

EFFECTS OF A NUTRITIONAL SUPPLEMENT WITH SPECIAL COLLAGEN PEPTIDES APPLIED IN PARALLEL TO MINIMALLY INVASIVE INTERVENTIONS

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IMCAS Annual World Congress 2022, Paris

Introduction

Nowadays nutritional supplements are used more than ever to improve skin appearance. Studies have shown that oral collagen peptides can stimulate the synthesis of body own collagen fibres and hyaluronic acid in corial skin cells (fibroblasts) and thereby sustainably improve skin structure and appearance [1-4]. On the other hand, popular interventions generate considerable, but usually not very long-lasting effects on skin appearance. In the present pilot study, it was examined if the improvement of skin appearance achieved by aesthetic minimally invasive interventions can be intensified and/or become more persistent by concomitant use of a nutritional supplement.

Material and Methods

In an open, uncontrolled, monocentric application study, 12 subjects (f/m, 30-60 years old) with healthy skin received the nutritional supplement ELASTEN® (with the daily amount of 2.5 g collagen peptides, 666 mg acerola fruit extract, 80 mg vitamin C, 3 mg zinc, 2.3 mg vitamin E, and 50 µg biotin) for 8 weeks (plus 4 prolongation weeks). Independently from the study participation, subjects underwent an aesthetic minimally invasive intervention (botulinum toxin therapy forehead area, not for the first time) 2 weeks after study onset. The potential benefits of the supplement were evaluated by comparing the improvement in skin appearance at 8 and 12 weeks with the improvement effects achieved by a previous minimally invasive procedure.



Results

12 subjects completing the study underwent in the past about 6 minimally invasive interventions on average (usually using botulinum toxin), mainly in order to reduce wrinkles. Most subjects did not apply the study product before or applied it for only some weeks in the past. Due to two drop-outs after T8, we report here the results after 8 weeks.

Figure 1: What effects do you attribute to taking ELASTEN® after 8 weeks?

