The Measure of Face-Lift Patient Satisfaction: The Owsley Facelift Satisfaction Survey with a Long-Term Follow-Up Study

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Background: Patient satisfaction is a major factor in determining success in aesthetic surgery. To the authors' knowledge, a long-term study measuring patient satisfaction with face-lift surgery has not been published. The authors' study was designed to measure patient satisfaction with the overall experience of a face lift and to assess the patient's level of satisfaction 10 to 15 years after surgery.
Methods: Three hundred ninety-four consecutive patients were identified who had face lifts performed by the senior author (J.Q.O.) between January 1, 1994, and January 1, 1999. Contact was achieved with 146 patients (37 percent), and 131 patients (90 percent) agreed to participate by completing a four-page survey. Eighty-nine patients (68 percent) returned the survey.
Results: One year after face-lift surgery, 87 patients (97.8 percent) described the improvement of their facial appearance as very good or beyond expectations. After an average follow-up of 12.6 years, 61 patients (68.5 percent) rated their current degree of improvement as very good or beyond expectations, and 61 patients (68.5 percent) felt 10 or more years had been added to their youthful appearance. Thirty-four patients (31 percent) indicated disappointment in some aspect of the face lift.
Conclusions: This work assesses the long-term satisfaction of face-lift patients who had a superficial musculoaponeurotic system–platysma face lift. The results suggest a high degree of satisfaction following face-lift surgery at short-term and long-term follow-up. The authors recognize that recall bias may be present when recalling the satisfaction at 1 year postoperatively. We present the survey questionnaire as a template for future research in face-lift patients. (*Plast. Reconstr. Surg.* 126: 245, 2010.)

To our knowledge, a long-term follow-up study measuring patient satisfaction with face-lift surgery has not been published. It has been stated that patient satisfaction is the predominant factor for determining success in aesthetic surgery.[1,2] Recently, a large retrospective review of the literature found only one article focused on face-lift outcomes.[3] Our study was designed to measure individual patient satisfaction with the overall experience of a face lift and to find out from each patient his or her level of satisfaction at a follow-up time between 10 and 15 years after the operation.

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MATERIALS AND METHODS

Creation of the Survey

Approval to perform the study was obtained from the Institutional Review Board of California Pacific Medical Center in San Francisco (no. 28.074). In constructing the survey, input from a statistician was sought to create our questionnaire. The instrument was designed to measure patient satisfaction, with multiple questions addressing the same issues from differing viewpoints. The

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patients were queried regarding their self-assessment of apparent improvement in appearance (question 1), reported degree of personal satisfaction (question 2), and feedback from other observers (questions 6, 7, and 8). The survey was designed to elicit the presence of surgical problems or complications (questions 3c and 4), asking for a written description, and about disappointments with the operation (question 9). After the suggestion of Alsarraf,[2] the multiple-choice questions were designed in such a way as to allow quantifying and comparative analysis. The patients were asked to assess the degree of improvement in five different anatomical areas of the face and neck in an attempt to determine the strengths and weaknesses of the operative technique.

Study Sample

Patient charts were examined for 394 consecutive patients who had a superficial musculoaponeurotic system (SMAS)–platysma face lift performed by the senior author (J.Q.O.) from January 1, 1994, to January 1, 1999. The SMAS-platysma face lift technique was initially published by Owsley in 1977[4] and modified to its present technique in 1983.[5] In 1992, the technique of elevating the malar fat pad[6–8] was introduced, and the Owsley technique has remained constant since that time.

Data Collection

The patients' charts and submitted surveys were reviewed by the first author (M.T.F.), who had no prior contact with any of the patients. There were no exclusion criteria. From the group of 394 patients identified, 146 patients (37 percent) were contacted by e-mail or telephone. Fifteen of the 146 patients (10 percent) contacted did not want to participate in the survey. A questionnaire was sent to 131 patients, and 89 patient surveys (68 percent) were returned. The survey is shown in Figure 1. Postoperative complications were recorded from both the completed patient survey and from the patient charts, with a primary focus on what the patient reported in the survey.

Statistical Analysis

The scores for the responses were summarized with means and medians. Chi-square testing was used to compare the distribution of survey ratings across levels. The Kruskal-Wallis one-way analysis of variance was used to compare median responses across multiple groups. A value of $p < 0.05$ was used to determine statistical significance in all analyses.

