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BODY MUSCLE MASS ASSOCIATION WITH CHROHN'S DISEASE ACTIVITY

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Summary

Background:

- In industrialized countries, Inflammatory bowel disease (IBD) has become a global disease and the incidence of Crohn's disease (CD) has risen significantly over the past half century (Levine, 2020).
- Malnutrition is a common complication of CD patients and it is correlated with alterations of the body composition and disease activity (Balestrieri, 2020; Argiles, 2015).

Aim:

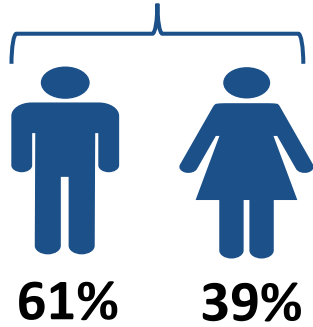
- Analyse body muscle mass metabolic data in association with CD.
- Identifying patients with low and high disease clinical activity.

Methods.

- Population: Twenty-three hospitalised patients:
 - aged ≥ 18 years,
 - with an established diagnosis of CD,
 - with no medical history of surgical interventions.
- Instruments: Nutritional Risk Score(NRS2002) and Malnutrition Universal Screening Tool(MUST)
- Body composition evaluation - Body bioelectrical impedance analysis(BIA)

Results

23 patients

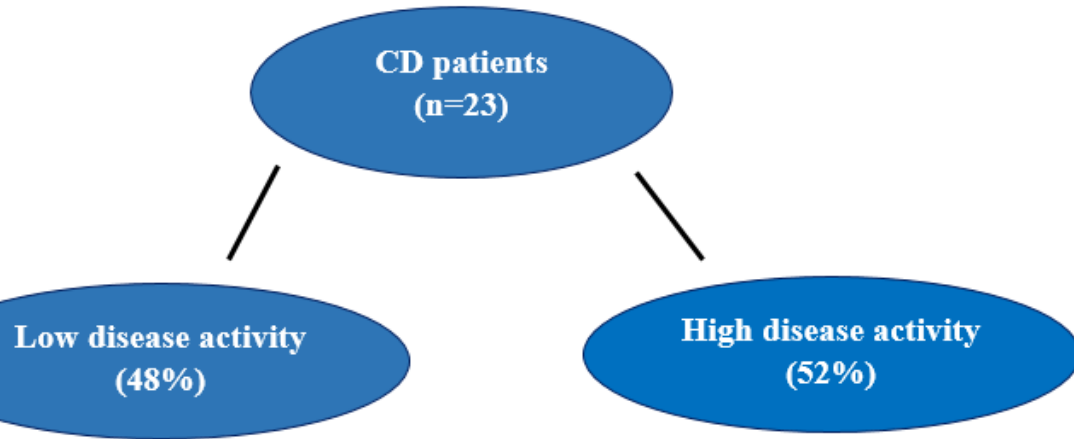
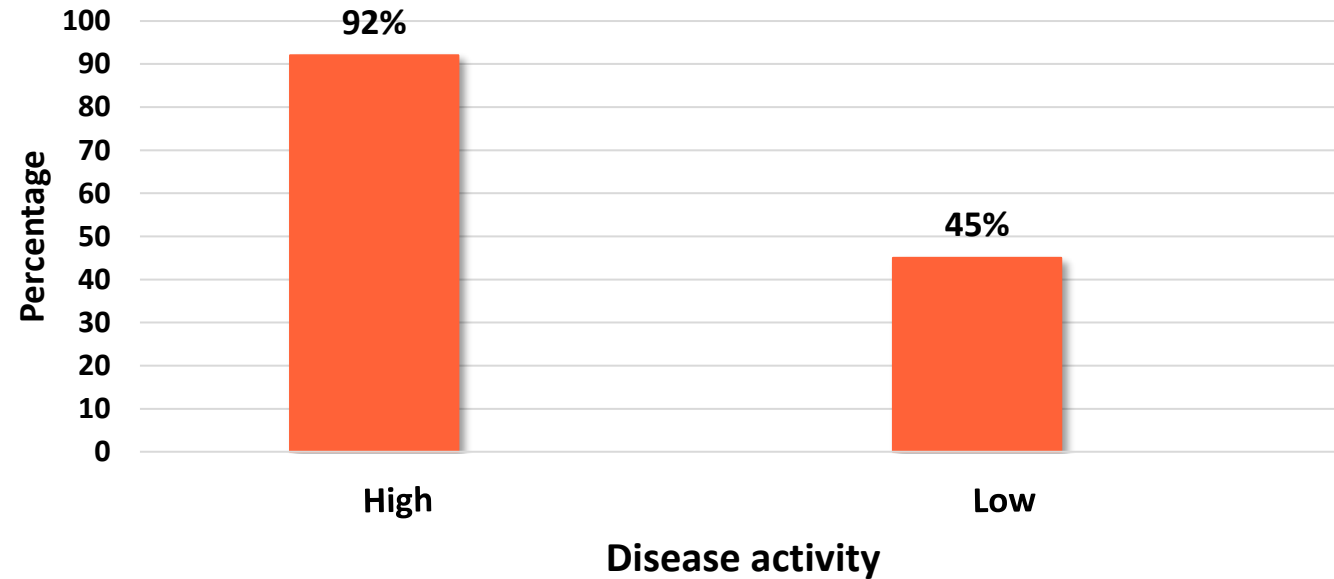


