

## **Prevalence and impact of Refeeding Syndrome in a Tertiary Care Referral University Hospital: preliminary results**

**Authors:** Marco D'Angelo, Raffaele Borriello, Tiziano Galasso, Pauline Raoul, Marco Cintoni, Brigida Eleonora Annicchiarico, Michele Impagnatiello, Gasbarrini Antonio, Emanuele Rinninella, Maria Cristina Mele.

**Introduction:** The latest recommendations of the ASPEN consensus defined refeeding syndrome (RFS) as a metabolic and electrolytic alteration occurring after the reintroduction and/or the increase in caloric content after a period of reduced caloric intake. Currently, the screening of RFS remains scarce in clinical practice.

**Objective:** To identify medical inpatients who are at risk of RFS and/or having developed it during hospitalization.

**Materials and methods:** An observational study was conducted at Fondazione Policlinico Universitario A. Gemelli IRCCS, Rome, Italy from April to September 2021. Data from hospitalized adult patients admitted to the Internal Medicine and Gastroenterology Unit were collected. The ASPEN consensus criteria 2020 were applied. Exclusion criteria included patients with low serum phosphorus levels at baseline.

**Results:** A total of 178 patients (mean age 65 years; mean BMI 25.2 kg/m<sup>2</sup>) were identified. Diagnosis of hospitalization were mainly gastroenterological disease (39.3%) and oncologic emergency (26.4%). 48% of patients were at risk of RFS according to the ASPEN criteria. The incidence of RFS was 16.9%. Lower BMI is significantly associated with a higher risk of RFS (24 kg/m<sup>2</sup> versus 26.3 kg/m<sup>2</sup>; p<0.05). The mean length of hospital stay (LOHS) was 8.5 days; LOHS was significantly longer in patients at risk of RFS compared with patients not at risk (9.3 versus 7.2; p<0.05).

**Conclusion:** The prevalence of RFS is high suggesting that RFS is often overlooked among clinicians. A risk assessment for RFS should be recommendable in patients starting nutritional therapy to optimally monitor/prevent the possible deleterious effects on the patient's prognosis.