RESULTS

There were 15 patients who were contacted but did not wish to participate in the survey. Eleven patients declined to participate and gave no reason. The charts of this group of 11 patients were reviewed, and we found no description of complications or postoperative complaints associated with surgery. Two patients reported that they were happy and had no time to complete the survey. One patient declined to participate because she was not happy with the blepharoplasty performed at the time of her face lift, and one patient declined to participate because she was not happy with her earlobe after her face lift. The demographics of the patients who returned the questionnaires are listed in Table 1.

In Figure 2, all of the responses from the questionnaires from the 89 patients are summarized. Some patients did not complete every part of the survey. Multiple calls were made to patients who failed to answer a question on the survey, but some questions remained unanswered despite these efforts.

In answer to question 1, all patients reported an improvement as a result of the face-lift operation, with 97.8 percent of the patients describing their appearance as "very good" or "beyond expectations" in the first year after surgery. Question 2 asked the patients to rate their satisfaction with the appearance of their face 1 year after surgery, and 86 of 89 patients (96.6 percent) responded they were "very much" or "completely pleased."

In question 3a, after the initial healing from the operation, 80 patients (90 percent) described their appearance as natural and two patients (2.2 percent) described their appearance as unnatural. The two patients who reported an unnatural appearance did not like the appearance of their eyes, having had brow lifts and a blepharoplasty in addition to their face lift. In question 3B, the patient's perception of the youthfulness of their appearance was addressed. Eighty-two patients (92 percent) reported liking their youthful appearance. Two patients (2.2 percent) did not like their appearance. One felt as though the platysma lift was not aggressive enough and the other patient had concerns about her eye appearance.

In question 3c, 17 patients (19 percent) believed that their normal appearance was altered unfavorably in some way. This subset of patients is referred to as the "unfavorable result group" for the remainder of the discussion. The causes are

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Patient name_____

Today's date _____ **Date of surgery**_____ **(from patient's chart)**

Satisfaction Survey. Long term follow up after SMAS- platysma face lift combined with malar fatpad mid facelift surgery.

How many years have passed since your face lift? _____years

Was this your first face lift? Yes_____ No_____

Have you had another face lift since the first surgery with Dr. Owsley?
No_____ Yes_____ If yes, date: _____

With Dr. Owsley? Yes_____ No_____

The next set of questions inquires about your recalled satisfaction in the first year after your face lift surgery.

1. Was the appearance of your face improved by your facelift? Rate the degree of improvement using a scale of 1 to 5. Circle the applicable number.

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

2. In the first year after your surgery, were you pleased with the appearance of your face? Circle the applicable number.

1 Not at all 2 Somewhat 3 Moderately 4 Very much 5 Completely

3. After healing (6 months-1 year):

A. Did you regard your appearance as "natural" (no noticeable signs of surgery)?

Yes_____ Somewhat_____ No_____

B. Did you look like a more youthful version of your normal appearance?

Yes_____ No_____

C. Was your normal appearance altered unfavorably in any way?

No_____ Yes_____ Explain:

Fig. 1. Face-lift questionnaire.

listed in Table 2, having received specific written feedback from 15 of the 17 patients in this group. What we learned is that almost half of the patients in the unfavorable result group were unhappy about the result of an ancillary procedure performed at the time of the face lift. Despite reporting that their face was altered unfavorably, 14 of these 17 patients were "very much" or "completely" pleased with the appearance of their face, as rated in question 2.

Question 4 focused on issues with incisional scarring. In all, eight patients (8.9 percent) reported a problem with their surgical scars that required either additional treatment or additional surgery. Question 5 asked whether there were any complications associated with the surgery, and

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4. Did you have problems with the surgery incisions and scars? Circle the applicable number.

1 No 2 Somewhat, recovered with time 3 Required additional treatment

4 Required surgical revision

Comments:

5. Were there any complications associated with the surgery?

Yes_____ No_____

Please describe:

6. Did other people notice that you had face lift surgery?

No_____ Yes_____ Who?(please circle) Family Close friends Casual acquaintances

7. Did other people remark about any positive change in your appearance?

No_____ Yes_____ Explain:

8. Did other people remark about any negative change in your appearance?

No_____ Yes_____ Explain:

9. Was there anything about the face lift that disappointed you?

No_____ Yes_____ Explain:

10. Rate the degree of improvement in the first year after surgery in several anatomic areas of the face and neck. Circle the applicable number.