Median age 36.5 (IQR: 28.5–51.5 years)



The median CDAI was 128 (IQR=6.0-207.0)

Risk of malnutrition depending on disease activity (p=0,027)

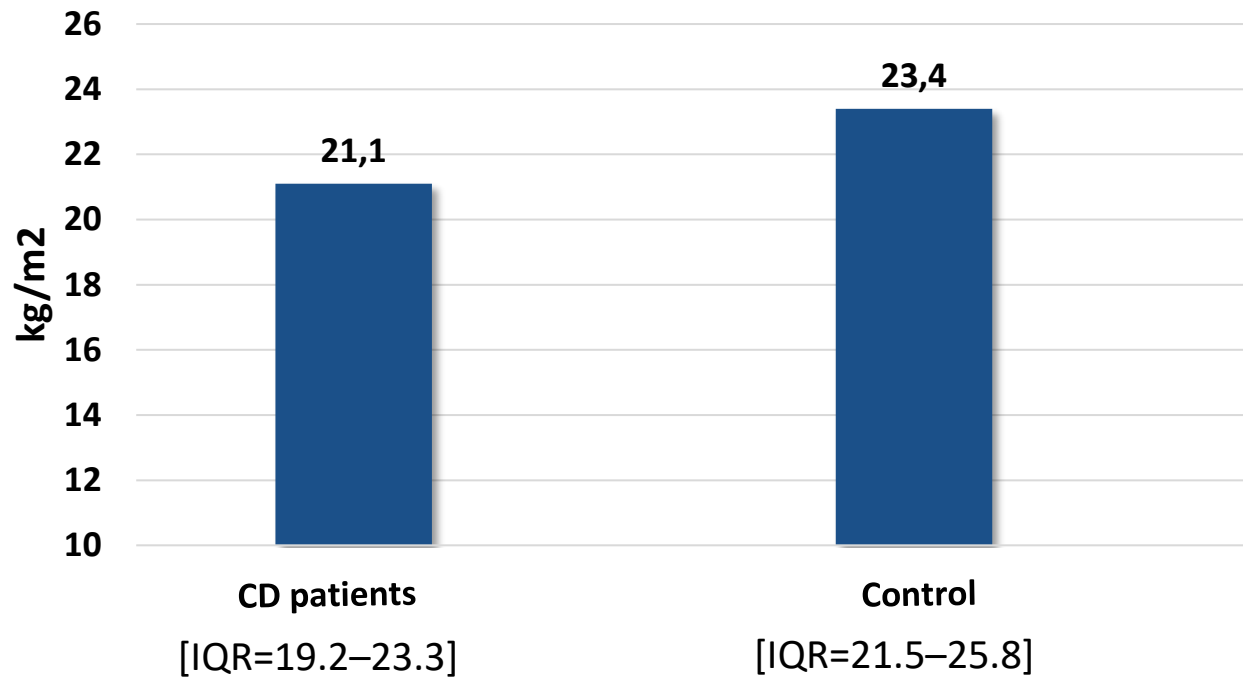


70%

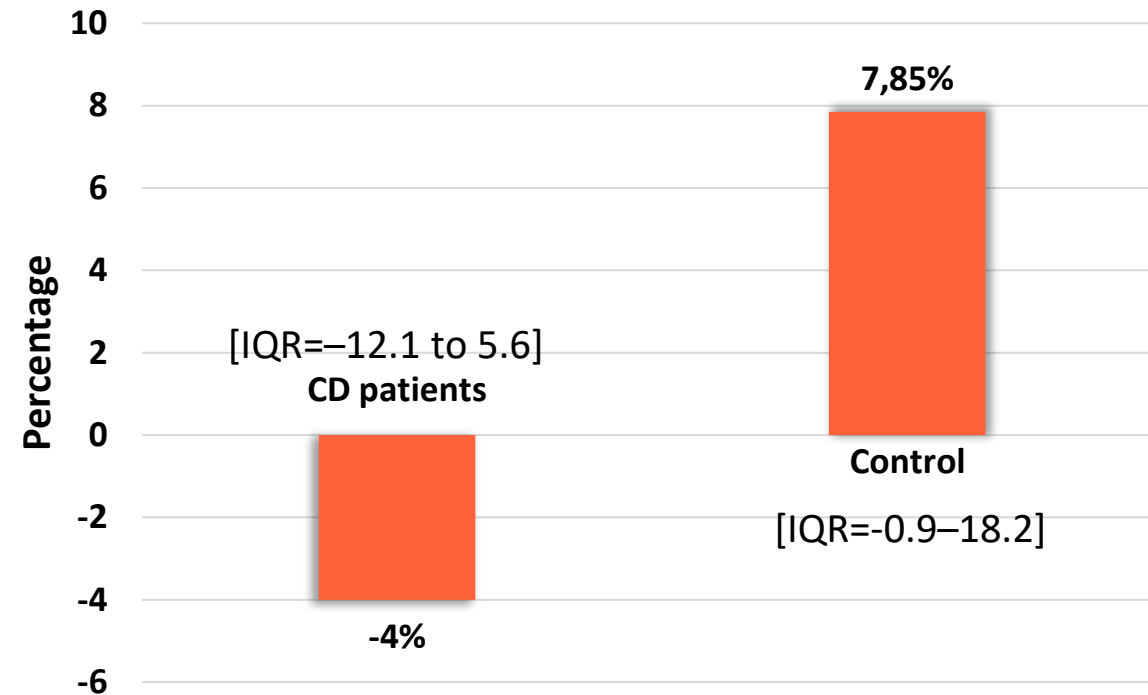
CD patients were nutritionally at risk and in need of nutritional support.

Results

BMI in study groups (p=0,014)



Visceral fat mass in study groups (p=0,003)



48%

CD patients with reduced muscle mass

Conclusion

- CD patients with high disease activity had a noticeably increased risk of malnutrition.
- 48% of CD patients in both the low and high disease activity groups had a reduction in muscle mass.
- Identification of the reduction in soft lean muscle mass in CD patients can be used as an indicator of disease activity.
- Patients that have BMI within normal values is also a high chance of having imbalance in body composition.