Original Article

Evaluation of Clinical Outcomes and Satisfaction of Rhinoplasty with or without Smasectomy with the Aim of Thinning the Nasal Tip in Patients with Thick Nasal Skin

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ABSTRACT

Background: Rhinoplasty is one of the most common plastic surgeries and a challenging procedure for people with thick nasal skin. There are several techniques to improve the outcome of the operation.

Methods: Our study is a double-blind randomized controlled trial conducted in Esfahan, Iran in 2020. Seventy participants were equally divided into two groups (35 people). In the control group, only rhinoplasty was performed without SMASectomy and in the intervention group, rhinoplasty was performed with SMASectomy. The results were obtained and the satisfaction of patients and physicians was collected through patient examination and a questionnaire. Statistical analysis of data was calculated by SPSS software version 23 at a significance level of less than 0.05.

Results: The mean total skin thickness before surgery in the two groups was equally, which showed a significant difference between the two groups at after 12 months (P <0.05). Comparison of 3, 6 and 12 months after rhinoplasty in the two groups showed that the percentage of patient, doctor, hairdresser and nurse satisfaction, in 12 months after rhinoplasty, in the intervention group compared to the control group had a significant increase (P <0.05). Furthermore, in the control group 2.85% and in the intervention group 5.71% bleeding was observed. No other complications were observed in any of the groups.

Conclusion: Overall, SMASectomy, which is performed simultaneously with rhinoplasty, is considered as an important technique in rhinoplasty. As we observed in our study, the complications of these surgeries in patients were very small.

Keywords: SMASectomy, Nasal tip, Rhinoplasty, Thick skin, Clinical outcomes

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INTRODUCTION

Rhinoplasty is the use of functional and aesthetic parameters together, which is performed in patients with congenital anomalies, traumatic nasal abnormalities, and changes in the patient's aesthetic appearance[1]. Tip modification is one of the most complex steps in rhinoplasty. The reason could be the tip's 3-dimensional structure and the interrelationships of the alar cartilages[2]. The ideal skin for an optimal rhinoplasty outcome is intermediate thickness. Skin that is too thin

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will show all the imperfections of the underlying nasal frame and show the shape of the underlying cartilage and the structure of the nose. Thus, slight irregularities of the reconstructed nasal skeleton could make undesirable changes[3].

Although a thicker skin envelope can camouflage minor imperfections of the underlying nasal framework, patients with thicker nasal skin present greater difficulty in achieving tip definition. Thicker nasal skin reduces the definition of the underlying osseocartilaginous frame. The bulk of the thicker skin in turn weighs on the underlying cartilage frame which is often weaker in individuals with thicker nasal skin[4]. Rhinoplasty has relatively low complication rates. Layliev et al did a study with 5000 rhinoplasty patients, and reported a total complication rate of 0.7% [5]. The complications of displacement, extrusion, inflammation, iatrogenic injury, scar and infection may be seen after rhinoplasty. Infection is the most serious complication after rhinoplasty[6]. Processes such as, osteotomies, performed during rhinoplasty breach the periosteum or nasal mucosa, creating a potential route for the spread of infection, which can lead to unsuccessful plastic surgery[7]. The cause of bleeding during rhinoplasty is damage to the large vessels at the site of osteotomy, or damage to the small subdermal vessels during osteotomy[8]. Postoperative bleeding is one of the most common complications following nasal surgery[9].

Edema occurs after surgery due to an increase in tissue fluid at the site, and if it is severe, it affects the end result[10]. Postoperative nasal necrosis may be caused due to vascular disorders, intranasal infection, excessive manipulation and destruction of nasal tissue by the surgeon, non-standard gel injection into the nose, rhinoplasty, granulomatous diseases, fungal infections, bacteria Abnormalities and neoplasms[11]. In this regard, skin necrosis occured in the back of the nose following rhinoplasty [12]. In that study, a 34-year-old female patient had a complaint of nasal deformity. She underwent secondary rhinoplasty where the deviated cartilaginous septum was corrected by submucosal resection. The deviated bony septum was corrected by lateral low-to-high osteotomies. A part of the harvested cartilage was used as columellar strut graft. Defatting was done for the bulbous tip, which was also refined by transdomal sutures. After skin closure, a metal splint was applied in the usual manner. On follow-up, removal of the splint revealed a 0.7×0.4 cm skin necrosis on the nasal dorsum. Local wound dressing was done, and the patient was prescribed Contractubex. After 6 months, the skin defect had healed, but a noticeable scar remained. Autogenous fat graft mixed with purified platelet-rich plasma was injected into the scarred area[12].