A. Midface. Prominent folds beside the upper lip (nasolabial folds).

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

B. Folds and lines below the mouth corner beside the chin ("marionette lines").

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

Fig. 1. Continued.

eight patients (8.9 percent) reported a complication with the surgery itself. The complications reported are listed in Table 3.

The next three questions—6, 7, and 8—reported the patient's observation of how others perceived their face-lift surgery. Question 6 asked whether people noticed that the patient had undergone surgery. Most patients commented that their spouses, family, and close friends could tell the patient had undergone surgery. This is a dif-

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C. Contour of jawline. (Correction of jowls.)

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

D. Contour of under the chin. (Double chin, folds, or bands.)

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

E. Contour of the lower front of the neck. (Folds or hanging loose skin.)

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

CURRENT CONDITION. How well was improvement maintained after 10 years or ____ years (time elapsed since your facelift surgery?

11. When looking in the mirror, how well do you like the appearance of your face now? Circle the applicable number.

1 Not at all 2 Somewhat 3 Moderately 4 Very much 5 Completely

12. Would you like to surgically alter the appearance of your face now? Circle the applicable number.

1 Definitely 2 Most likely 3 Possibly 4 Probably not 5 No

13. Rate the degree of current overall improvement using a scale of 1 to 5. Circle the applicable number.

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

14. After 10 or ____ (time elapsed since your face lift surgery) years, rate the current degree of lasting improvement in several different anatomic areas, compared to the first year after surgery. Does it still look better than prior to the face lift?

A. Midface. Prominent folds beside the upper lip (nasolabial folds).

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

B. Folds and lines below the mouth corner beside the chin ("marionette lines").

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

Fig. 1. Continued.

ficult question to analyze, as spouses and close friends will certainly notice in the first few postoperative days. A more precise question would be, "Aside from people you see on a daily basis, after the initial operative swelling subsided, did others notice you had a face lift?" Sixty-four patients (71.9 percent) reported that others made positive remarks about the operation, as asked in question 7. Question 8 asked whether any negative comments were made with regard to the patient's face lift. Seventy-six patients (85 percent) received no negative comments, whereas nine patients (10 percent) did receive negative comments, and the remainder had no response to this question. Six of

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C. Contour of jawline. (Correction of jowls.)

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

D. Contour of under the chin. (Double chin, folds, or bands.)

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

E. Contour of the lower front of the neck. (Folds or hanging loose skin.)

1 None 2 Minimal 3 Modest 4 Very good 5 Beyond expectations

15. How many years of favorable effect do you feel your facelift has had on your appearance?

Less than 1 year _____ 5 years _____ 8 years _____ 10 years _____

More than 10 years _____

16. Do you believe that your face still looks better today than if you had not had a facelift?

Yes_____ No_____

Any other comments (what is the most important statement you can make about your face lift experience?):

Could you kindly send a current photograph (digital OK) (front and profile, if possible)? Please contact us at (415)861-8040 to assist with photographs or if possible? schedule a follow-up appointment.

Fig. 1. Continued.

Table 1. Patient Demographics

Demographic Characteristic	Value
Total no. of patients enrolled	89
No. of women	85
No. of men	4
Average current age of patient, years	68.3
Median current age of patients, years	68.5
Average age at the time of surgery, years	55.6
Median age at the time of surgery, years	56.5
Average time since surgery, years	12.6
Median time since surgery, years	12.6

the nine patients who received negative remarks were in the unfavorable result group.

Question 11 asked the patients to rate the degree of personal satisfaction with their face at the present time at an average of 12.6 years of follow-up. Eighty-two patients (92.1 percent) liked the appearance of their face, with responses ranging from "somewhat" to "beyond expectations." Question 13 asked the patients to rate the degree of overall current improvement, and 76 patients (85.5 percent) reported a positive degree of current improvement ranging from "modest" to "beyond expectations." Question 15 asked the patients to rate the number of years for which the face lift had a favorable effect on their appearance. Sixty-one patients (66 percent) stated 10 or more years had been added to their youthful appearance.

Question 9 asked whether there was anything about the face lift that disappointed the patient. Twenty-eight patients (31.5 percent) stated that they were displeased with something about the

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Q1 Was the appearance of your face improved by your facelift?

