Lipedema and Psychological Well-Being: Psychosocial Burden, Psychiatric Comorbidities, and Perspectives for Psychological Treatment

Ilaria Bertolucci*

Miller Institute of Behavioral and Cognitive Psychotherapy, Florence, Italy

Abstract: Lipedema is a chronic adipose tissue disorder characterized by disproportionate fat accumulation, pain, and functional limitations, yet it remains underrecognized and frequently diagnosed late. In addition to its physical manifestations and multisystem comorbidities, lipedema is associated with substantial psychological and psychosocial challenges, including anxiety, depressive symptoms, disordered eating, body dissatisfaction, and weight-related stigma. These difficulties may negatively affect quality of life, social functioning, and interpersonal relationships. This review examines the clinical characteristics and comorbidities of lipedema, with particular emphasis on its psychological and psychosocial impact. Despite growing research interest, differences in diagnostic criteria and assessment methods contribute to variability in reported findings. Although psychological distress and psychosocial difficulties have been documented in individuals with lipedema, evidence from condition-specific studies evaluating psychological interventions remains unavailable or insufficient to establish their effectiveness. A multidisciplinary, patient-centered approach is therefore essential, with greater emphasis on psychological interventions to address the emotional and psychosocial burden of lipedema, support adaptive coping strategies, and promote psychological well-being. Further research is needed to establish the efficacy of specific psychotherapeutic approaches and clarify how integrating psychological care into multidisciplinary treatment pathways may improve overall clinical outcomes and quality of life.

Keywords: Lipedema, Lipoedema, Clinical manifestations, Psychological distress, Psychiatric comorbidities, Health-related quality of life, Body image, Weight stigma, Psychosocial functioning, Multidisciplinary care, Psychological interventions.

RATIONALE AND OBJECTIVES

Despite growing recognition of the psychological burden associated with lipedema, evidence on specific psychological interventions remains limited. This narrative review aims to summarize the available evidence on psychological manifestations and psychiatric comorbidities in lipedema and to explore potential psychological interventions to address the associated psychological and psychosocial difficulties.

METHOD

This narrative review was conducted in accordance with the Scale for the Assessment of Narrative Review Articles (SANRA) criteria (Baethge *et al*., 2019). The scientific literature was searched using three electronic databases: PubMed, ScienceDirect, and Google Scholar. The literature search was carried out between August and October 2026.

The following keywords were used: “lipedema,” “lipoedema,” “physical manifestations,” “physical symptoms,”, “medical comorbidities” “psychological symptoms,” “psychological manifestations,” “psychiatric comorbidities,” “psychological comorbidities,” “quality of life,” “well-being,” “psychological interventions,” and “psychotherapeutic approach.” Search terms were combined using Boolean operators (AND and OR) to identify studies addressing the clinical characteristics of lipedema and its associated psychological and psychosocial dimensions. The search strategy was adapted to the specific requirements of each database.

Studies were eligible for inclusion if they met the following criteria: (i) they were written in English; (ii) they included individuals diagnosed with lipedema; and (iii) they addressed at least one of the following domains: the historical development and clinical characterization of lipedema, including its definition, diagnostic criteria, and physical manifestations; psychological symptoms, and/or psychopathological diagnoses; medical and psychological comorbidities; the impact of lipedema on quality of life and psychosocial functioning; psychological interventions and therapeutic approaches relevant to the management of lipedema. Studies employing quantitative, qualitative, or mixed-methods designs were considered eligible. Quantitative studies assessing psychological symptoms or diagnosis were considered particularly relevant when they employed validated or standardized assessment instruments. Letters to the editor were excluded.

Throughout this paper, the term "psychological symptoms" refers to scores exceeding the established cut-off values of the respective validated assessment instruments used to evaluate different psychological

*Address correspondence to this author at the Miller Institute of Behavioral and Cognitive Psychotherapy, Florence, Italy; E-mail: ila.bertolucci@gmail.com

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constructs (*e.g.*, depression, anxiety, and other psychopathological symptoms), without necessarily indicating the presence of a clinically diagnosed disorder. The term "clinical diagnosis" or “disorder” is used when a psychological disorder has been formally identified through structured or semi-structured clinical interviews.