Conscious satisfaction in rhinoplasty is a challenging process due to rigid surgical techniques and a wide range of possible complications[13]. Nasal repair or secondary rhinoplasty is an operation in which the nose is repaired again due to dissatisfaction with the expected result, or deformation and change in function after primary surgery. Sometimes, after the first nose surgery, the desired result is not achieved[14]. In this regard, Heilbronn et al. conducted a literature review and comparison with a survey of consent forms. These researchers reported, rhinoplasty consent forms generally accountable a wide range of topics, with varying incidences of complications cited within the literature. Certain complications such as dissatisfaction and revision surgery should be included in every consent process[13].

The soft tissue between the skin and osseocartilaginous skeleton in the face consists of superficial musculoaponeurotic system (SMAS). The superficial aponurotic muscular system is a layer of fibrous tissues and muscles that extends from the front and under the ear to the neck, and where major vessels may lie[15]. For the correction of bulbous tip, cartilage work and nasal SMAS excision is an important procedure for the reduction of bulbous tip with thick skin and soft tissue envelope[16]. SMAS was continuous with the platysma, the temporoparietal fascia, and enveloped the facial muscles, protecting the vasculature and facial nerves[17].

In rhinoplasty, deeper structures such as nerves, lacrimal ducts, blood vessels, and muscles may be damaged during surgery. Deeper tissue damage can be temporary or permanent. Therapeutic and cosmetic techniques, such as rhinoplasty, can affect the SMAS layer and cause side complications such as bleeding. Evidence suggests that SMAS excision may sacrifice a major blood supply to the lobular tip such as the lateral nasal and dorsal nasal arteries. Therefore, monitoring blood circulation during the postoperative period is very important.

The purpose of this study was determining and comparing the clinical outcome and satisfaction of rhinoplasty for nasal tip defatting in patients with thickened skin with and without SMASectomy.

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METHODS

The present study was a randomized controlled trial double blind study in which the clinical outcome and satisfaction of rhinoplasty in patients with thickened skin with and without SMASectomy were investigated.

In this study, 70 patients with thick nasal skin were hospitalized in Esfahan, Iran in 2020 with the aim of correction and beauty of the nose. With the calliper, the thickness of the supratype was more than 8 mm and they had no history of smoking and no history of collagen vascular disease and no history of previous nose surgery. These patients were operated by permuted block randomization in one of two ways. Thus, in the control group, only rhinoplasty was performed without SMASectomy and, in the intervention group, rhinoplasty was performed with SMASectomy (excision of the tip and supratip nasal SMAS).

After compilation and design, the present study was approved scientifically and ethically in the Department of Medicine of Isfahan University of Medical Sciences, respectively. Ethical considerations in the research process were: 1) The objectives, benefits and steps of the research were explained to the participants in a meeting, 2) The participants informed the consent form. Participated in the research approved by the ethics committee, 3) Participants' health status and attending physician were monitored, 4) Participants were assured that all information obtained from the study would be kept confidential, and findings would be reported as group information.

The variables of the present study are stated in Table 1.

Demographic information of patients including gender and age was extracted through measurement and interview with them. In the present study, due to the possibility of non-referral of a number of patients, 80 patients were selected over time. Facial and profile photographs were taken from the patients and the results were evaluated by a plastic surgeon, a nurse, a beautician and the patient himself. Patients with facial images without the above standards were excluded from the study. At the end of the study, 3 patients in the control group and 2 patients in the intervention group were excluded due to lack of referral and follow-up, and finally 70 people were included in the study. Participants were randomly divided into two groups of 35 control and intervention by permuted block randomization, which included 4 or 6 or 8 patients per week:

In the control group, only rhinoplasty was performed without SMASectomy.

Intervention group, rhinoplasty was performed with SMASectomy (excision of nasal SMAS).

