

Sarcopenic Obesity frequently occurs in Adult Patients with Mitochondrial Disease



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Introduction

Adult patients with mitochondrial disease (MD) are known to be at risk of malnutrition, but data on body composition and physical functioning are lacking. The aim of this study was to describe the nutritional status, food intake, body composition and physical functioning in MD patients.

Methods

Table 1: Parameters measured and methods applied.

| Parameter | Method |
|--------------------------------|--|
| Body Composition | Dual X-ray Absorptiometry |
| Anthropometric Characteristics | Height, weight, waist circumference (WC) |
| Dietary Intake | Three day dietary record |
| Malnutrition | Patient Generated Global Assessment |
| Physical Functioning | Handgrip strength (HG) 30 sec sit to stand test (3SCT) 6 minute walk test (6MWT) |
| Sarcopenia | Low FFMI & Low Physical Functioning |
| Sarcopenic Obesity | Sarcopenia & High fat% |

Results

Characteristics of 35 adult MD patients (14 males, 21 females), aged 44 ± 10 years, included in this study are shown in Figure 1.

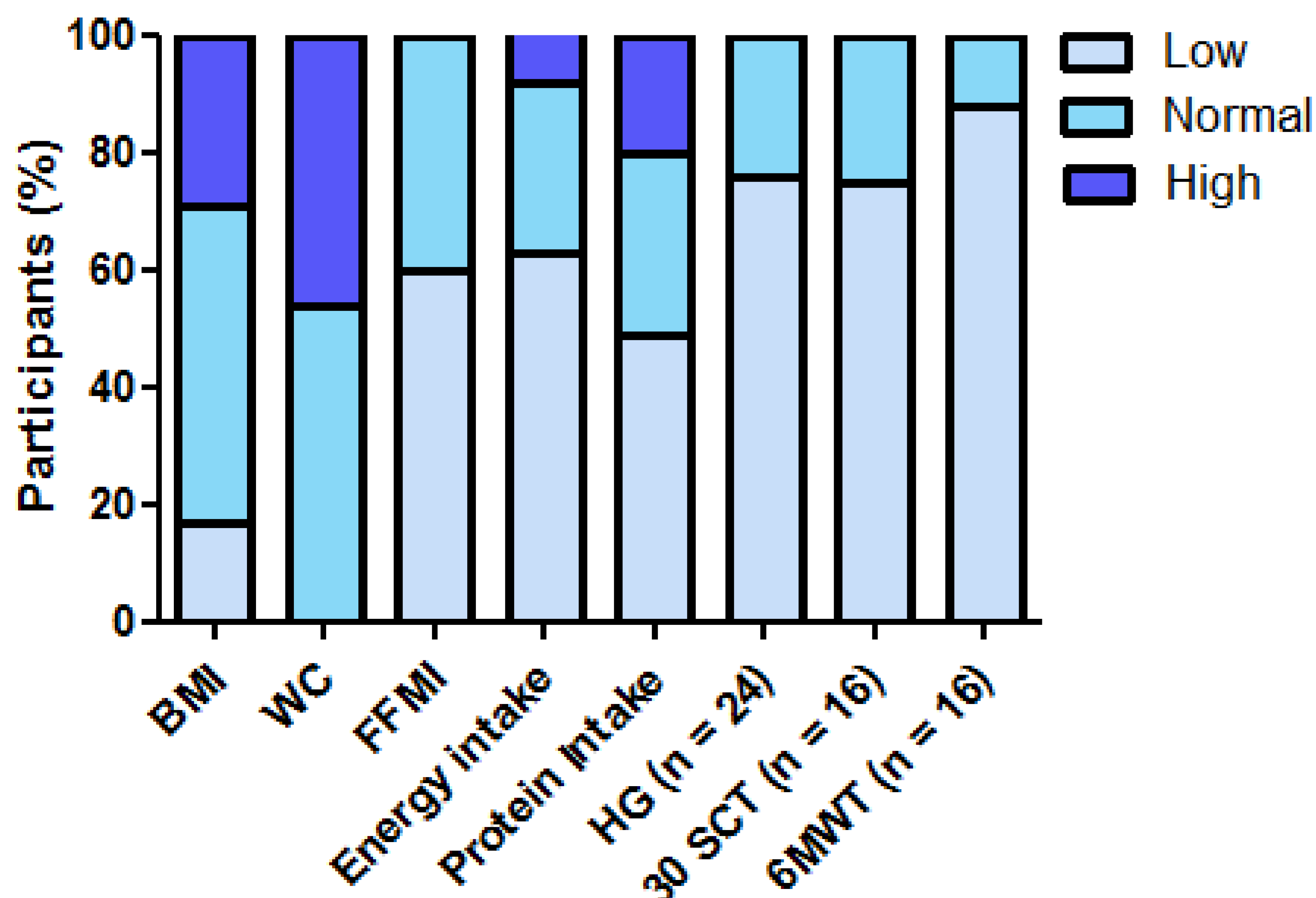


Figure 1: Characteristics of study population categorized into low, normal and high values compared to reference.