None	Minimal	Modest	Very Good	Beyond Expectations
0	1	1	49	38
0.0%	1.1%	1.1%	55.1%	42.7%

Q2 In the first year after your surgery, were you pleased with appearance of your face?

Not at All	Somewhat	Moderately	Very Much	Completely
1	1	1	39	47
1.1%	1.1%	1.1%	43.8%	52.8%

3a After healing, did you regard your appearance as natural?

No	2	2.2%
Somewhat	6	6.7%
Yes	80	89.9%
No Answer	1	1.1%

3b Did you like the more youthful look of your appearance?

No	2	2.2%
Yes	82	92.1%
No Answer	5	5.6%

3c Was your normal appearance altered in an unfavorable way?

No	67	75.3%
Yes	17	19.1%
No Answer	5	5.6%

4 Did you have problems with the surgery incisions and scars?

No	64	71.9%
Somewhat	14	15.7%
Req treatment	6	6.7%
Req surgery	1	1.1%
No Answer	4	4.5%

5 Were there any complications associated with the surgery?

No	79	88.8%
Yes	8	9.0%
No Answer	2	2.2%

6 Did others notice you had surgery?

No	41	46.1%
Yes	44	49.4%
No Answer	4	4.5%

7 Did people remark about a positive change in your appearance?

No	20	22.5%
Yes	64	71.9%
No Answer	5	5.6%

Fig. 2. Tabulated answers from all respondents.

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8 Did people remark about a negative change in your appearance?

No	76	85.4%
Yes	9	10.1%
No Answer	4	4.5%

9 Was there anything about the facelift that disappointed you?

No	56	62.9%
Yes	28	31.5%
No Answer	5	5.6%

10 Degree of improvement in the first year after surgery

A Midface

None	Minimal	Modest	Very Good	Beyond	No Answer
3	1	11	49	20	5
3.4%	1.1%	12.4%	55.1%	22.5%	5.6%
			77.6%		

B Nasolabial Folds

None	Minimal	Modest	Very Good	Beyond	No Answer
3	5	5	51	19	6
3.4%	5.6%	5.6%	57.3%	21.3%	6.7%
			78.6%		

C Contour of Jawline

None	Minimal	Modest	Very Good	Beyond	No Answer
2	3	3	31	41	9
2.2%	3.4%	3.4%	34.8%	46.1%	10.1%
			80.9%		

D Contour under the Chin

None	Minimal	Modest	Very Good	Beyond	No Answer
3	2	6	45	35	8
3.4%	2.2%	6.7%	50.6%	39.3%	9.0%
			89.9%		

E Contour of the Front of the Neck

None	Minimal	Modest	Very Good	Beyond	No Answer
4	2	6	35	35	7
4.5%	2.2%	6.7%	39.3%	39.3%	7.9%
			78.6%		

11 How well do you like the appearance of your face now?

Not at All	Somewhat	Moderately	Very Much	Completely	No Answer
2	12	26	38	6	5
2.2%	13.5%	29.2%	42.7%	6.7%	5.6%

12 Would you like to surgically alter your appearance now?

Definitely	Most Likely	Possibly	Probably Not	No	No Answer
10	12	23	24	15	5
11.2%	13.5%	25.8%	27.0%	16.9%	5.6%

Fig. 2. Continued.

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13 Rate the degree of current improvement

None	Minimal	Modest	Very Good	Beyond Exp	No Answer
1	5	15	46	15	7
1.1%	5.6%	16.9%	51.7%	16.9%	7.9%

14 List your current degree of improvement compared to the first year after surgery

A Midface

None	Minimal	Modest	Very Good	Beyond	No Answer
2	16	21	37	6	7
2.2%	18.0%	23.6%	41.6%	6.7%	7.9%
		65.2%			

B Nasolabial Folds

None	Minimal	Modest	Very Good	Beyond	No Answer
2	19	26	32	2	8
2.2%	21.3%	29.2%	36.0%	2.2%	9.0%
		65.2%			

C Contour of Jawline

None	Minimal	Modest	Very Good	Beyond	No Answer
0	10	25	36	12	6
0.0%	11.2%	28.1%	40.4%	13.5%	6.7%
		68.5%			