All patients underwent surgery by a professional plastic surgeon. Tampon was removed 24 hours after surgery and prednisolone 5 mg tablets were taken for 6 days in the same way that they took 6 tablets at the same time on the first day and gradually reduced one tablet the next day. They took a total of 21 pills and the stitches were removed on the 7th day. The external splint was removed on day 7 and the nasal adhesive was implanted for 3 months. Patients were photographed with a 35mm Nikon D90 camera and a 100mm lens. Information on primary procedural outcomes including infection, bleeding, scar, necrosis, and local edema were collected through examination of patients. Satisfaction with the operation was measured by another plastic surgeon,

Table 1. Study variables

Variable name	Variable role	Variable type			The unit	Measurement method
		Qualitative	Quantitative			
		Nominal / rank	Continuous	Discrete		
Type of procedure	Qualitative and nominal	***			Smasectomy group and control group	File review
Skin thickness	Dependent			***	Mm	With Calliper
Satisfaction	Dependent	***			Yes / no	Interview
Bleeding	Dependent	***			Yes / no	Examination
Scar	Dependent	***			Yes / no	Examination
Edema	Dependent	***			Yes / no	Examination
Infection	Dependent	***			Yes / no	Examination
Necrosis	Dependent	***			Yes / no	Examination
Smasectomy	Independent	***			Yes / no	Surgery

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cosmetic nurse, hairdresser and the patient himself based on the patient's photos according to the five-level lykert scale classification system (complete dissatisfaction, relative dissatisfaction, no opinion, relative satisfaction and complete satisfaction).

DATA ANALYSIS

The results of the study were expressed as mean and standard deviation for quantitative variables and as a percentage for qualitative variables. Comparisons between quantitative variables were performed by independent t-test and repeated measures anova analysis of variance. Comparisons between qualitative variables were performed using Chi-square. SPSS software version 23 was used for statistical analysis of data. Significance level was considered less than 0.05.

RESULTS

Descriptive findings

In the present study, 70 patients participated in the study, of which 10 (28.57%) were male and 25 (71.43%) were female in the control group and 7 (20%) were male and 28 (80%) were female in the intervention group. The age range of patients in the control group was between 18-37 years and the mean was 26 years and the standard deviation was 5 years and in the intervention group was between 19-38 years with a mean of 27 years and 6 months and the standard deviation was 5 years and 6 months.
There was no significant difference between the two groups in terms of age and gender (P<0.2).

QUANTITATIVE STATISTICS

Thickness of nasal skin

In all patients, the thickness of the nasal skin was measured with a calliper and if they were more than 6.8 mm, they were studied. The thickness of the nasal skin of patients after rhinoplasty between 1, 3, 6 and 12 month in the control and intervention groups is shown in Table 4. Before rhinoplasty, no significant difference in skin thickness was observed between the two groups (P<0.2). In the first month, showed a significant difference between the two groups (P<0.001). In the third month, a significant difference was observed between the two groups (P<0.000). We see an increase in nasal thickness at 1 and 3 months in the intervention group. At 12 months, the two groups were significantly different (P<0.000). Indicates a decrease in thickness in the intervention group (Table 2). There was no significant difference in thickness in the control group before and after 12 months, but in the intervention group there was a significant difference in thickness before and after 12 months (Table 3).

Satisfaction percentage of doctor, nurse, hairdresser and patient

Satisfaction with the surgery was measured by another plastic surgeon, nurse, hairdresser and the patient himself, based on the patient's photographs according to a five-level likert scale classification system (complete dissatisfaction, relative dissatisfaction, no opinion, relative satisfaction and complete satisfaction).

Percentage of patient satisfaction

According to the results, in 3, 6 and 12 months after rhinoplasty, the percentage of complete satisfaction of patients was 2.9, 4.3 and 31.4%, respectively, and the relative satisfaction of patients was 4.3, 47.1, and 34. 3%, the percentage of patients without comments was 57.1, 35.7, 21.4%, and relative dissatisfaction

Table 2. Distribution of nasal skin thickness in two groups control and intervention at different times

	Group	N	Mean	Std. Deviation	Sig
Thick 0	Control	35	3.8329	.28951	.204
	Intervention	35	3.9257	.31515	.204
Thick 1	Control	35	4.2971	.24939	.001
	Intervention	35	4.5157	.27886	.001
Thick 3	Control	35	3.9986	.28530	.000
	Intervention	35	4.2757	.25991	.000
Thick 6	Control	35	3.8257	.29911	.950
	Intervention	35	3.8300	.26574	.950
Thick 12	Control	35	3.8414	.29091	.000
	Intervention	35	3.5386	.31298	.000