BRIEF HISTORY

Lipedema was first described in 1940 by Drs. Edgar Allen and Edgar Hines at the Mayo Clinic as a syndrome characterized by disproportionately enlarged legs and orthostatic edema (Allen & Hines, 1940). Subsequently, Wold *et al*. (1951), in a series of 119 patients, expanded this initial description by systematically characterizing the clinical features of lipedema, including bilateral and symmetrical enlargement of the lower limbs, relative sparing of the feet, pain and tenderness, easy bruising, persistence despite weight loss, familial occurrence, and features that help distinguish the condition from lymphedema and venous disease.

Despite these early clinical observations and the detailed characterization of the condition, lipedema received limited attention in mainstream medicine for several decades. Its manifestations were frequently attributed to obesity, cellulite, or nonspecific circulatory problems, contributing to diagnostic delays and missed diagnoses and leaving many patients without appropriate recognition or care.

In recent years, lipedema has attracted increasing attention in both clinical practice and scientific research. An important milestone occurred in 2017, when Germany introduced specific diagnostic codes for lipedema in the German modification of the International Classification of Diseases, Tenth Revision (ICD-10-GM; Bundesinstitut für Arzneimittel und Medizinprodukte, 2017). Further international developments included the World Health Organization’s adoption of the Eleventh Revision of the International Classification of Diseases (ICD-11) in 2019, which came into effect on January 1, 2022, providing an international framework for classifying and documenting health conditions (World Health Organization, 2022).

Today, lipedema is increasingly recognized as a distinct chronic disorder, although important gaps remain in diagnosis, treatment, and clinical standardization. In the United States, specific ICD-10-CM diagnostic codes for lipedema have been proposed for consideration, with potential implementation from October 1, 2027. If approved, these codes could support more standardized diagnosis, documentation, and reporting of the condition (Centers for Disease Control and Prevention, 2026).

DEFINITION

Lipedema is currently recognized as a chronic disorder involving the subcutaneous adipose tissue and the surrounding loose connective tissue. It is characterized by a disproportionate and symmetrical distribution of adipose tissue in the extremities, predominantly affects women, and is typically associated with pain and/or discomfort (Kruppa *et al*., 2026; Herbst *et al*., 2021). The condition primarily affects the lower limbs but may also involve the upper limbs, with reported prevalence estimates ranging from 30% to 80% (Kruppa *et al*., 2026). Upper-limb involvement may occur at different stages of the disease. The hands and feet are generally spared, often resulting in a characteristic cuff-like appearance at the wrists or ankles. Lipedema can be classified into five types according to the anatomical distribution of affected adipose tissue (Kruppa *et al*., 2026; Herbst *et al*., 2021; see Figure **1**).