D Contour under the Chin

None	Minimal	Modest	Very Good	Beyond	No Answer
4	8	30	33	9	5
4.5%	9.0%	33.7%	37.1%	10.1%	5.6%
		70.8%			

E Contour of the Front of the Neck

None	Minimal	Modest	Very Good	Beyond	No Answer
2	9	28	34	11	5
2.2%	10.1%	31.5%	38.2%	12.4%	5.6%
		69.7%			

15 How many years of favorable effect do you feel your facelift has had on you appearance?

< 1 yr	5 years	8 years	10 years	More than 10	No Answer
0	7	19	25	36	2
0.0%	7.9%	21.3%	28.1%	40.4%	2.2%

16 Do you feel as though your face looks better than if you didn't have a facelift?

No	1	1.1%
Yes	86	96.6%
No Answer	2	2.2%

Fig. 2. Continued.

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Table 2. Unfavorable Results

Means by Which Appearance Was Unfavorably Altered	No. of Occurrences
Fold on one cheek	1
Dimples changed	1
Unspecified scarring	2
Cheek asymmetry	1
Earlobe problems	3
Unspecified	2
Other issues not directly related to face lift*	7

*Upper eyelid problem ($n = 2$), not happy with rhinoplasty, hollow eyes, rounder eyes, higher forehead, and left lower eye lid.

Table 3. Complications as Reported by the Patients

Complication	No. of Occurrences
Alopecia at ear incision	1
Dysesthesias for 1 yr from anterior hairline brow lift	1
Ear scar	1
Failure of the malar fat pad to lift on one side	1
Upper lid adhesion from transblepharoplasty brow lift	1
Keloid on posterior ear incision	1
Left cheek hematoma	1
Postoperative bleeding (unspecified)	1

experience of undergoing the face lift. Among these 28 patients, 13 were part of the unfavorable result group from question 3c. There was a wide range of reasons for patients to state displeasure with the experience of the face lift, as reflected in Table 4. Eleven of the 28 patients who reported disappointment with the experience of having a face lift had complaints pertaining to an additional procedure performed at the time of the face lift.

The overall satisfaction of patients who either reported a problem with the experience or expressed a disappointment with the face-lift operation was analyzed. Questions 3c, 4, 5, and 9 were reviewed to identify patients who answered yes to any of these questions, indicating either disappointment or a problem with the face-lift experience. In all, 34 responders (38.2 percent) were identified that responded yes to at least one of the four questions. As mentioned earlier, many of the areas of disappointment were the result of an ancillary operation performed at the same time as the face lift. The satisfaction rating of this group of 34 patients reporting unfavorable results was compared with the 55 patients who reported no problems or disappointments. The results showed that despite a complication or disappointment, most of the patients reported that they were "very much" or "completely" satisfied with their appearance at 1-year follow-up, as shown in Table 5. At long-term follow-up, there was a downward shifting of satisfaction scores in both patient groups. Patients who expressed a disappointment or a problem with the face-lift surgery rated their overall satisfaction somewhat lower than those who reported no problems or disappointment.

Table 4. Disappointment with the Experience of Having a Face Lift

Area of Concern	No. of Patients
Eyes	7
Cheeks	3
Neck	3
Posterior ear scars	3
Brow lift	2
Ear lobe	2
Lip wrinkles and crow's feet	2
Lost dimples with animation	1
Scalp numbness	1
Rhinoplasty	1

Questions 10 and 14 focused on patient satisfaction ratings of five separate areas of the face and neck addressed by the face lift as rated at 1 year after the operation and at the current time. The validity of the early individual anatomical ratings as recalled after 10 or more years has passed can be questioned and in the future could be better studied prospectively. The satisfaction ratings are listed in Table 6. The average time of follow-up was 12.6 years. The five areas in which the patients were asked to rate improvement were the midface, nasolabial folds, contour of the jawline, contour under the chin, and contour of the front of the neck. One year after surgery, for each of the five anatomical areas, the patients rated their appearance as being "very good" or "beyond expectations" 77.5 to 80.9 percent of the time, with the highest rating given to the jaw line and the lowest rating given to the midface. When asked to rate each of the five areas at the present time, 64 to 70 percent of the patients rated the anatomical areas as "modest" or "very good," with the jaw line still highest rated and the nasolabial folds rated as the lowest improvement.