Thick 0=thick preopration, thick1 = thick 1 month postoperation, thick 3=thick 3 months postoperation
Thick 6 =thick 6 months postoperation, thick 12=thick 12 months postoperation

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Table 3. Comparison of nasal skin thickness in two groups separately at different times

Group	(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
						Lower Bound	Upper Bound
Control	1	2	-.464*	.020	.000	-.524	-.405
		3	-.166*	.015	.000	-.210	-.122
		4	.007	.027	1.000	-.074	.089
		5	-.009	.008	1.000	-.032	.015
	2	1	.464*	.020	.000	.405	.524
		3	.299*	.015	.000	.255	.342
		4	.471*	.030	.000	.380	.563
		5	.456*	.018	.000	.403	.509
	3	1	.166*	.015	.000	.122	.210
		2	-.299*	.015	.000	-.342	-.255
		4	.173*	.030	.000	.084	.262
		5	.157*	.015	.000	.114	.201
	4	1	-.007	.027	1.000	-.089	.074
		2	-.471*	.030	.000	-.563	-.380
		3	-.173*	.030	.000	-.262	-.084
		5	-.016	.029	1.000	-.104	.072
	5	1	.009	.008	1.000	-.015	.032
		2	-.456*	.018	.000	-.509	-.403
		3	-.157*	.015	.000	-.201	-.114
		4	.016	.029	1.000	-.072	.104
Intervention	1	2	-.590*	.024	.000	-.662	-.518
		3	-.350*	.018	.000	-.405	-.295
		4	.096*	.016	.000	.048	.143
		5	.387*	.019	.000	.331	.444
	2	1	.590*	.024	.000	.518	.662
		3	.240*	.018	.000	.187	.293
		4	.686*	.026	.000	.608	.763
		5	.977*	.031	.000	.885	1.069
	3	1	.350*	.018	.000	.295	.405
		2	-.240*	.018	.000	-.293	-.187
		4	.446*	.020	.000	.386	.505
		5	.737*	.025	.000	.663	.812
	4	1	-.096*	.016	.000	-.143	-.048
		2	-.686*	.026	.000	-.763	-.608
		3	-.446*	.020	.000	-.505	-.386
		5	.291*	.014	.000	.250	.332
	5	1	-.387*	.019	.000	-.444	-.331
		2	-.977*	.031	.000	-1.069	-.885
		3	-.737*	.025	.000	-.812	-.663
		4	-.291*	.014	.000	-.332	-.250

0 = thick preoperation , 1 =thick 1 month postoperation ,2 = thick 3 months postoperation
3 =thick 6 months postoperation,4 = thick 12 months postoperaton

was 35.7, 12.9, and 12.9%. In general, the percentage of patient satisfaction, in 3, 6 and 12 months after rhinoplasty, in the intervention group compared to the control group showed a significant increase (P <0.05) (Table 4).

Doctor satisfaction percentage

Iin 3, 6 and 12 months after rhinoplasty, the percentage of complete satisfaction of doctor was 2.9, 5.7and 34.3%, respectively, and the relative satisfaction of doctor was 38.6, 58.6, and 38.6%,

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the percentage of doctor without comments was 57.1, 35.7, and 27.1%. In month 3, the percentage of relative dissatisfaction of doctor was 1.4 %. In general, in 6 and 12 months after rhinoplasty, the percentage of doctor satisfaction in the intervention group compared to the control group showed a significant increase (P <0.05) (Table 5).

Nurse Satisfaction percentage

In months 3, 6 and 12 after rhinoplasty, the percentage of complete satisfaction of nurse was 7.1, 7.1and 38.6%, respectively, and the relative satisfaction of nurse was 30, 54.3, and 35.7%, the percentage of nurse without comments was 58.6, 38.6, and 25.7%. In month 3, the percentage of relative dissatisfaction of nurse was 4.3%. In general, the percentage of nurse satisfaction in months 3, 6 and 12, in the intervention group compared to the control group showed a significant increase (P <0.05)(Table 6).