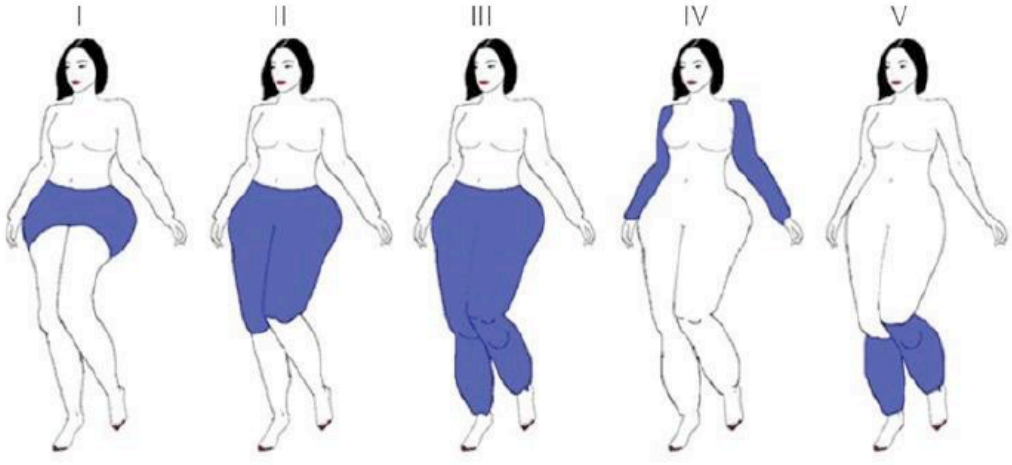


Figure 1: Types of lipedema according to the anatomical distribution of adipose tissue. Adapted from Torre *et al*. (2018).

Type 1 primarily affects the pelvic region, buttocks, and hips. Type 2 extends from the pelvis to the knees, with characteristic adipose tissue deposits around the knees, particularly on their inner aspects. Type 3 extends from the pelvis to the ankles. Type 4 involves the upper limbs, particularly the arms, whereas Type 5 primarily affects the calves and lower legs.

A separate classification distinguishes between different morphological patterns of adipose tissue distribution (Herbst *et al*., 2021; see Figure **2**). These patterns include a columnar type, in which adipose tissue is distributed relatively evenly along the limb, resulting in a loss of its physiological contours and a cylindrical appearance, and a lobular type, characterized by an irregular distribution of adipose tissue in distinct lobes or pockets.

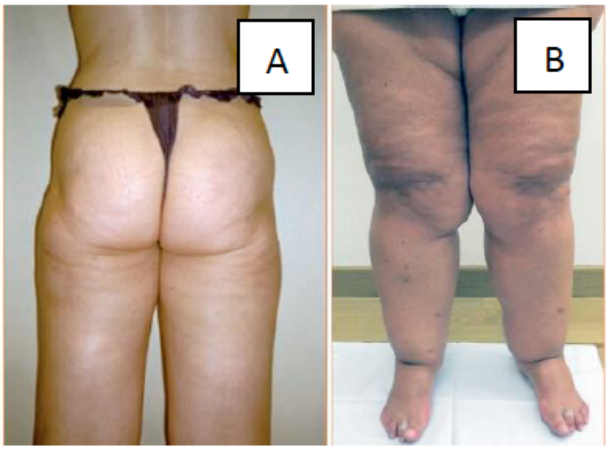


Figure 2: Columnar-type lipedema (Fig. **A**) and lobular-type lipedema (Fig. **B**). Image from Alcolea *et al*., 2018.

Lipedema can also be classified according to clinical stage, which describes morphological changes in the skin and subcutaneous tissue over the course of the disease (Herbst *et al*., 2021). Stage 1 is characterized by a smooth skin surface and small, palpable subcutaneous nodules. In Stage 2, the skin may develop an orange-peel appearance, accompanied by increased tissue thickness and more pronounced nodules. Stage 3 is characterized by more substantial tissue changes, including an uneven, mattress-like skin surface and larger subcutaneous nodules.

More recently, the introduction of two intermediate stages, 1.5 and 2.5, has been proposed to describe transitional phenotypes between Stages 1 and 2 and between Stages 2 and 3, respectively. This proposal considers not only morphological changes in the tissue but also variations in clinical and biophysical parameters, including pain, swelling, sensations of heaviness, water content, fat mass, and skeletal muscle mass. In particular, Al-Ghadban *et al*. (2025) reported progressive changes in several of these parameters across clinical stages, suggesting that disease progression may be better understood as a continuum rather than as a sequence of clearly distinct categories. However, the international consensus emphasizes that traditional staging primarily describes morphological features and does not necessarily reflect overall clinical severity (Kruppa *et al*., 2026).

