

The Three-points Chin: A Multilayered Filler Approach Using a Cannula

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Summary: The present study was conducted to evaluate the aesthetic results of the three-points chin filler injection using a SoftFil cannula, where the filler product is placed in a multilayered fashion. The study included 40 women who complained about their unaesthetic small chin. Revanesse Versa filler was injected into these patients using a SoftFil cannula in a multilayered fashion, targeting both the deep and superficial fat compartments. For the cannula, three points of entry were chosen depending on a specific anatomical landmark, providing chin beautification in three dimensions. All patients were followed up at the following intervals for recording their satisfaction score: 14 days, 2 months, 4 months, and 6 months. Satisfaction score recorded at 14-days follow-up showed a significant increase in patient satisfaction. This was maintained up to 6 months postoperative. The suggested three-points chin beautification technique using microcannula provides satisfactory results in three dimensions, compared with the original technique. (*Plast Reconstr Surg Glob Open* 2024; 12:e5772; doi: [10.1097/GOX.0000000000005772](https://doi.org/10.1097/GOX.0000000000005772); Published online 14 May 2024.)

INTRODUCTION

Nonsurgical treatment modalities have become the new normal in our daily aesthetic practice, in which most patients look to harmonize their facial features and proportions. The chin plays a major role in facial proportions. Therefore, a chin with the right anterior, lateral, and downward dimensions is crucial for facial harmonization procedures.¹

Aside from surgical treatment modalities aiming to provide chin augmentation, cross-linked hyaluronic acid fillers have been used effectively to address a weak chin.² Many injectors advocate the use of needles, which carries a high risk of complications,³ whereas others prefer the use of microcannula through a single entry point.⁴ However, the latter technique, although safe, does not provide the artistry and beautification in three dimensions. The third group of injectors combine both needles and cannula to overcome the mentioned drawback in terms of the unaesthetic results achieved with the use of only cannula.⁵ This led to the necessity of coming up with a new approach using the cannula that provides both safety and artistry for chin beautification.

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MATERIALS AND METHODS

Forty Middle Eastern women aged 22–32 years complained of a small and weak chin in addition to having a double chin. The postoperative patient satisfaction score⁶ was recorded by asking patients to report how they feel about the results of the treatment, on a scale from 1 to 5, where 1 indicates not satisfied; 2, less satisfied; 3, quite satisfied; 4, satisfied; and 5, extremely satisfied. Postoperative recording was performed at the follow-up periods, using the same scoring grade: 14 days, 2 months, 4 months, and 6 months.

All patients were treated with the same product [Revanesse Versa (Prollenium Medical Technologies, Inc., Aurora, Ontario, Canada)] in a multilayered approach, using a 23G 30-mm SoftFil cannula (Soft Medical Aesthetics, France). Written informed consent was obtained from all patients, after explaining the procedure and all positive and possible negative outcomes.

After careful antiseptic disinfection of the skin, three points of entry were made with a pilot needle to allow the entry of the cannula; this corresponds to the name of the procedure, “three-points chin.” The first point is in the midline at the labiomental crease; the second point, in the midline at the pogonion, which is the most anterior point of the chin; and the third point, in the midline at the menton, which is the most inferior point of the chin.

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The injection procedure was performed in the following fashion via three steps [See Video (online), which displays the injection technique and a live injection of a patient, using the three-points chin technique, with Revanesse Versa and the 23G 30-mm SoftFil cannula. At the end of the video, there is a display of before-result and after-result pictures of the patient in addition to other patients' results achieved using the same technique but using different products]:

- Step 1: Deep supraperiosteal static microboluses were injected at each of the three points mentioned earlier.
- Step 2: A series of superficial linear retrograde injections were administered through each point for superficial layering and harmonization.
- Step 3: A series of superficial linear retrograde injections were performed to blend the whole area with the lateral part of the chin and jawline.

The first point was used as an access to the lower lip tubercles and the corners of the mouth, as shown in the video, to lift the corners of the mouth and enhance the lip tubercles, as well as harmonize the lips with the chin.

STATISTICAL ANALYSIS

Recorded data were analyzed using the Statistical Package for Social Sciences, version 23.0 (SPSS Inc., Chicago, Ill.). The quantitative data were presented as mean ± SD and ranges. Also, qualitative variables were presented as numbers and percentages. The following tests were performed: Cochran Q test, Monte Carlo correction, and Pearson correlation coefficient (*r*) test. The confidence interval was set to 95%, and the margin of error accepted was set to 5%. Therefore, the significance level was set as 0.05.

RESULTS

None of the patients reported any serious or minor complications after the procedure. The range of the patient's age was 22–32 years, with a mean of 26.60 ± 3.00. All patients reported a high satisfaction score after completion of the procedure, which was maintained up to 6-months follow-up. When analyzed for patient satisfaction, extreme satisfaction was found to be reported by 35 patients (87.5%) at 14 days, 40 patients (100%) at 2 months, 40 patients (100%) at 2 months, and 35 patients

Takeaways

Question: Does the three-points chin technique using cannula provide safety and artistry in a three-dimensional aspect?

Findings: The proposed technique provides both safety and artistry for chin beautification.

Meaning: The three-points chin technique using cannula provides superior results to those of the original single point cannula technique as well as the needle approach.

(87.5%) at 6 months, with a *P* value of less than 0.05 (Tables 1–3 and Fig. 1).