To evaluate the longevity of improvement in each of the five separate anatomical areas studied, the percentage of patients who maintained an early and late high rating in each of the five anatomical areas was determined. Table 7 indicates that a high favorable rating, consisting of responses of "very good" or "beyond expectations," was maintained in all five anatomical areas in a large number of patients. For three of the ana-

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Table 5. Comparison of Satisfaction

	Not At All (1)	Somewhat (2)	Moderately (3)	Very Much (4)	Completely (5)	No Answer	Mean	Median
At 1 year, were you pleased with the appearance of your face (question 2)?								
Patients reporting a problem (n = 34)	1	1	1	20	11	0	4.15	4
Patients reporting no problems (n = 55)	0	0	0	19	35	1	4.65	5
At the current time, are you pleased with the appearance of your face (question 11)?								
Patients reporting a problem (n = 34)	0	10	5	18	0	1	3.24	4
Patients reporting no problems (n = 55)	2	2	21	20	6	4	3.51	4

Table 6. Individual Anatomical Ratings of Improvement at 1 Year Postoperatively Compared with the Present Day*

	None (1)	Minimal (2)	Modest (3)	Very Good (4)	Beyond Expectations (5)	No Answer	Mean	Median
Midface								
1 yr after surgery	3 (3.4)	1 (1.1)	11 (12.4)	49 (55.1)	20 (22.5)	5 (5.6)	3.98	4
Present time	2 (2.2)	16 (18.0)	21 (23.6)	37 (41.6)	6 (6.7)	7 (7.9)	3.35	4
Nasolabial folds								
1 yr after surgery	3 (3.4)	5 (5.6)	5 (5.6)	51 (57.3)	19 (21.3)	6 (6.7)	3.95	4
Present time	2 (2.2)	19 (21.3)	26 (29.2)	32 (36.0)	2 (2.2)	8 (9.0)	3.15	4
Contour of jawline								
1 yr after surgery	2 (2.2)	3 (3.4)	3 (3.4)	31 (34.8)	41 (46.1)	9 (10.1)	4.3	5
Present time	0 (0.0)	10 (11.2)	25 (28.1)	36 (40.4)	12 (13.5)	6 (6.7)	3.58	4
Contour under the chin								
1 yr after surgery	3 (3.4)	2 (2.2)	6 (6.7)	35 (39.3)	35 (39.3)	8 (9.0)	4.2	4
Present time	4 (4.5)	8 (9.0)	30 (33.7)	33 (37.1)	9 (10.1)	5 (5.6)	3.41	4
Contour of the front of the neck								
1 yr after surgery	4 (4.5)	2 (2.2)	6 (6.7)	35 (39.3)	35 (39.3)	7 (7.9)	4.16	4
Present time	2 (2.2)	9 (10.1)	28 (31.5)	34 (38.2)	11 (12.4)	5 (5.6)	3.52	4

*Values are no. (%).

Table 7. Comparative Anatomical Ratings at 1-Year and Long-Term Follow-Up

Facial Area	Patients Who Maintained a High Rating at Long-Term Follow-Up (%)	Patients Who Did Not Maintain a High Rating at Long-Term Follow-Up (%)	p
Midface	48.8	33.8	0.037
Nasolabial fold	43.0	41.8	NS
Jawline	55.8	33.8	0.043
Under chin	44.9	41.0	NS
Front of neck	51.7	35.0	0.002

NS, not significant.

tomical areas (i.e., midface, jaw line, front of neck), there were significantly more patients who responded with a rating of "very good" to "beyond expectations" at both the early and late follow-up time points. These measurements were found to be statistically significant.

The patients were divided into three age brackets to see whether there were significant differences in satisfaction ratings by age groups as shown in Table 8. There were no statistically significant differences in the satisfaction ratings for the three age groups. All three groups reported similar satisfaction ratings 1 year postoperatively, with the lowest rating in those older than 60 years. The long-term satisfaction ratings were highest in those younger than 50 years. Patients younger than 50 years also reported the highest longevity ratings of improvement in each of the five separate anatomical areas studied in questions 10 and 14. At long-term follow-up, there was a noticeable de-

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Table 8. Average Satisfaction Ratings among the Three Age Brackets*

	Age (yr)		
	<50 (n = 26)	50–59 (n = 40)	>60 (n = 23)
Were you pleased with the appearance of your face at 1 yr follow-up (question 2)?	4.46	4.49	4.39
How do you like the appearance of your face at the present time (question 11)?	3.54	3.45	3.18

*Maximum score, 5.

crease in satisfaction ratings in those older than 60 at the time of surgery when compared with the other two groups. This measurement was not statistically significant but should be noted as a trend within our data. All of the patients who had scar problems were younger than 50 years.

