

# THE USE OF ARTIFICIAL NUTRITIONAL SUPPORT WITHIN A NATIONAL ALLOGENEIC TRANSPLANT UNIT

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## Introduction

- Patients undergoing allogeneic transplant are at risk of malnutrition which is associated with poorer outcomes and prolonged hospital stay.
- Enteral feeding would be first line artificial nutritional support in our unit in line with ESPEN recommendations.
- Parenteral nutrition (PN) is not standard therapy if enteral feeding is refused and each patient will be assessed individually with risks of this method considered.

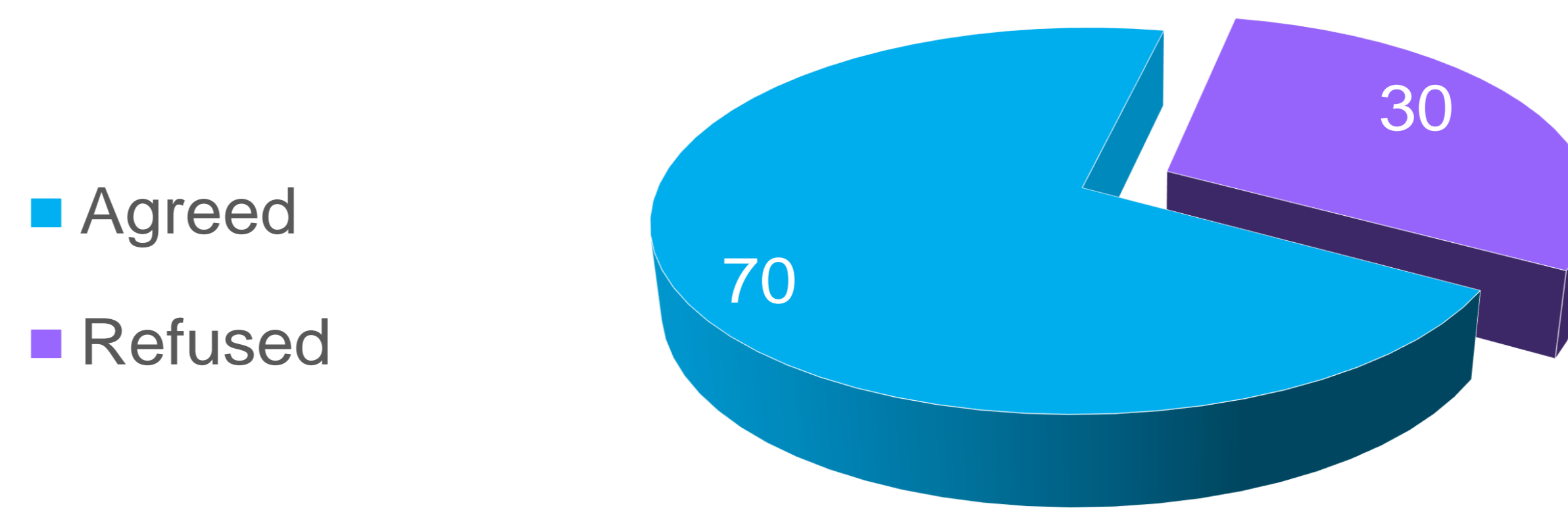
**Aim:** To identify whether patients receiving nasogastric feeding have lower rates of weight loss and length of stay than those who receive parenteral nutrition.



## Method

- A retrospective review between 2017 and 2019 highlighted allogeneic transplant patients deemed high nutritional risk and requiring some form of artificial nutritional support (ANS).
- Patients (n=43) were routinely assessed by a Specialist Dietitian pre transplant through individualised assessment.
- These patients were recommended to consider nasogastric (NG) feeding based on treatment plan, weight loss/BMI, current nutritional status and history. PN was considered as appropriate.

Acceptance of NGT (%)



## Results

- Thirty patients agreed to placement of an NG tube (NGT). Only 57% tolerated insertion (n=17).
- Thirteen patients declined an NGT and received PN along with five patients who did not tolerate tube insertion (n=18, 42%).
- Myeloablative conditioning was the largest factor in those who received PN.
- Those who were NG fed had lower weight loss and length of stay compared to those on PN.
- Despite successful NGT insertion one patient required PN due to considerable gastrointestinal toxicity and was excluded from results together with one patient who died.

	PN (17)	NGT (16)
Average weight loss (%)	7	4
Myeloablative conditioning (%)	95	39
Average LOS (days)	40	30
Average Karnofsky score	80	90

## Discussion and Next Steps

- Data suggest nasogastric feeding can be used successfully to reduce weight loss and hospital stay when patients accept and tolerate tube insertion.
- Regardless of acceptance, some patients did not tolerate NGT insertion (43%). Despite the small sample size, further prospective studies could be warranted.
- Those commenced on PN had highest weight loss and hospital stay.
- Ideally, improved acceptance and insertion of NGTs could reduce need for PN.
- Future strategies to improve acceptance of feeding could include use of anthropometric measures to highlight lean muscle function and loss to enhance understanding of body composition when considering ANS.
- Furthermore, consideration of radiologically inserted feeding tubes if failed NGT at ward level could support first line enteral feeding.