

## Abstract LWC 2025

**Title:** Cultural and Nutritional Approaches to Lipedema Treatment: A Cross-Sectional Cohort Study

**Background:** Lipedema is a chronic connective tissue disorder characterized by the abnormal accumulation of subcutaneous fat in the limbs, often misdiagnosed as obesity. Diagnostic confusion based on BMI analysis ignores factors such as inflammation and lymphatic dysfunction, which may have a greater clinical impact. In many cases, this error leads to an inappropriate therapeutic plan (restrictive diets, GLP1-agonists, bariatric surgery, etc.), with long-term negative consequences. Unlike in Northern Europe and USA, obesity may not be the primary issue in mediterranean regions and thus weight reduction not the priority treatment.

### Objectives:

This study aims to explore cultural regions differences in diagnostic and therapy management of lipedema and evaluates how these approaches may influence the clinical outcomes.

### Methods:

We conducted a retrospective, observational cohort study including 154 women diagnosed with lipedema. Participants completed a survey assessing demographic information (age, hormonal status, and comorbidities) and therapy approaches (nutritional therapy, regular exercise, compression, surgery). Data were correlated with waist-to-hip ratio (WHR), body mass index (BMI) and lipedema stage to analyze factors that may influence in diagnosis pattern and final treatment election.

### Results:

Median age was 43.4 years. Among them, 4,5% were younger than 30, 67,5% aged 30 to 50 years old and 36% were aged 50 or more. Women who were peri- or post-menopausal accounted for 44,5%. According to the body mass index (BMI), the median of the participants was 27, with 65,5% valued over 25 (overweight or obesity) while only 9,2% of the patients showed an increased risky WHR ( $> 0,85$ ), being normal at 90,8% of the participants (median 0,7). Additionally, 61.7% of the women had a concomitant disease. The most common conditions included hypothyroidism (21.1%), polycystic ovarian syndrome (14.7%), and asthma or treatment with corticosteroids (12.6%). The stage of lipedema was known for 135 patients: 17.3% were classified as stage I, 57.5% as stage II, 20% as stage III, and 5.2% as stage IV. Older patients and those diagnosed with hypothyroidism exhibited significantly higher levels of WHR ( $p < 0.05$ ). Diet was considered a therapeutic option for 87% of the women, with a dietitian guiding the plan in 47.4% of the cases.

### Conclusion:

Although 65% of our patients would have been classified as overweight or obese regarding BMI, over 90% had normal WHR values. Results suggest that an accurate earlier diagnostic and consequent therapy management including nutritional education, could improve long term patients outcomes. Probably food culture, access to healthier foods and particular lifestyle habits in mediterranean regions may provide antiinflammatories benefits that help slow disease progression.

### Bibliography:

Brenner E, Forner-Cordero I, Rapprich S, Cornely M. "Body mass Index vs. waist to height-ratio in patients with lipohyperplasia dolorosa (vulgo lipedema)" JDDG: Journal der deutschen Dermatologischen Gesellschaft. 2023

Herbst K et al. "Standard of care for lipedema in the United States" Phlebologie. May 2021

Forner-Cordero I, Langa JM. "Is lipedema a progressive disease?" Vascular Medicine. Jan 2025

Faeber, G, Cornely, M, Daubert C et al. "S2K-Leitlinie Lipödem" J Deutsche Derma Gesell-2024