DISCUSSION

In 2003, Ching et al.[9] published an extensive review of the literature regarding outcome measurement techniques for aesthetic surgery. Patient responses to a rating scale are subjective and difficult to interpret because of a complex function of expectations that may vary greatly among patients with comparable care. We readily acknowledge that a positive bias is likely to exist among patients reporting their satisfaction scores to their surgeon.

We decided to develop a study of patient satisfaction after face-lift surgery. In the absence of a tested and validated instrument for face-lift outcome study, we set out to create our own questionnaire for the survey. We designed the study to evaluate patient satisfaction in the first year after surgery and at the present time between 10- and 15-year follow-up after surgery. With the multiple-choice format, we asked patients to assess the degree of improvement in five different anatomical areas of the face addressed by the operation in an attempt to determine the strengths and weaknesses of the operative technique.

The questionnaire attempted to measure patient satisfaction, with multiple questions addressing the same issue from different viewpoints. We inquired about self-assessment of the apparent improvement in appearance (question 1), reported degree of personal satisfaction (question 2), and feedback from other observers (questions 6, 7, and 8). We asked about the absence or presence of surgical problems and complications, asking for a description if such occurred (questions 3c and 5). We inquired specifically about disappointment with the operation (question 9). We compared satisfaction scores of patients reporting complications or unfavorable results to the ratings reported by patients who denied any unfavorable outcome after the operation.

Conventional wisdom suggests that younger face lift patients achieve longer lasting results that are less likely to attract negative attention from other observers. We divided the 89 responders in our study into three age brackets as described previously and learned that there were no statistical differences in patient satisfaction among the three different age groups. The older patients did report the lowest satisfaction ratings at 1 year and at long-term follow-up. Patients older than 60 years experienced earlier recurrence of the aging changes, but this was not statistically significant. Scarring problems were reported exclusively by patients younger than 50 years, which is consistent with the clinical impression that hypertrophic scars are chiefly a problem in younger individuals.

The SMAS-platysma face-lift technique enables the application of a wide vector of vertical lift through the cheek to lift the jowl and the jawline and create a sling effect of tightened platysma and skin in the submental area. Subsequent lateral advancement of the neck platysmal flaps tightens the anterior neck. Selective localized transection from the deep surface of platysma bands reduces the frequency of band recurrence.

To evaluate the comparative effectiveness of the SMAS-platysma lift and the midface malar fat pad suspension, the survey patients were asked to rate the early and long-term appearance of five separate anatomical areas of the face and neck. The highest ratings at both the early and late follow-up times were given for the submental correction under the chin, closely followed by the jaw line and anterior neck. In both the early and late evaluations, the midface nasolabial ratings were moderately lower than the corrections of the lower face and neck.

These subjective ratings are consistent with previously reported studies of long-term follow-up face-lift results published by the senior author, including preoperative and postoperative photographs to demonstrate the correction.[10,11] For future study, we are stimulated to compare the sur-

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vey results of satisfaction with early and long-term follow-up photographs of the patients who participated in the study. This should add a measure of objective measurement to our face-lift evaluation.

CONCLUSIONS

It may not be possible to draw any definitive scientific conclusions from a study that is subjective in nature. Nevertheless, it seemed worthwhile to describe the trends that are observed in a large face-lift population with long-term follow-up because such a study has not been reported previously in the literature. The survey instrument was designed to be patient friendly and to elicit satisfaction responses from several differing viewpoints. Although we are unable to claim statistical validity and recognize that there may be recall bias present when recalling the first postoperative year, we do submit that subjective responses from a large sample group can be interpreted to support widely held clinical impressions. This instrument and the responses obtained in our patient group can be a step in developing, in the future, a statistically valid outcome instrument for measuring face-lift patient satisfaction. We are encouraged in this prediction by the recent publication of apparently valid and reliable outcome measurements using a survey instrument to measure outcomes in various types of reconstructive breast surgery.[12,13]

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