Table 4. Mean patient satisfaction in 12 month after rhinoplasty in control and intervention groups

			group		Total
			Control	Intervention	
pa12	2	Count	9	0	9
		% within group	25.7%	0.0%	12.9%
	3	Count	14	1	15
		% within group	40.0%	2.9%	21.4%
	4	Count	10	14	24
		% within group	28.6%	40.0%	34.3%
	5	Count	2	20	22
		% within group	5.7%	57.1%	31.4%
Total		Count	35	35	70
		% within group	100.0%	100.0%	100.0%

Table 5. Mean doctor satisfaction in 12 month after rhinoplasty in control and intervention groups

			group		Total
			Control	Intervention	
dr12	3	Count	18	1	19
		% within group	51.4%	2.9%	27.1%
	4	Count	14	13	27
		% within group	40.0%	37.1%	38.6%
	5	Count	3	21	24
		% within group	8.6%	60.0%	34.3%
Total		Count	35	35	70
		% within group	100.0%	100.0%	100.0%

Table 6. Mean nurse satisfaction in month 12 after rhinoplasty in control and intervention groups

			group		Total
			Control	Intervention	
nu12	3	Count	17	1	18
		% within group	48.6%	2.9%	25.7%
	4	Count	13	12	25
		% within group	37.1%	34.3%	35.7%
	5	Count	5	22	27
		% within group	14.3%	62.9%	38.6%
Total		Count	35	35	70
		% within group	100.0%	100.0%	100.0%

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Table 7. Mean hairdresser satisfaction in 12 month after rhinoplasty in control and intervention groups

			group		Total
			Control	Intervention	
be12	2	Count	8	0	8
		% within group	22.9%	0.0%	11.4%
	3	Count	20	3	23
		% within group	57.1%	8.6%	32.9%
	4	Count	6	16	22
		% within group	17.1%	45.7%	31.4%
	5	Count	1	16	17
		% within group	2.9%	45.7%	24.3%
Total		Count	35	35	70
		% within group	100.0%	100.0%	100.0%

Table 8. Frequency distribution of complications after rhinoplasty based on the reports of participants in the study

Complication	group							
	Control				Intervention			
	Yes		No		Yes		No	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Bleeding	1	2.85	34	97.14	2	5.71	33	94.28
Local infection	0	0	35	100	0	0	35	100
local edema	0	0	35	100	0	0	35	100
necrosis	0	0	35	100	0	0	35	100
scar	0	0	35	100	0	0	35	100
Restoration	0	0	35	100	0	0	35	100

Percentage of hairdresser satisfaction

In months 3, 6 and 12 after rhinoplasty, the percentage of complete satisfaction of hairdresser was 1.4, 1.4 and 24.3%, respectively, and the relative satisfaction of hairdresser was 4.3, 28.6, and 31.4%. The percentage of hairdresser without comments was 30, 52.9, 32.9%, and relative dissatisfaction was 64.3, 17.1, and 11.4%. In general, in month12, the percentage of hairdresser satisfaction in the intervention group compared to the control group showed a significant increase (P <0.05) (Table7).

Frequency distribution of complications after rhinoplasty

Information on primary procedural outcomes including infection, bleeding, Oscar, necrosis, and local edema through examination of patients is shown in Table 8. According to the results, in the control group, 1 case of bleeding was observed, which improved with the maintenance of nasal tampons for 48 hours, and in the intervention group, 2 cases of bleeding were observed, which were eliminated by the same technique. No other complications were observed in any of the groups (Table 8) (Figure 1 and 2).

DISCUSSION

Regarding rhinoplasty and its consequences, it is very important to pay attention to important parameters such as skin thickness. After evaluating the thickness of the nasal skin and with the aim of achieving the desired beauty as well as improving the function of the muscular structure of the nasal skin, rhinoplasty with skin thinning techniques has been considered. In this regard, it is necessary to evaluate the consequences of these surgeries from the perspective of physician and patient and to examine complications such as bleeding, infection, necrosis and the degree of satisfaction of physician and patient. SMASectomy is also sometimes performed to minimize the complications of rhinoplasty.

