

NUTRITION AND RESISTANCE TRAINING

in malnourished surgical patients

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INTRO

41%
at nutritional
risk



BACKGROUND

In a recent study we found that 41% of surgical patients at the National Hospital of Faroe Islands were at nutritional risk. This is similar to international findings. Only a few patient groups are offered post-discharge dietary advice and/or supervised training on a routinely basis.

AIM

Can oral nutritional supplements combined with resistance training minimize skeletal muscle atrophy in malnourished surgical patients following discharge?

CRITERIA



SURGERY

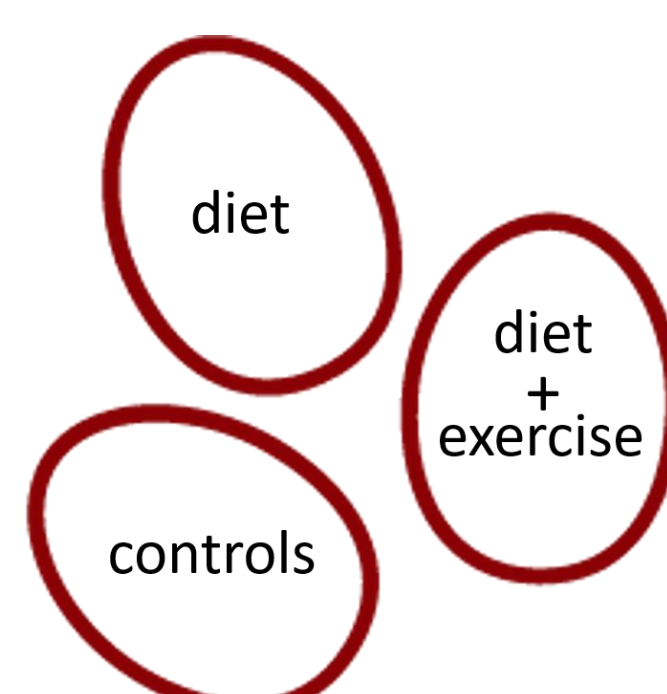
Patients with major surgery such as gastrointestinal surgeries, hip replacements, collum femoris fractures and other complex surgical procedures can participate



MALNUTRITION

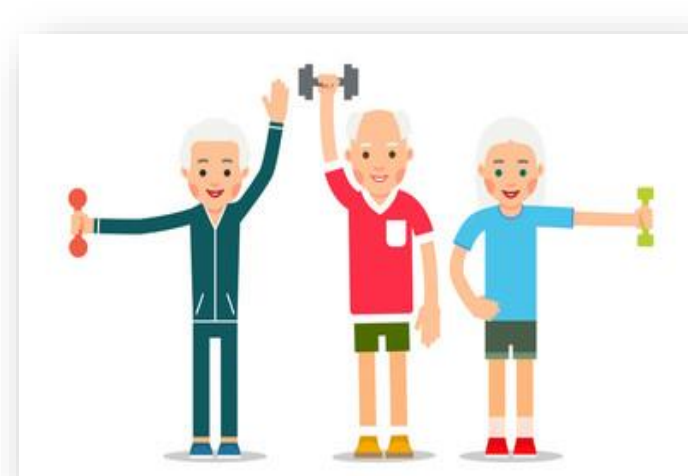
Patients are screened for malnutrition postoperatively. Only patients at risk of malnutrition are invited to participate. Malnutrition is unintended weight loss and/or low dietary intake in combination with major surgery.

INTERVENTION



PROTEIN

Patients randomized into the intervention group 1 and 2 get two protein drinks a day and dietary advice about eating foods rich in energy and protein.



TRAINING

Patients randomized into group 2 get supervised exercise and progressive strength training by a physiotherapist

OUTCOME MEASURES

MUSCLE MASS

Main outcome is change of lean body mass (muscle mass) measured by repeated DEXA (Dual-energy X-ray absorptiometry) scans.



HAND GRIP STRENGTH

Hand grip strength is measured by using a dynamometer, as an indicator for nutritional and functional status.



BLOOD TESTS

Vitamin- and mineral deficiencies, anaemia and infection is measured by blood tests.



MOBILITY

Functional abilities and activity of daily living is tested by a physiotherapist



QUESTIONNAIRES

Quality of life, pain and complications are assessed by standardised validated questionnaires.



STATUS

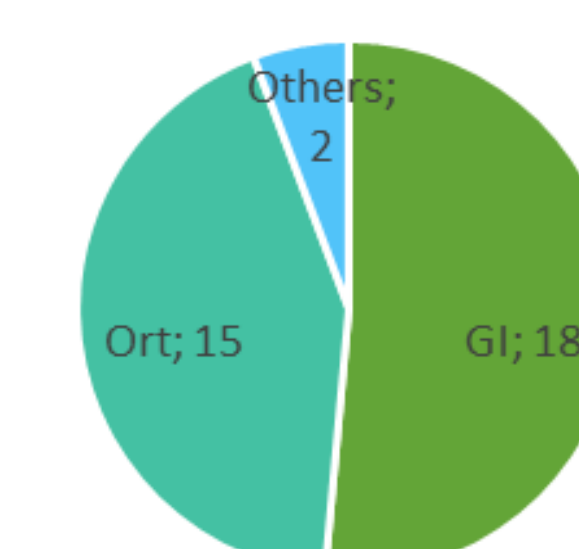
35 PATIENTS RECRUITED

Recruitment is ongoing. 17 women and 18 men have been recruited so far. Mean age is 59,5 years (23-85 y). 10 people are allocated to the diet group, 13 to the training and diet group, 12 are controls.



SURGICAL PROCEDURES

6 minimal invasive and 29 open surgical procedures were performed. 18 gastrointestinal, 15 orthopaedic and 2 others.



DISCLOSURE AND ACKNOWLEDGEMENT

The MASU study is funded by The Faroese Health Insurance Fund, the National Hospital of Faroe Islands and University of Copenhagen. Nestlé Health Science is providing oral nutritional supplements.

MASU

DO YOU WANT TO KNOW MORE

Contact pp@ls.fo, visit the webpage www.ls.fo/masustudy or use the QR code