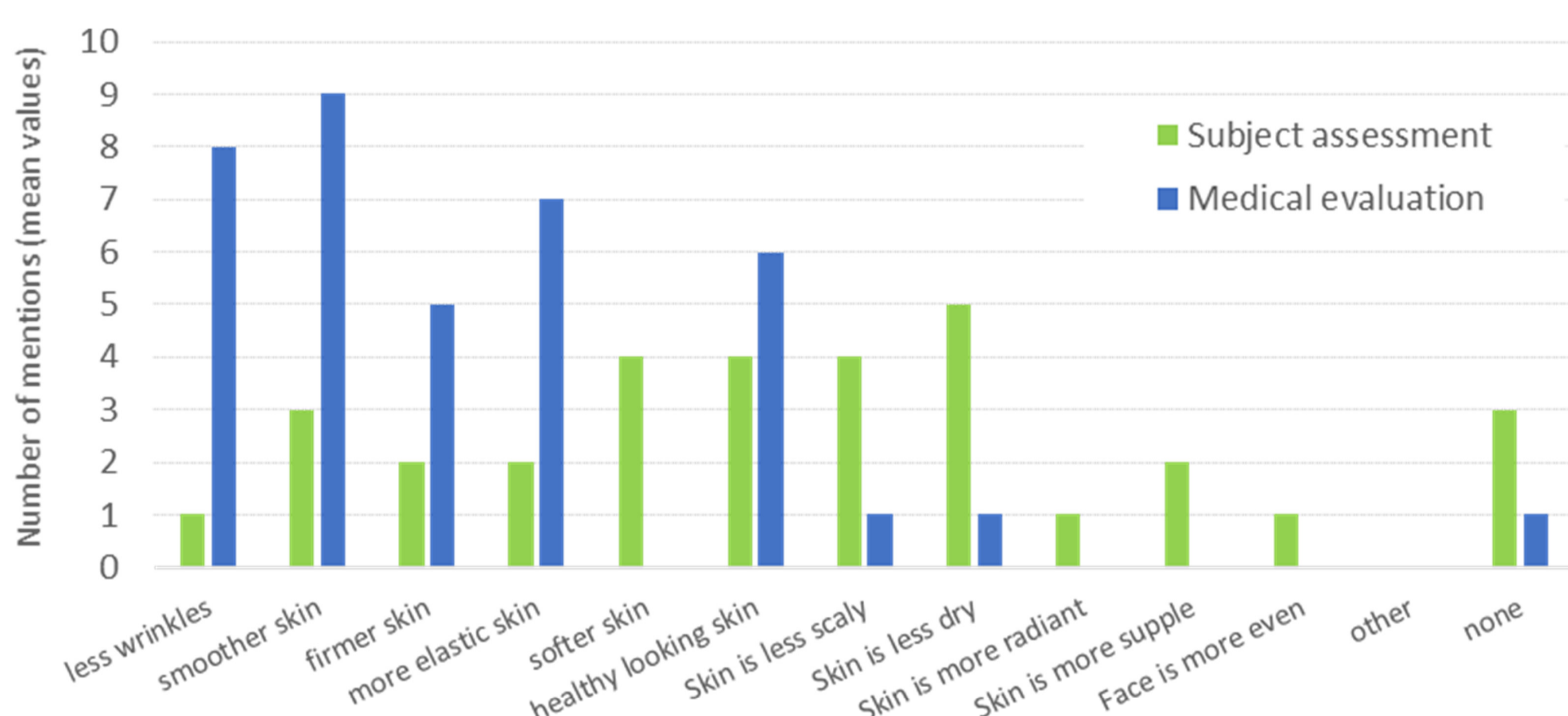


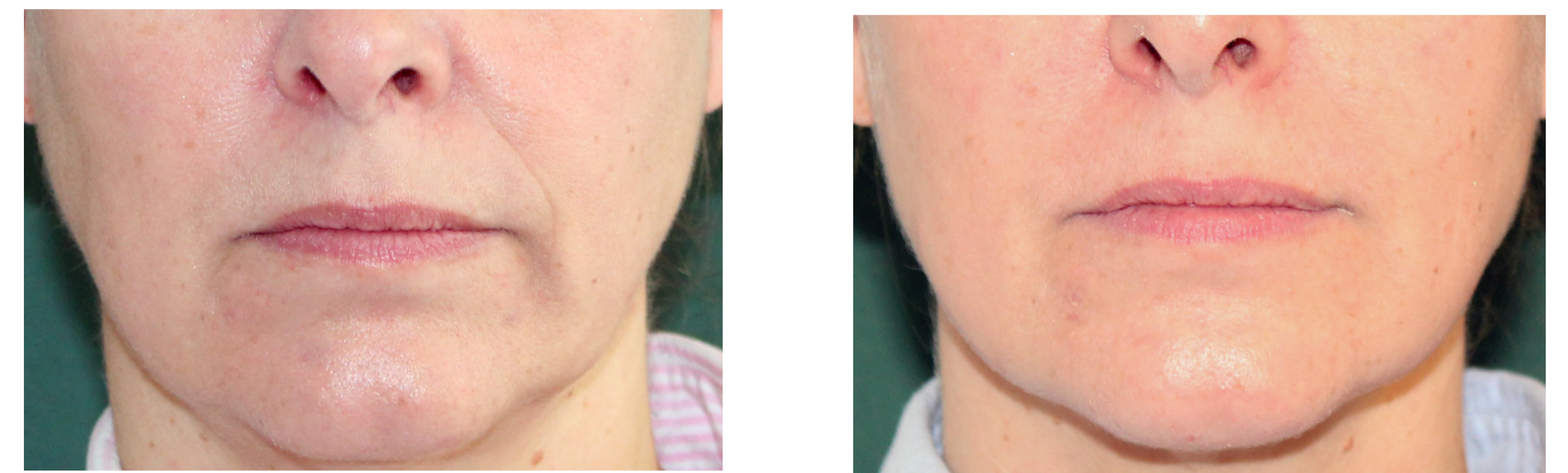
Figure 2: Eye before (T0, left) and after 12 weeks of intake (T12, right).



The medical evaluation after the first 2 study weeks revealed already a tendency towards slight improvements of skin appearance. After 8 weeks, the doctor as well as most subjects assessed the skin appearance as considerably better than before, and two more subjects felt as attractive. Obviously due to the strong effect of the minimal invasive treatment, improvement was usually detected outside the treated area.

According to medical evaluation the skin appearance of 10 subjects was definitely improved at T8. On average, 5 of 10 positive skin characteristics ("firm", "smooth", "flat", "soft", "supple") were stated by subjects more frequently, and 7 of 10 negative characteristics ("rather unhealthy", "insensitive", "uneven", "slack", "dull", "blunt", "greasy") were stated less frequently than at baseline.

Figure 3: Mouth area before (T0, left) and after 8 weeks of intake (T8, right).