PREVALENCE AND ONSET

The global prevalence of lipedema among women has been estimated to range from 11% to 17% (Laur, 2025). Although lipedema predominantly affects women, rare cases have also been reported in men (Wold *et al*., 1951; Amato *et al*., 2025). Symptoms often emerge or worsen during periods of significant hormonal change, such as puberty, pregnancy, and menopause. These observations suggest a possible

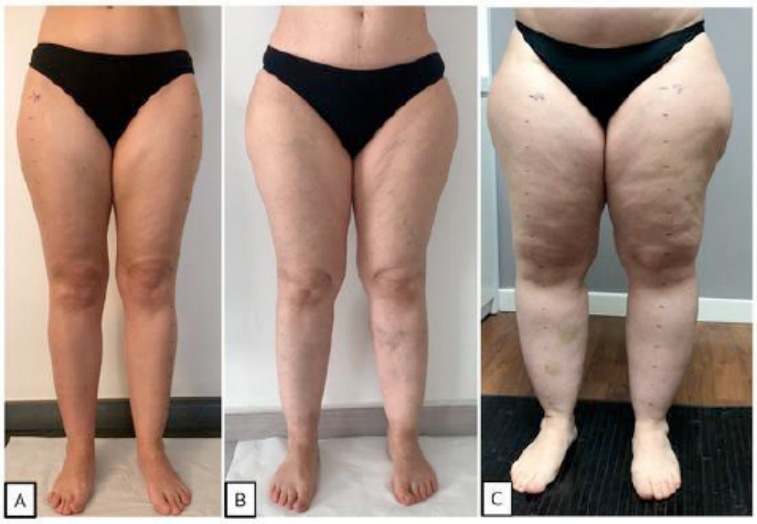


Figure 3: Staging of lipedema. The figure shows the three clinical stages of lipedema: stage 1 (Fig. **A**), stage 2 (Fig. **B**), and stage 3 (Fig. **C**); (Image from Patton *et al*., 2024).

association between hormonal fluctuations and the onset or progression of lipedema (Aday *et al*., 2024; Lüchinger *et al*., 2026; Kruppa *et al*., 2026).

PHYSICAL MANIFESTATIONS AND MEDICAL COMORBIDITIES

Lipedema is a chronic and potentially disabling condition characterized by disproportionate adipose tissue accumulation and physical symptoms, including spontaneous pain, swelling, heaviness, and fatigue, which may occur across all clinical stages (Herbst *et al*., 2021; Patton *et al*., 2024).

Beyond its physical manifestations, lipedema is associated with several comorbidities affecting multiple organ systems. Musculoskeletal manifestations include multisite pain, reported in more than half of patients, joint hypermobility (31.6–44%), and ligamentous hyperlaxity (95.8% in one study) (Torre *et al*., 2018; Patton *et al*., 2024; Fiengo & Sbarbati, 2025; Simarro *et al*., 2025). Chronic venous disease is particularly prevalent, affecting 71.9–86.2% of patients (Patton *et al*., 2024; Luta *et al*., 2025). Endocrine and metabolic comorbidities are also common, particularly vitamin D deficiency (63.4–84.6%) and thyroid disorders (11.7–59.5%) (Romeijn *et al*., 2018; Patton *et al*., 2024; Luta *et al*., 2025; Vaquero-Ramiro *et al*., 2026).

Other frequently reported conditions include gynecological disorders, particularly menstrual irregularities (32.5%) (Ghods *et al*., 2020; Patton *et al*., 2024), migraine (22.5–43.1%) (Bauer *et al*., 2019; Ghods *et al*., 2020; Vaquero-Ramiro *et al*., 2026), and urinary incontinence (25.8%) (Patton *et al*., 2024). Asthma, rheumatological, gastrointestinal, and dermatological conditions have also been documented (Ghods *et al*., 2020; Romeijn *et al*., 2018; Luta *et al*., 2025).

These findings highlight the complexity of the condition and the importance of a comprehensive clinical assessment, as the burden of physical manifestations and associated comorbidities may extend beyond physical health, negatively affecting psychological well-being and quality of life.

