

Retrospective Study on Clinical Indications and Technical Aspects of Micro Focused Ultrasound on a Large Cohort of Patients

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Introduction: Recent studies have shown autologous collagen regeneration, efficacy on face and neck lifting and safety of transcutaneous micro-focused ultrasound procedures. Despite this, guidelines on clinical indications and technical aspects such as the proper number of energy spots to be delivered to the patients are lacking.

Materials and methods: We reviewed 925 women with a mean age of 51, 3 years (range 33 – 64 years), with soft to severe skin ptosis of the face according to APSS (Araco Ptosis Scale System), which received an average of 1.060 spots of micro-focused ultrasound as sole treatment.

The first statistical analysis was conducted on the differences in the number of spots delivered in different homogeneous groups. The first group of 56 patients received an average of 486 lines; the second group of 73 patients received an average of 1.126 lines and the third group of 66 patients received an average of 1460 lines.

The second analysis was conducted on the differences in clinical indication according to APSS in three different homogeneous groups. The first group of 175 patients was on APSS 2; the second group of 193 patients on APSS 3 and the third group of 184 patients on APSS 3.

Standardised digital photographs and 3d reconstructions with VectraH2, before and 6 months after treatment were assessed by two blinded independent doctors (F.A.; M.A.) which scored photographs from 1 to 20 according to the SASS (Surgeon Assessment Scoring System). The reduction of at least 4 set points was considered a significant difference.

A patient satisfaction questionnaire (PSQ) were given to patients that scored the results from 0 to 10. The reduction of at least 2 set points was considered a significant difference.

Result: All patients completed the follow-up after 6 months and no major side effects were reported.

Result on energy lines delivered: Only groups 2 and 3 reached the statistical significant difference according to SASS and PSQ.

Result on face ptosis groups: Only groups 1 and 2 reached the statistical significant difference according to SASS and PSQ.

Conclusion: Our retrospective study showed that in order to stimulate collagen regeneration and tissue contraction (lifting effect), it's necessary to deliver a significant number of energy micro-focused ultrasound lines and choose the right patient indication.

Biography:

Dr. Antonino Araco is a Consultant Aesthetic Surgeon and Medical Director at Jenevi Medical since 2010. He is a Contracted Professor at University of Camerino and Torino. He is also an International Speaker and Scientific Researcher (over 60 articles in peer reviewed Journal). During 2003-2010 he was a consultant surgeon at Dolan Park Hospital, Birmingham (UK).