DISCUSSION

The goal of this study was to evaluate the proposed technique as a superior alternative to the original single-point cannula technique and the needle technique in providing both safety and artistry in chin filler treatments. Using needles provides artistry; however, it carries a high risk of vascular occlusion, as well as tongue and floor-of-the-mouth necrosis.⁷ On the other hand, the cannula provides safety; however, it does not provide artistry to shape the chin in three dimensions, as it mainly focuses on anterior projection or lateral projection without taking into consideration the downward elongation for the chin or smoothing the labiomental crease and the myomodulation effect on the lips.^{8,9} The technique presented in this study provides a direct and indirect effect on the lips. Injecting the filler superficially at the labiomental crease provides a myomodulation effect on the lips (indirectly). In addition, injecting the filler in the lips through an entry point at the labiomental crease provides a direct effect. In this study, a multilayered approach was used for treating the chin. This approach is similar to the multilayered technique advocated in another study for addressing patients with volume deficiency.¹⁰ Although satisfactory results are achieved in this study, further studies are needed to help assess our proposed technique better.

CONCLUSIONS

The proposed multilayered three-points cannula technique provides both safety and artistry in three dimensions rather than other techniques reported in the literature. We strongly recommend conducting further

Table 1. Comparison between Time Intervals in Terms of Satisfaction Score

Satisfaction Score	At 14 Days		At 2 Months		At 4 Months		At 6 Months		<i>P</i>
	No.	%	No.	%	No.	%	No.	%	
Not satisfied	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0.014*
Less satisfied	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
Quite satisfied	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
Satisfied	5	12.5%	0	0.0%	0	0.0%	5	12.5%	
Extremely satisfied	35	87.5%	40	100.0%	40	100.0%	35	87.5%	
Total	40	100.0%	40	100.0%	40	100.0%	40	100.0%	

**P* < 0.05.

research on the proposed technique with a larger sample and imaging analysis in addition to testing different filler products for the multilayered approach, using ultrasound analysis.

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Table 2. Correlation between Satisfaction Scores, Using Pearson Correlation Coefficient (r)

Satisfaction Score	Age (y)	
	r	P
Satisfaction score at 14 d	-0.102	0.531
Satisfaction score at 2 mo	-0.022	0.895
Satisfaction score at 4 mo	-0.022	0.895
Satisfaction score at 6 mo	-0.076	0.639

There is no statistically significant correlation between age “years” and satisfaction score, with Pvalue ($P < 0.05$). Pvalues of greater than 0.05 are nonsignificant, those less than 0.05 are significant, and those less than 0.001 are highly significant.

DISCLOSURE

The author has no financial interest to declare in relation to the content of this article.

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Table 3. Association between Age Group and Satisfaction Score

Satisfaction Score	<25 Years		25 Years to Less Than 30 Years		≥30 Years		χ^2	P ^{MC}
	No.	%	No.	%	No.	%		
At 14 d	4	10.0%	2	9.5%	2	22.2%	1.005	0.605
	5	90.0%	19	90.5%	7	77.8%		
At 2 mo	1	0.0%	1	4.8%	0	0.0%	0.928	0.629
	5	100.0%	20	95.2%	9	100.0%		
At 4 mo	1	0.0%	1	4.8%	0	0.0%	0.928	0.629
	5	100.0%	20	95.2%	9	100.0%		
At 6 mo	4	10.0%	2	9.5%	2	22.2%	1.005	0.605
	5	90.0%	19	90.5%	7	77.8%		

This table shows no statistically significant association between age group and satisfaction score for different time periods, with Pvalue ($P < 0.05$). Pvalues of less than 0.05 are significant, and those greater than 0.05 are nonsignificant. MC, Monte Carlo.

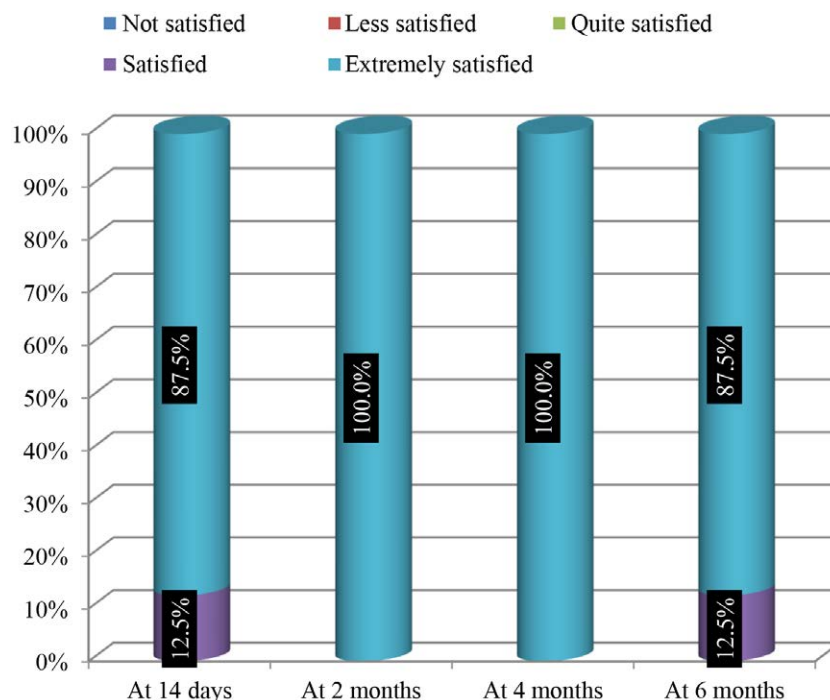


Fig. 1. Comparison between time intervals in terms of satisfaction score.

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