PSYCHOLOGICAL MANIFESTATIONS AND PSYCHOLOGICAL COMORBIDITIES

The physical manifestations of lipedema can have significant implications for women's psychological well-being and overall quality of life (Alwardat *et al*., 2020). In particular, pain may contribute to psychological distress, as evidenced by positive associations between pain intensity and depressive symptoms, suggesting that higher pain levels tend to coincide with greater depressive symptom severity (Kempa *et al*., 2024; Seynhaeve *et al*., 2026). Reduced mobility and greater symptom severity have also been associated with poorer quality of life among women with lipedema (Dudek *et al*., 2018). Beyond the physical burden of the condition, difficulties associated with the diagnostic process may further compromise patients' psychological well-being (Sorrentino *et al*., 2026). Previous studies have documented substantial delays in diagnosis, ranging from 18 to 40 years, with patients consulting an average of 2.5 to 2.8 physicians before receiving a diagnosis (Romeijn *et al*., 2018; Clarke *et al*., 2023). These prolonged diagnostic journeys, together with experiences of dismissive or invalidating healthcare encounters, may contribute to frustration, psychological distress, and feelings of stigmatization (Romeijn *et al*., 2018; Clarke *et al*., 2023; Melander *et al*., 2022).

Consistent with these findings, women with lipedema may experience considerable psychological distress, including difficulties with emotion regulation, anxiety, and depressive symptoms (Al-Wardat *et al*., 2020; Al-Wardat *et al*, 2022; Luta *et al*., 2025). Compared with healthy controls, women with lipedema showed significantly greater difficulties in identifying, understanding, and regulating emotions, as well as higher levels of anxiety (Al-Wardat *et al*., 2022). Emotional lability was also reported by 28% of women with lipedema (Clarke *et al*., 2023). Although the evidence regarding anxiety remains relatively limited, available findings suggest that anxiety symptoms may be common in this population. Luta *et al*. (2025) reported that 64.4% of participants scored above the anxiety subscale cut-off on the Hospital Anxiety and Depression Scale (HADS; Snaith, 2003). However, the prevalence of clinically diagnosed anxiety disorders appears to be lower. Erbacher & Bertsch (2020) reported that 4.7% of participants had been diagnosed with anxiety or panic disorders and 3.3% with post-traumatic stress disorder (PTSD) in the period preceding the onset of typical lipedema-associated pain. Nevertheless, the absence of a formal diagnosis does not preclude the presence of disease-related fears or maladaptive cognitive patterns. In this regard, women with lipedema have been found to exhibit significantly higher levels of dysfunctional beliefs than healthy controls. Specifically, they reported greater catastrophizing, rigid interpersonal expectations, overgeneralization, negative bias, and self-blame (Fabbro *et al*., 2026). These findings suggest that, beyond clinically diagnosable disorders, maladaptive cognitive patterns may represent an additional dimension of the psychological burden associated with lipedema.

More extensive evidence is available on depressive symptoms, although prevalence estimates vary across

studies according to the assessment instruments and cut-off scores used. Erbacher and Bertsch (2020) reported that 30.7% of participants had received a clinical diagnosis of a depressive disorder in the 12 months preceding the onset of typical lipedema-associated pain. Among studies assessing depressive symptoms using screening instruments, Luta *et al*. (2025) found that 23.4% of women scored above the HADS threshold for depressive symptoms, while Clarke *et al*. (2025) reported that 42.3% met the Patient Health Questionnaire-9 (PHQ-9; Kroenke *et al*., 2001) screening threshold for depression. Higher estimates were reported by Kunzová *et al*. (2025), who identified moderate-to-severe depressive symptoms in 50.9% of participants, and by Dudek *et al*. (2021), who found that 59.2% of women scored within ranges suggestive of possible depression. The proportion of participants reporting severe depressive symptoms was lower across these studies, ranging from 9.3% in Kunzová *et al*. (2025) to 11.2% in Dudek *et al*. (2021) and 13.3% in Clarke *et al*. (2025).