In our study, the majority of the applicants for rhinoplasty were female, of which 25 (71.43%) were in the control group, and 28 (80%) in the intervention group. The mean age of patients in the control group

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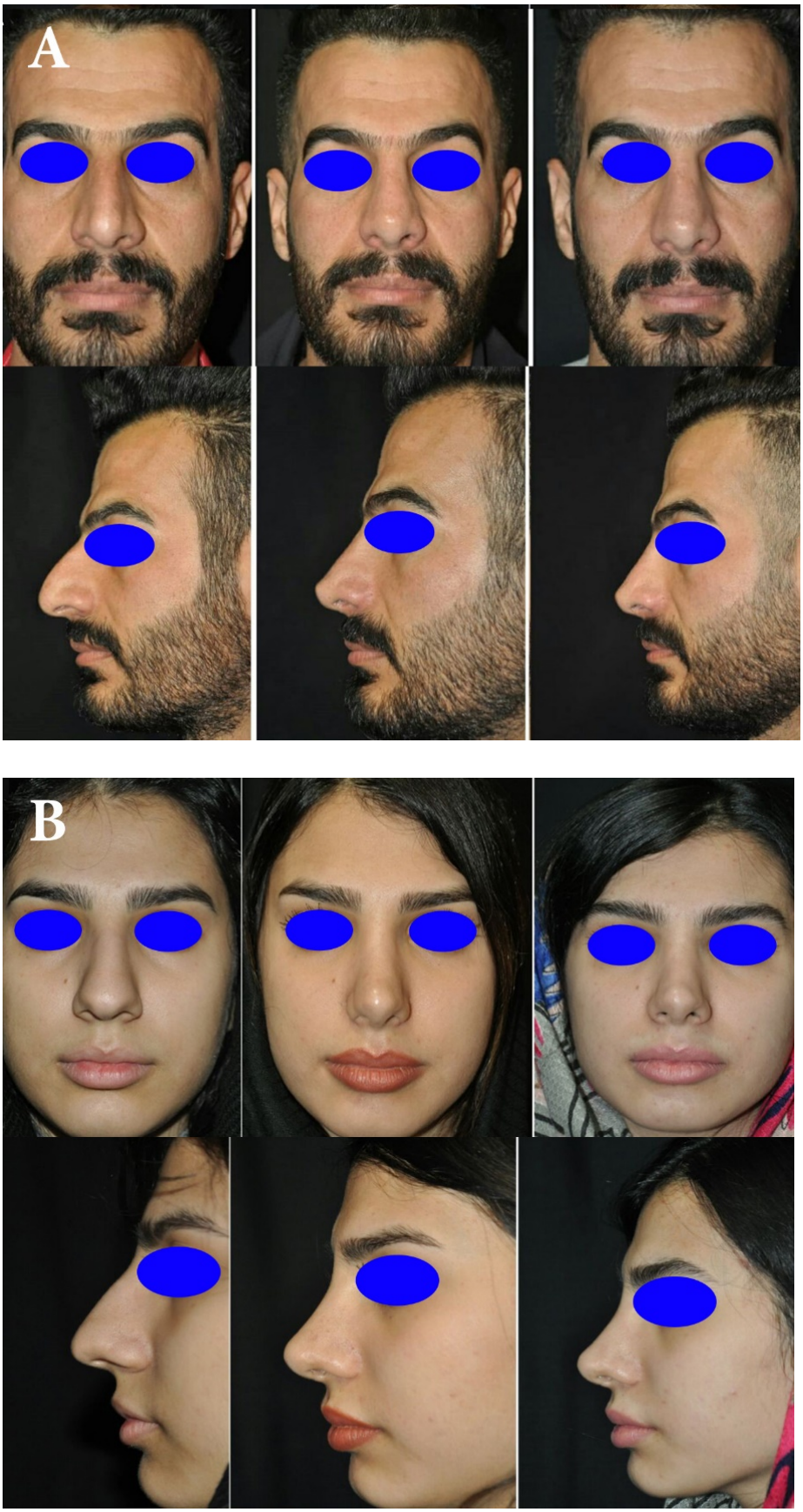


Figure 1. Pictures A and B are related to the participants in the control group. From left to right, respectively: before rhinoplasty, 6 months after rhinoplasty and 12 months after rhinoplasty.

