0,548	p:0,040
Neutrophil Lymphocyte Rate	r:-0,01	p:0,020
Type of Discharge	r:-0,349	p:0,017

**Conclusion:** There is a clear relationship between the GNRI and the prognosis of the disease in diabetic geriatric patients hospitalized for COVID-19. Patients at risk of malnutrition have a longer hospital stay, need more intensive care and mechanical ventilation, and have a worse prognosis.

Disclosure of Interest: None declared.

### P033

# MALNUTRITION IN COVID-19 HOSPITALIZED PATIENTS: A CROSS-SECTIONAL STUDY

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**Rationale:** Considering the nutritional impact of COVID-19 and the prognostic significance of malnutrition, the aim of this study is to assess the prevalence of malnutrition in a sample of COVID-19 hospitalized patients at the time of admission and the possible correlation with clinical severity, prognosis and length of hospitalization.

**Methods:** From 20/01/21 to 20/02/21 all patients admitted to a COVID Internal Medicine Unit of Ferrero Hospital in Verduno were enrolled in the study. The patients' assessment was performed within the first 48 hours after admission (T0) with NRS-2002. The data regarding clinical severity, prognosis and length of stay were taken from the medical record at the end of the hospitalisation. The clinical severity indexes used are the increase in

intensity of care (transition to sub-intensive or intensive regimen) and death.

Results: 30 patients aged 43 to 91 years (mean 70±12.9) were evaluated. 1 patient suffered from an oncological disease; 4 patients had chronic neurological diseases; 6 patients had T2DM; 17 patients had high blood pressure. Patients' BMI on admission ranged from 18.8 to 38.6 (mean 27.5±4.6). The nutritional risk on admission (score≥3) was present in 22 out of 30 patients (73.3%). Among the patients characterized by lower clinical severity (n.15) 60% were at nutritional risk at T0; while among the patients with high clinical severity (n.15) 87% were at nutritional risk at T0 (Chi Square: p-value 0.09). Among the surviving patients (n.24) 66% were at nutritional risk at T0; while among the deceased (n.6) 100% were at nutritional risk (Chi Square: p-value 0.09). Patients with nutritional risk at T0 were hospitalized for an average of 18 days, while those without nutritional risk at T0 were hospitalized for an average of 10 days (T-test: p-value 0.02).

Conclusion: NRS-2002 showed a high prevalence of nutritional risk in COVID-19 hospitalized patients although none had a BMI lower than 18.5 and only 5 patients had previous chronic oncological or neurological diseases. The correlation between nutritional risk and length of stay was statistically significant (p-value 0.02); while the correlations between nutritional risk on admission and clinical severity and prognosis were not statistically significant, probably due to the limited number of enrolled patients. Because a definitively effective treatment for COVID-19 has not yet been performed, the factors that could be associated with the worsening of the clinical course should be recognized and managed, including nutritional risk. Early nutritional screening is therefore an important step in order to perform an adequate nutritional intervention as integral part of COVID-19 management. Further and larger studies will be necessary to better investigate the prognostic value of nutritional status in acute diseases in general and in COVID-19 disease in particular.

Disclosure of Interest: None declared.

#### P034

# HOME ENTERAL NUTRITION (HEN): AN ADDITIONAL TOOL IN THE CARE PROCESS OF UNDERNOURISHED PATIENTS WITH ANOREXIA NERVOSA (AN)?

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**Rationale:** AN is a severe eating disorder which can lead to undernutrition and somatic complications. EN is the most appropriate and safe tool for nutritional care and weight gain in extremely undernourished AN inpatients (BMI<13). Evidence for HEN in this pathology remains scarce\*. This study aimed to explore the efficacy of HEN associated with multidisciplinary ambulatory care in order to limit the hospitalization stay.

**Methods:** We performed in a specialized tertiary nutritional care unit, a longitudinal pilot study of weight evolution in discharged patients with AN under HEN.

**Results:** Thirty-four patients were included: age:  $42 \pm 19$  years, BMI at admission:  $13.2 \pm 2.8$ , BMI at discharge:  $14 \pm 1.4$ ; AN types: 23(67.6%) restrictive AN type, 5 (14.7%) atypical type and 6 (17.6%) binge-purging type\*\*. Only 5 (14%) patients decided to stop HEN. Sixteen patients (47%) had a significant improvement in weight gain with HEN ( $4 \pm 4.4$  kg in 5 months) p < 0.05, most of them had a restrictive type of AN and received a shorter period of HEN. No complications were reported during HEN.

**Conclusion:** HEN could be, if associated with a multidisciplinary ambulatory care, an interesting tool to limit the length of hospital stay and provide weight gain in AN patients. Further studies are nedeed to confirm these Results

## References:

\*Rigaud et al. Tube feeding at home in anorexia nervosa patients, Presse Med, 2009

\*\* American Psychiatric Association. Mental Disorders, 5th Edition (DSM-5) **Disclosure of Interest**: None declared.