

Peer Review File

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Reviewer A

COMMENT 1: This manuscript presents a rather small case series, divided into three different surgical techniques, and a simple narrative review, without extended data extraction and analysis.

REPLY 1: Thank you for the comment. That is the format we intended to present. Data extraction was performed and was presented in narrative way.

COMMENT 2: The recent AWMF-guideline on Lipedema suggests the use of the Waist-to-Height-Ratio in order to describe a co-incident obesity, which cannot be estimated by using the BMI. Therefore, some patients in this case series might have been co-incidentally obese (or not). This should be clarified. Furthermore, this case series summarizes patient with different numbers of interventions, some even the third intervention.

REPLY 2: Thank you for your comment. We added this information to our manuscript and how it affects the presented outcomes.

CHANGES IN THE TEXT: We did not include waist-to-height-ratio in order to evaluate coincidence of obesity. Only using BMI leads to inaccurate diagnoses overestimating overweight and obesity.

COMMENT 3: The narrative literature review does not provide any new insights, as there are no c and analyzed.

REPLY 3: Thank you so much for the comment. Per request from the editorial office and the journal editorial board, the manuscript format for this study was decided to be narrative literature review. If cumulative data extraction and analysis were requested, this would need a meta-analysis and different guidelines will be needed.

CHANGES IN THE TEXT: No changes in text were documented.

Reviewer B

COMMENT 1: "misdiagnosed chronic condition" - I would suggest to use the term misnomer

REPLY 1: Thank you for your comment. We changed the word misdiagnosed to "Underdiagnosed" to indicate that is condition or disease diagnosed less often than it is actually present.

CHANGES IN THE TEXT: Lipedema [*lipohyperplasia dolorosa*](1) is a underdiagnosed chronic condition known as “painful fat syndrome” or “fatty deposition syndrome” due to the pain and discomfort generated by disproportional subcutaneous fat distribution

COMMENT 2: "gentle and powerful spray water" - these are rather suggestive terms, please use more objective descriptions

REPLY 2: Thank you for your comment. We changed the text accordingly, so it explains better the mechanism of WAL.

CHANGES IN THE TEXT: Lastly, the WAL technique employs a dual-purpose cannula that delivers pulsating, fan-shaped jets of tumescent solution, while simultaneously suctionions both the adipose tissue and the injected fluid.

COMMENT 3: Please specify the major targets of liposuction in lipedema - it is pain reduction at first and body shape and weight modifications are secondary.

Furthermore, there is no correlation between pain reduction and amount of adipose tissue removal.

REPLY 3: We appreciate the comment of the reviewer. We have added the recommendations suggested and we think the manuscript was improved.

CHANGES IN THE TEXT: This segment was added in symptom control section:

Large-scale studies have not established a clear association between pain reduction and volume loss.

Pain reduction is a primary goal of liposuction, while body contouring and weight modification are secondary objectives.

COMMENT 4: "Wollina et al, 2014" in table 6 is not listed in the references. However, this study is rather small. therefore it seems of greater value to choose "[Microcannular liposuction in tumescent anesthesia in lipedema patients: an analysis of 519 liposuctions]. Kodim A, Wollina U. Wien Med Wochenschr. 2023;173(11-12):290-298."

REPLY 4: Thank you for your comment. We added the citations requested by the reviewer.

CHANGES IN THE TEXT: Citations are visible in the reference list.

COMMENT 5: Table 1. The staging system is originally from: "Strößenreuther R. Lipödemund Cellulitis sowie andere Erkrankungen des Fettgewebes.Köln: Viavital; 2001. S. 79–86; 161–168."

REPLY 5: Thank you for your comment. We performed the changes suggested by the reviewer.

CHANGES IN THE TEXT: *Adpated from Strößenreuther R. Das lipödem. In: Lipödem und Cellulitis sowie andere Erkrankungen des Fettgewebes. Köln: Viavital-Verlag; (2001). p. 41–54*

Reviewer C

COMMENT 1: Very well written and informative. Lipedema is so misunderstood and your paper gives hope to so many. It was fascinating to read. I have attached the file with my edits.

REPLY 1: Thank you for your comment. We did the necessary changes requested by the reviewer in the word document he attached to his comments.

Changes are evident throughout the whole manuscript.