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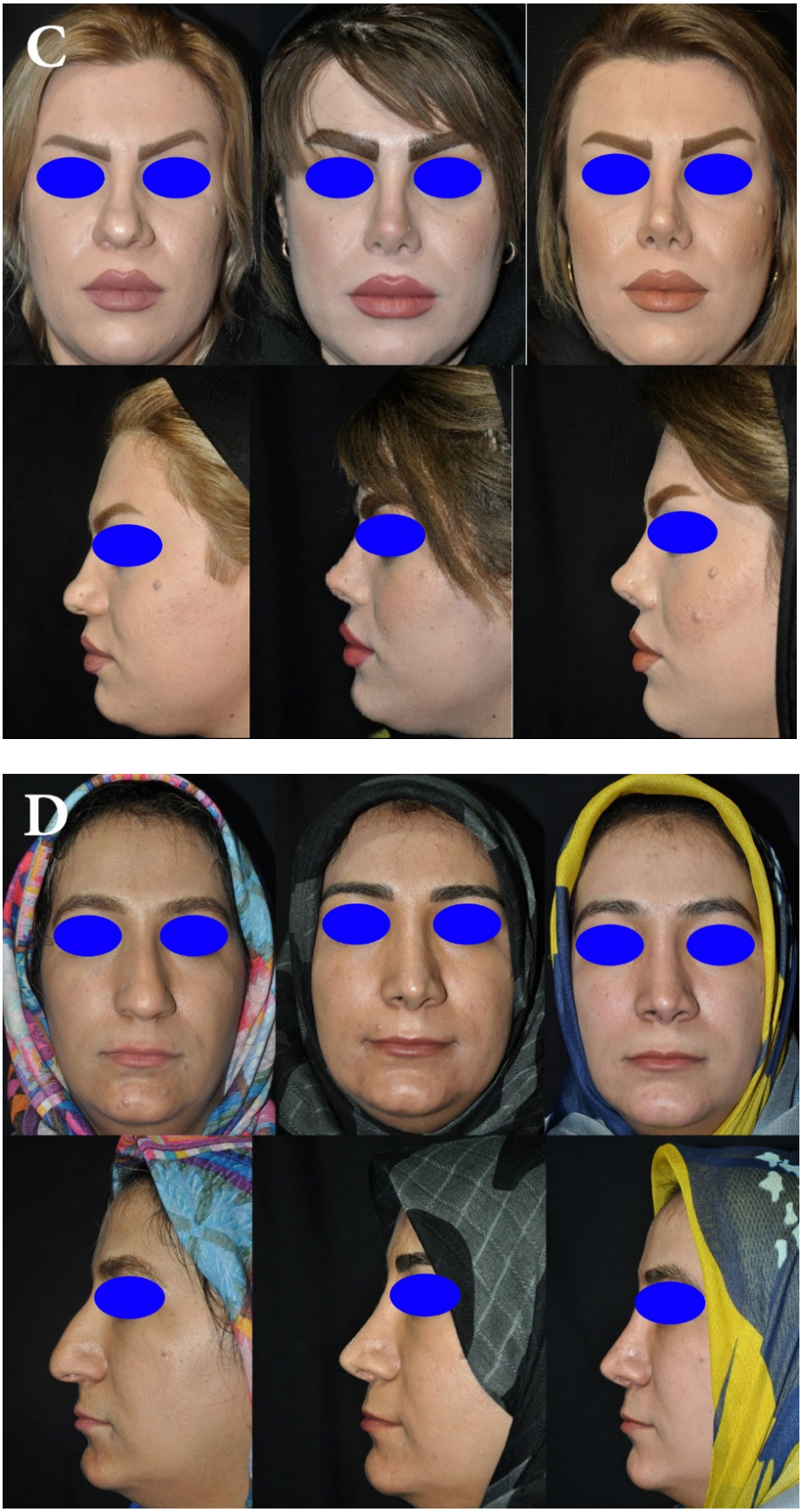


Figure 2. Pictures C and D are related to the participants in the Intervention group. From left to right, respectively: before rhinoplasty, 6 months after rhinoplasty and 12 months after rhinoplasty.

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was 25.97 years and in the intervention group was 27.14 years. Therefore, a large part of the applicants for rhinoplasty were women and youth. We also measured the thickness of the participants' nasal skin using a calliper. Before surgery, no significant difference was observed between the two groups, but 1 month after surgery, the mean skin thickness in the control group was 5.22 and in the intervention group was 5.54, which were significantly different. In the 6 month follow-up periods of surgery, no significant difference was observed between the two groups and also in comparison with the preoperative period, but there was a significant difference between the follow-up period of 3 and 12 months.