Beyond anxiety and depression, lipedema may affect several other dimensions of quality of life, including perceived health, social functioning, and sexual well-being (Falck *et al*., 2025; Kunzová *et al*., 2025; Kempa *et al*., 2024; Günay *et al*., 2026). Kunzová *et al*. (2025) found that 39.5% of participants rated their quality of life as moderate, whereas 30.2% rated it as poor or very poor. Satisfaction with health was similarly limited, with 30.2% of participants reporting dissatisfaction and none describing themselves as very satisfied. These findings are consistent with those of Kempa *et al*. (2024), who reported significantly lower perceived quality of life among women with lipedema than among healthy controls. Falck *et al*. (2025) found that women with lipedema reported greater health-related stigma than women in an age-matched general population. Specifically, 65% experienced moderate-to-severe distress in social situations, while 48.6% reported moderate-to-severe avoidance of social activities. Higher levels of perceived stigma were associated with poorer quality of life, particularly in terms of social functioning and emotional well-being. Conversely, greater perceived social support was associated with better emotional well-being and social functioning, suggesting that supportive social relationships may serve as an important resource for women living with lipedema (Falck *et al*., 2025).

In addition to these psychosocial challenges, the relative resistance of lipedema-associated adipose tissue to weight loss may adversely affect body image and expose women to weight-related stigma and shaming from friends, family members, and healthcare professionals. Such experiences may contribute to psychological distress, anxiety, depressive symptoms, and dysfunctional eating behaviors (Grigoriadis *et al*., 2022). Consistent with these concerns, Erbacher and Bertsch (2020) found that 18.0% of women in their pilot study had experienced eating disorders, particularly binge-eating disorder, in the 12 months preceding the onset of typical lipedema-associated pain. Furthermore, experienced and internalized weight stigma have been associated with body-image concerns, feelings of shame, and social avoidance among women with lipedema (Kloosterman *et al*., 2025; Falck *et al*., 2025). Body dissatisfaction may also affect interpersonal relationships and social functioning, potentially limiting social participation (Romeijn *et al*., 2018).

These psychosocial difficulties may extend to intimate relationships and sexual well-being (Falck *et al*., 2025). In this regard, Meral *et al*. (2026) reported that 75% of women with lipedema experienced sexual dysfunction and had significantly poorer scores than healthy controls across several domains of sexual functioning, including desire, arousal, lubrication, orgasm, and sexual satisfaction.

Taken together, these findings suggest that the psychological burden associated with lipedema may arise from the interaction between physical symptoms, body-image concerns, maladaptive cognitive patterns, and negative social experiences. In particular, pain-related distress, catastrophizing, difficulties in emotion regulation, and internalized weight stigma may contribute to less adaptive coping strategies, including social avoidance and difficulties in psychological adjustment. Conversely, perceived social support may represent an important protective factor, potentially facilitating adaptive coping and better psychosocial functioning. However, the predominantly observational nature of the available evidence does not allow causal relationships between these factors to be established.

However, these findings should be interpreted with caution, as the available evidence remains limited and is characterized by considerable methodological heterogeneity. Differences in reported prevalence estimates and psychological outcomes may reflect variations in sample sizes, sociodemographic and clinical characteristics, diagnostic criteria, recruitment strategies, and assessment instruments, including the use of different screening tools and cut-off scores. Furthermore, differences in study designs and the limited availability of representative samples restrict the comparability and generalizability of the findings. Therefore, further research involving larger and more representative populations, together with greater methodological consistency, is needed to provide a more reliable understanding of the psychological burden associated with lipedema.

PERSPECTIVES FOR PSYCHOLOGICAL TREATMENT

Current guidelines and international consensus statements emphasize the importance of a multidisciplinary and individualized approach to lipedema management, involving medical professionals and, as appropriate, physiotherapists, nutrition specialists, and mental health professionals. Psychological and social support should be considered an integral component of comprehensive care, given the potential impact of lipedema on psychological well-being, daily functioning, body image, and quality of life (Faerber *et al*., 2024; Kruppa *et al*., 2026; Amato *et al*., 2025).