Malnutrition, sarcopenia and high fat percentage occurred within the same patients (Figure 2).

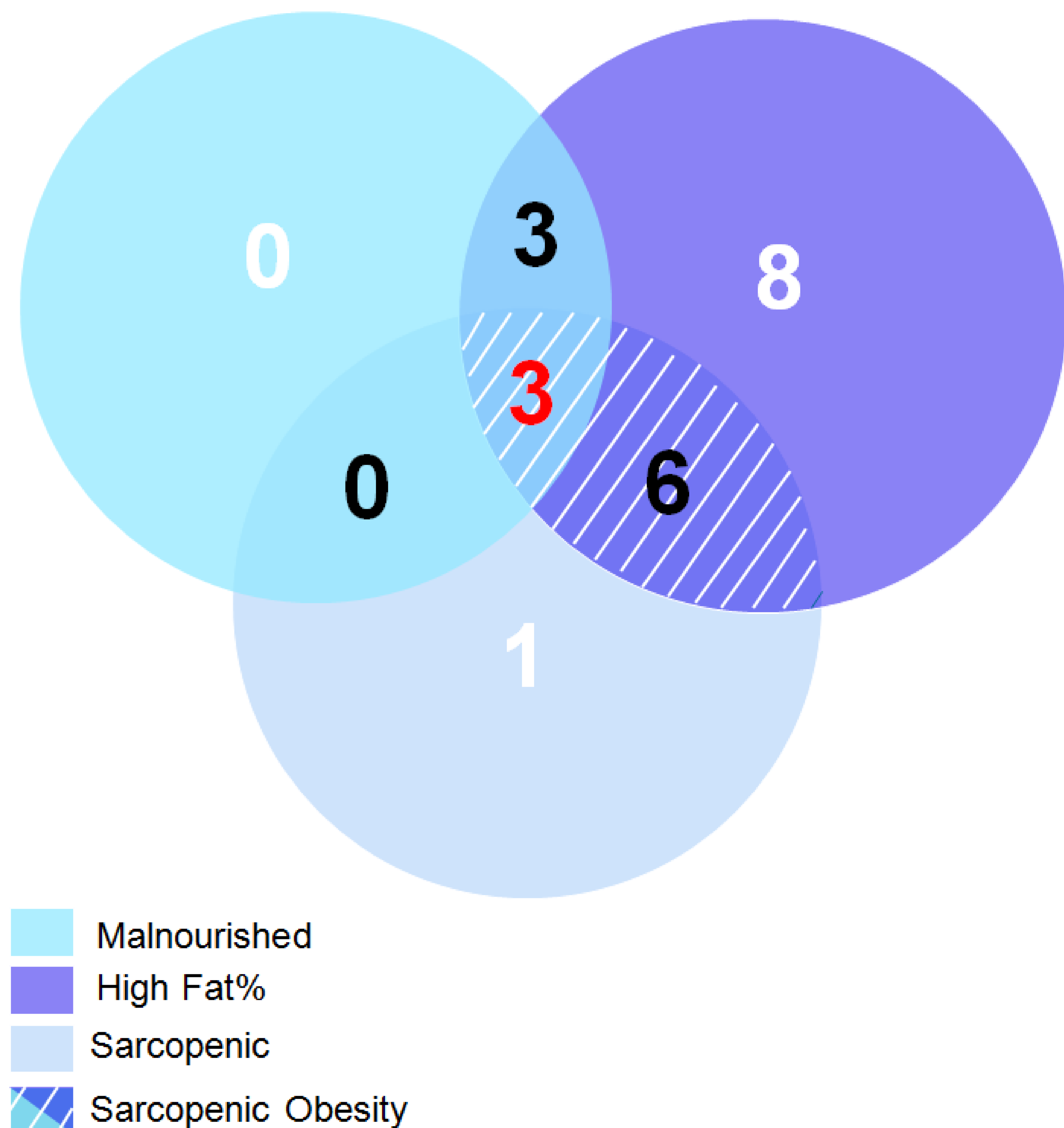


Figure 2: Occurrence of malnourishment, high fat mass, sarcopenia and sarcopenic obesity in MD patients (n=21).

Discussion

Sarcopenic obesity was frequently observed in adult MD patients. BMI did not qualify these patients as obese. Malnutrition and low physical functioning are common in this study population.

Conclusion

To provide optimal nutritional support to MD patients, it appears mandatory to perform a complete nutritional assessment including measurement of food intake, body composition and physical functioning.

The authors declare no conflict of interest.

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