Our findings are similar to Davis et al reports where en bloc excision of the nasal SMAS in thick-skinned patients provides uniformly favorable improvements in nasal tip definition without adverse sequelae[18] .Evaluation of nasal skin thickness is used during rhinoplasty along with skin thickness thinning techniques such as degreasing the tip of the nose as well as SMAS surgery. However, our findings are not correspond with the reports of Alharethy et al. in which the samples were divided into 3 groups based on skin thickness. Analysis of their satisfaction shows that thick skin may not have an effect on patient satisfaction, and by choosing the appropriate technique and method, any nasal problem can be overcome[19] . Jomah et al. in their study entitled "nasal skin thickness measurements using computed tomography in an adult Saudi population", reported that nasal skin is thickest over the nasofrontal angle, thinner at the rhinion, and again thicker at the nasal tip and columella. These researchers believe that their data could be useful for plastic surgeons who could take the patient's nasal area thickness into consideration when planning his or her rhinoplasty[20], investigated the effect of nasal skin thickness on the outcome of nasal tip surgery. They reported that thick skin at the nasal tip and columella is linked with poor surgical outcomes[21].

We also evaluated the satisfaction of the physician, nurse, hairdresser, and patient themselves based on patient photographs according to a five-level likert scale classification system (complete satisfaction, relative satisfaction, no opinion, relative dissatisfaction, complete dissatisfaction). Our results showed that the percentage of patient and nurse satisfaction, in 3, 6 and 12 months after rhinoplasty, in the intervention group compared to the control group had a significant increase. In 6 and 12 months after rhinoplasty, the percentage of doctor satisfaction, and also, in 12 month, the percentage of hairdresser satisfaction in the intervention group compared to the control group showed a significant increase.

Conscious consent to rhinoplasty may be associated with a wide range of possible complications. Consistent with the results of our study, previous studies have shown that to correct the tip of the bulbous nose, SMAS nose incision is an important method to reduce the tip of the bulbous nose with a thick coating of soft skin tissue[16]. In a review study aimed to underscore the importance of informed consent in rhinoplasty, Heilbronn et al. reported that the most common complications of rhinoplasty are infection, bleeding, sores, and skin problems such as acne, numbness, and repair. Hence, valuable information in preoperative counseling for patients and physicians about rhinoplasty and its possible complications is very important[16].

In addition, we observed one case (2.85%) bleeding in the control group, and two cases (5.71%) bleeding in the intervention group, which improved by maintaining a nasal tampon for 48 hours. Other complications such as infection, necrosis, local edema, and need for repair were not observed in our study. In rhinoplasty, deeper structures such as nerves, lacrimal ducts, blood vessels, and muscles may be damaged during surgery. Deeper tissue damage can be temporary or permanent.

Therapeutic and cosmetic techniques, such as rhinoplasty, can affect the SMAS layer and cause side complications such as bleeding. Evidence suggests that SMAS excision may sacrifice a major blood supply to the lobular tip such as the lateral nasal and dorsal nasal arteries. Therefore, monitoring blood circulation during the postoperative period is very important. According to the results of our study, Layliev et al, studied 5,000 rhinoplasty patients. In their study, the overall complication rate was very low (0.7%) [5]. In this regard, Faber et al. in their study identified von Willebrand factor deficiency (VWF) in two patients as the cause of bleeding. They used desmopressin to reduce bleeding in the postoperative period [22]. However, our findings do not agree with the reports of Mrad et al. [12] who performed plastic surgery on a 34-year-old female patient. After removing the splint, they observed 0.4 × 0.7 cm skin necrosis on the nasal dorsum. 6 months after topical wound dressing, the skin defect was removed and to remove the scar, and combination of autogenous fat

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graft with platelet-rich plasma was injected into the wound area [12]. Like any other surgery, rhinoplasty carries risks such as bleeding, infection, necrosis, and local edema. It seems that the knowledge and attitude of people applying for rhinoplasty in the field of these complications and problems after surgery is not enough. Therefore, it is necessary for these people to be consulted about the complications after rhinoplasty before the operation.

CONCLUSION

SMASectomy, which is performed simultaneously with rhinoplasty, is considered as an important technique in rhinoplasty. As we observed in our study, the complications of these surgeries in patients were very small. Therefore, we believe that performing SMASectomy itself minimizes the complications of rhinoplasty, and can a suitable method for patients with thick skin. Although there is a significant increase in skin thickness in the first months, better results are obtained over time.

CONFLICT OF INTEREST

Non-declared.

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