Several psychological approaches may be potentially relevant to addressing the psychological and psychosocial burden associated with lipedema. However, their application in this population is currently based on theoretical considerations and indirect evidence from studies involving individuals with other chronic conditions, rather than on intervention studies conducted specifically in patients with lipedema. Therefore, the approaches discussed below should be considered potential therapeutic options whose feasibility, acceptability, and effectiveness in this population remain to be established.

Psychoeducation may represent an important component of multidisciplinary care by helping patients develop a better understanding of lipedema, its clinical manifestations, and available management strategies. Evidence from other chronic conditions suggests that patient education and psychoeducational interventions may improve disease-related knowledge, self-efficacy, treatment engagement, and psychological well-being (Correia *et al*., 2023; Burke *et al*., 2024; van der Zanden *et al*., 2023). Moreover, current lipedema guidelines emphasize the importance of evidence-based patient information and self-management, including collaborative goal-setting and problem-solving strategies (Faerber *et al*., 2024).

Cognitive behavioural therapy (CBT; Beck, 1976) may represent a promising approach to addressing maladaptive cognitions, emotional regulation, ineffective coping strategies, and psychosocial difficulties in individuals with lipedema. Evidence from other clinical populations with chronic diseases supports the effectiveness of CBT-based interventions in reducing symptoms of depression and anxiety (Scott *et al*., 2023), improving insomnia outcomes through cognitive behavioural therapy for insomnia (CBT-I; Scott *et al*., 2025), and addressing pain-related psychological and functional difficulties (Ehde *et al*., 2014; Knoerl *et al*., 2016), as well as symptoms of chronic fatigue syndrome (Malouff *et al*., 2008). Furthermore, CBT is an established evidence-based treatment for eating disorders (*e.g*. binge-eating disorder) (Agras & Bohon, 2021). Through techniques such as cognitive restructuring, behavioural modification, and problem-solving, CBT may also help patients with chronic disease develop more adaptive coping strategies and improve psychological adjustment (Tao *et al*., 2023).

Mindfulness-based interventions (MBIs) may represent another promising approach to addressing the psychological burden associated with lipedema by fostering present-moment awareness and a non-judgmental, accepting attitude toward one's thoughts, emotions, and bodily experiences (Kabat-Zinn, 2003; Creswell, 2017). Evidence from studies involving individuals with chronic conditions suggests that MBIs may help reduce psychological distress, anxiety, and depressive symptoms, while supporting coping and improving selected aspects of quality of life (Mansor *et al*., 2023; Motolese *et al*., 2023; Razzera *et al*., 2022; Tabernero *et al*., 2022; Zhang *et al*., 2021). Research on chronic pain also suggests that mindfulness-based approaches may improve pain-related outcomes, although effects vary according to the clinical population, intervention, and comparator condition (Hilton *et al*., 2017; Razzera *et al*., 2021; Requier *et al*., 2023; Zhang *et al*., 2021). Some studies have additionally investigated potential effects on physiological outcomes, including blood pressure and heart rate (Goldstein *et al*., 2012; Manikonda *et al*., 2008).

Acceptance and Commitment Therapy (ACT) aims to enhance psychological flexibility, defined as the ability to remain in contact with the present moment and to engage in behaviours consistent with personal values, even in the presence of difficult thoughts, emotions, or symptoms (Fletcher & Hayes, 2005). Evidence from systematic reviews and meta-analyses suggests that ACT may improve quality of life and reduce psychological distress, including symptoms of anxiety and depression, in individuals with chronic health conditions (Konstantinou *et al*., 2023; Graham *et al*., 2016). ACT may also help address physical symptoms associated with chronic illness, particularly fatigue (Maunick *et al*., 2023) and chronic pain (Ma *et al*., 2023).

Self-compassion-focused interventions aim to promote the ability to respond to personal suffering and perceived failures with kindness, understanding, and acceptance, while recognizing suffering as a common aspect of the human experience (Neff, 2003). Research across various chronic illness populations suggests that greater self-compassion is associated

with better psychological well-being and may facilitate emotion regulation, promote more adaptive cognitive appraisals, and support effective coping strategies (Sirois *et al*., 2015).