Improvements like a reduction of wrinkles or a smoother skin were mainly considered as incontrovertible success of the minimally invasive intervention. However, both the doctor and the subjects attributed the improvement of many other skin characteristics mainly to the nutritional supplement, like the increase in smoothness, elasticity and healthy look and a reduction of dryness and scaliness (Fig. 1). In the opinion of the doctor, in 8 cases the nutritional supplement also contributed to the reduction of wrinkles. According to the medical evaluation on the basis of photo comparison (examples shown in Fig. 2 and Fig. 3), the skin appearance of subjects was additionally improved by the well-tolerated nutritional supplement (Fig. 4, Fig. 5).

Figure 4: How do you evaluate the effects that can be achieved with ELASTEN® after aesthetic measures?

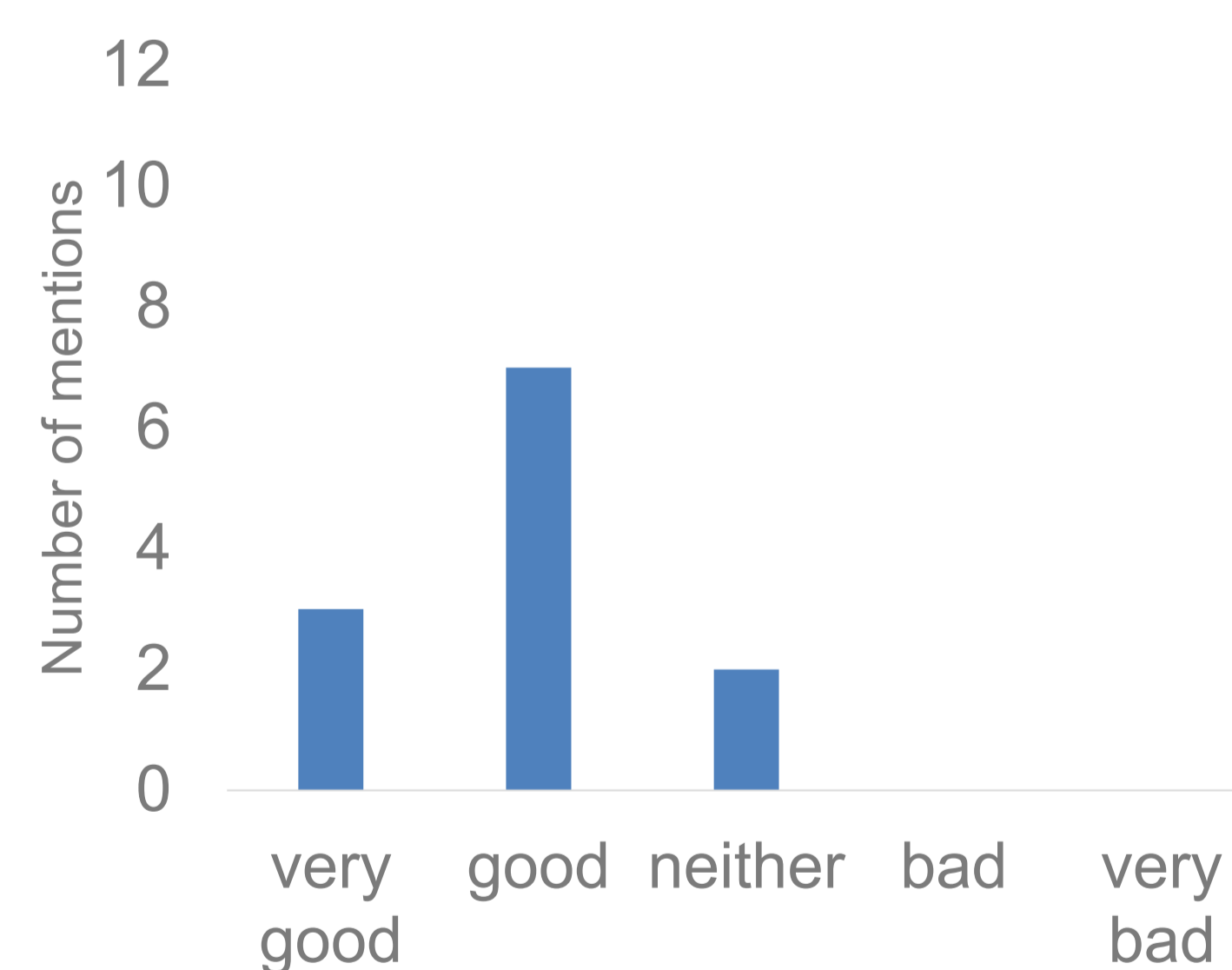
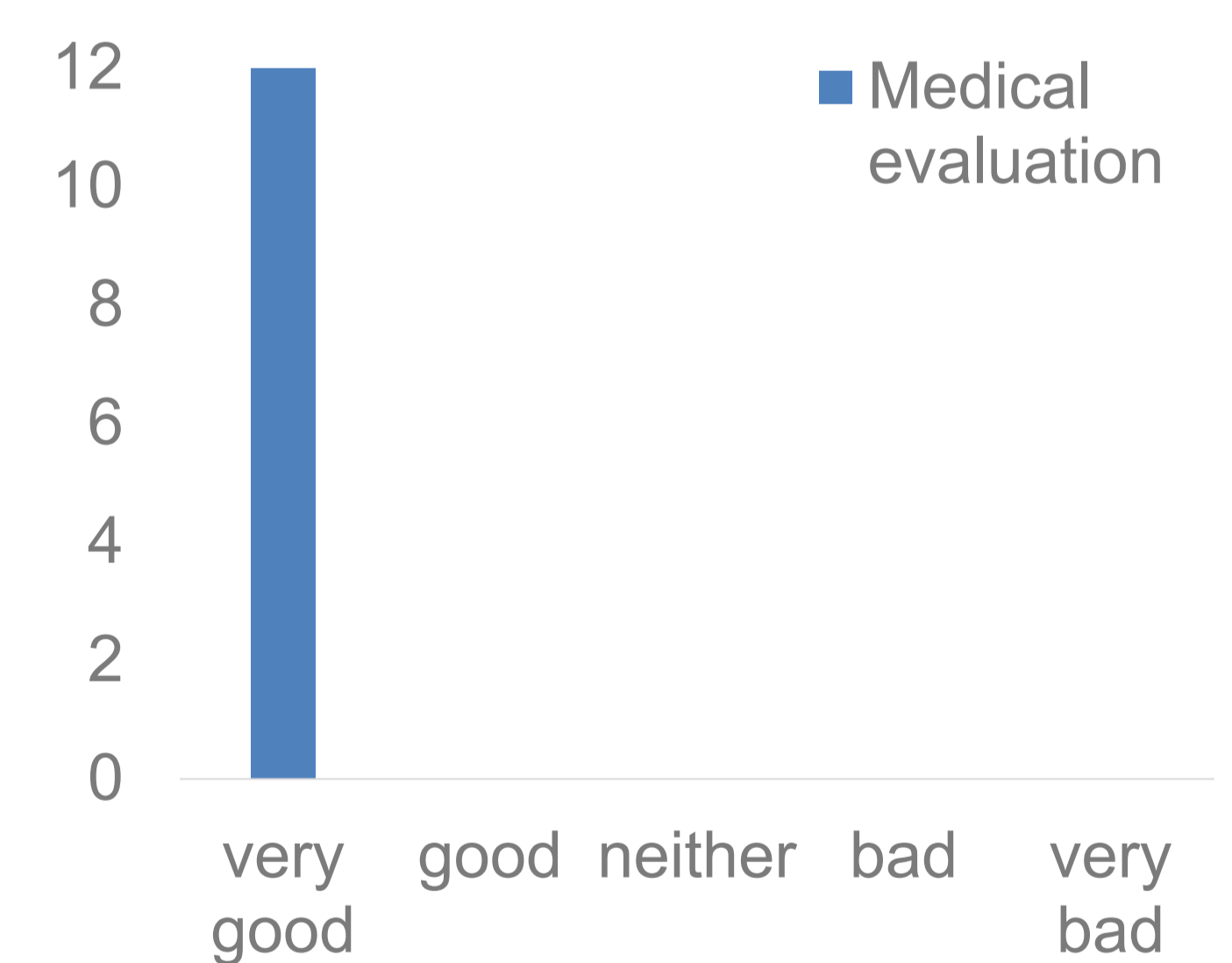


Figure 5: How would you rate the overall tolerability of the ELASTEN® ?



Conclusion

Both the minimally invasive interventions and the intake of a nutritional supplement with collagen peptides are applied to improve skin appearance. The participants of the present application study knew the extend and sustainability of effects of former invasive interventions. Thus, it can be assumed that they were able to compare such effects with the results of a concomitant intake of the nutritional supplement. As a first result of this study, the 8-week application of the nutritional supplement can additionally improve skin appearance.

References

1. Choi FD, et al., 2019.

2. De Miranda RB et al., 2021.

3. Bolke L, et al. 2020

4. Laing S et al., 2020