Tumescent liposuction in lipoedema yields good long-term results

W. Schmeller, M. Hueppe* and I. Meier-Vollrath

Hanse-Klinik, St-Jürgen-Ring 66, D-23564 Lübeck, Germany
*Department of Anaesthesiology, University of Lübeck, Ratzeburger Allee 160, D-23538 Lübeck, Germany

Summary

Background Lipoedema is a painful disease in women with circumscribed increased subcutaneous fatty tissue, oedema, pain and bruising. Whereas conservative methods with combined decongestive therapy (manual lymphatic drainage, compression garments) have been well established over the past 50 years, surgical therapy with tumescent liposuction has only been used for about 10 years and long-term results are unknown.

Objectives To determine the efficacy of liposuction concerning appearance (body shape) and associated complaints after a long-term period.

Methods A total of 164 patients who had undergone conservative therapy over a period of years, were treated by liposuction under tumescent local anaesthesia with vibrating microcannulas. In a monocentric study, 112 could be re-evaluated with a standardized questionnaire after a mean of 3 years and 8 months (range 1 year and 1 month to 7 years and 4 months) following the initial surgery and a mean of 2 years and 11 months (8 months to 6 years and 10 months) following the last surgery.

Results All patients showed a distinct reduction of subcutaneous fatty tissue (average 9846 mL per person) with improvement of shape and normalization of body proportions. Additionally, they reported either a marked improvement or a complete disappearance of spontaneous pain, sensitivity to pressure, oedema, bruising, restriction of movement and cosmetic impairment, resulting in a tremendous increase in quality of life; all these complaints were reduced significantly (P < 0.001). Patients with lipoedema stage II and III showed better improvement compared with patients with stage I. Physical decongestive therapy could be either omitted (22.4% of cases) or continued to a much lower degree. No serious complications (wound infection rate 1.4%, bleeding rate 0.3%) were observed following surgery.

Conclusions Tumescent liposuction is a highly effective treatment for lipoedema with good morphological and functional long-term results.