Although these psychological approaches may be relevant to addressing the difficulties associated with lipedema, none of the interventions discussed has yet demonstrated effectiveness through condition-specific intervention studies in this population. Their potential benefits are therefore inferred from studies conducted in individuals with other chronic conditions and cannot be directly generalized to women with lipedema. Accordingly, CBT, MBIs, ACT, and CFT should be regarded as theoretically promising therapeutic options rather than evidence-based treatments for lipedema-associated psychological difficulties. Future research should investigate their feasibility, acceptability, and effectiveness specifically in this population.

CONCLUSION

Lipedema is a complex chronic condition whose impact extends beyond its physical manifestations to encompass substantial psychological and psychosocial challenges. Available evidence suggests that individuals with lipedema may experience anxiety, depressive symptoms, disordered eating, maladaptive cognitive patterns, body dissatisfaction, weight-related stigma, and difficulties in social and interpersonal functioning. These challenges, alongside chronic pain, fatigue, functional limitations, and diagnostic delays, may further compromise psychological well-being and health-related quality of life. However, the interpretation of these findings should take into account the considerable heterogeneity across available studies, particularly regarding study populations, sample sizes, diagnostic criteria, and assessment instruments, which may contribute to variability in reported prevalence estimates and psychological outcomes.

These findings underscore the importance of integrating psychological and psychosocial support into multidisciplinary, patient-centred lipedema care. Such interventions may provide complementary strategies to alleviate emotional distress, promote adaptive coping, improve body image, and support psychological adjustment. However, although evidence from other clinical populations provides a rationale for considering these approaches, their feasibility, acceptability, and effectiveness in individuals with lipedema remain insufficiently established.

Importantly, although observational studies conducted in individuals with lipedema have documented psychological distress and psychosocial difficulties, these findings do not constitute evidence of the effectiveness of specific psychological interventions. To date, no condition-specific intervention studies have established the efficacy of CBT, MBIs, ACT, or CFT in this population.

Future research should prioritize the development and evaluation of psychological interventions specifically tailored to the needs of individuals with lipedema. Although approaches such as cognitive behavioral therapy (CBT), mindfulness-based interventions, Acceptance and Commitment Therapy (ACT), and Compassion-Focused Therapy (CFT) have shown potential benefits in other chronic illness populations, their effectiveness in individuals with lipedema has not yet been established through condition-specific intervention studies. Therefore, their application in this population should currently be regarded as theoretically and indirectly supported rather than evidence-based.

Several research priorities can be identified. First, well-designed clinical trials are needed to investigate the feasibility, acceptability, and effectiveness of these interventions in individuals with lipedema. Second, future studies should identify the specific psychological needs and therapeutic targets of this population, with particular attention to anxiety, depressive symptoms, body dissatisfaction, internalized weight stigma, disordered eating, pain-related distress, and difficulties in emotional regulation. Particular attention should also be given to the development of lipedema-specific psychological interventions addressing the distinctive challenges associated with this condition, including internalized weight stigma, body-image dissatisfaction, pain-related distress, and experiences of diagnostic invalidation. Such interventions should be evaluated not only in terms of symptom reduction but also in relation to body acceptance, social participation, self-efficacy, and health-related quality of life.

Third, research should examine which intervention components are most effective in promoting adaptive coping, psychological flexibility, self-compassion, and improved body image. Finally, longitudinal studies involving larger and more representative samples are needed to clarify the relationships between disease severity, physical symptoms, psychological distress, and health-related quality of life, while accounting for potential sociodemographic and clinical confounding factors.

Overall, integrating psychological support into multidisciplinary lipedema care represents an important clinical priority. However, further condition-specific research is essential to establish which psychological interventions are most appropriate, for whom, and

under what clinical circumstances, ultimately supporting the development of evidence-based and individualized treatment pathways.

CONFLICTS OF INTEREST STATEMENT

The authors declare no conflicts of interest.

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