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## BACKGROUND AND IMPORTANCE

- Refeeding syndrome (RFS) is a metabolic disorder that can be triggered after nutritional replacement. This condition can be life-threatening, so early identification and prevention is important.

## AIM AND OBJECTIVES

- Describe a system of screening and nutritional support in patients at risk of RFS. **Assess the degree of adequacy** of initial parenteral nutrition (TPN) to published NICE guidelines.

## MATERIAL AND METHODS



Retrospective observational study



Patients from January 2020-September 2022 identified with RFS risk\* at the beginning of TPN.

\*according to NICE guidelines criteria

### Variables collected

- Demographic (age, sex)
- Anthropometric (weight, height)
- Service
- Low/no intake in 5-10 days prior to starting TPN
- Type of RFS risk (high or extreme)
- Kilocalories (Kcal) of TPN at baseline and at reaching total requirements
- Time to establishment of total kcal on TPN
- Development of RFS\*

\* serum levels of potassium, phosphate, magnesium in the first 72 hours

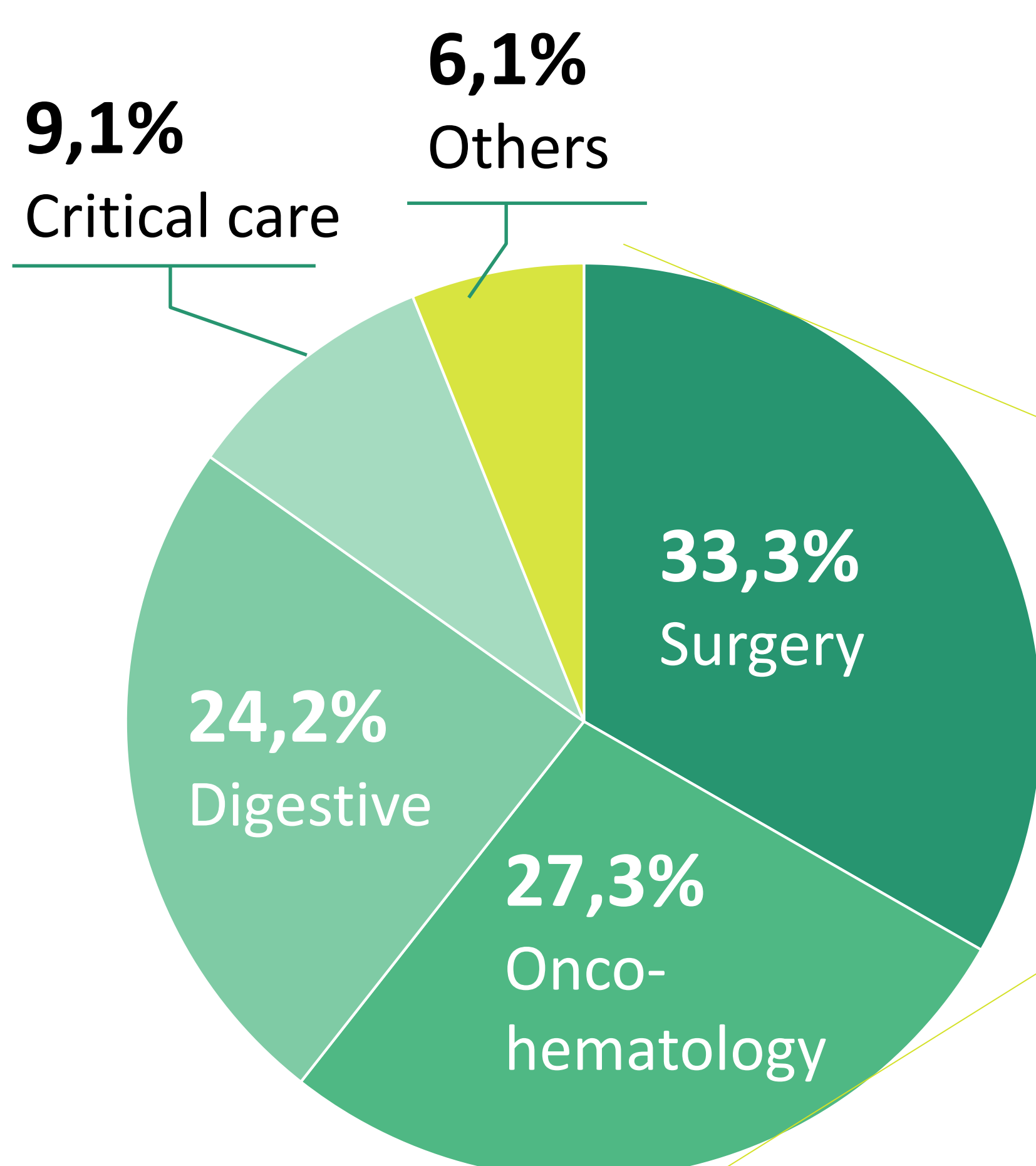
## RESULTS

Mean BMI **20,2** (SD: 4,0)

**33** patients included

Mean age **59,6 years** (SD: 15,5)

**54,5%** men



Mean kcal/kg of TPN at the start was **20,4** (SD: 3,7)

Establishment of total kcal in — 2 days – **63,6%** of patients  
3 days – **36,4%** of patients



**75,8%** low/no intake prior introduction of TPN



**90,9%** high risk of developing RFS



3 patients developed RFS

**3/3** at high risk  
**2/3** onco-haematological

## CONCLUSION AND RELEVANCE

- Most patients who developed RFS were **onco-hematologic**, a group at risk for RFS, and had **little/no intake prior to the initiation of TPN**.
- The **kcal/kg** provided by TPN at **baseline** are **higher than recommended** by NICE guidelines (20,4 vs. 10 kcal/kg). The **total kcal** were **reached** between **2-3 days**, the recommendations being between 4-7 days.
- Only 9,1% of the patients developed RFS, so that future studies could consider a less restrictive caloric start in TPN than that proposed in the guidelines.
- The role of the **pharmacist** has allowed **early detection** and **prevention** of developing **RFS** in 90,9% of the patients.

