The Journal of Laryngology & Otology

cambridge.org/jlo

A comprehensive approach to rhinoplasty for thick-skinned patients

Brajendra Baser[1], Sreena Dev[2] and Shangorav Mukhopadhyay[3]

[1]Department of ENT, Jaslok Hospital, Mumbai, Department of ENT, Sri Aurobindo Institute of Medical Sciences, Indore, and Department of ENT, Akash Hospital, Indore, India, [2]Sreena Dev, Department of ENT, Akash Hospital, Indore, India and [3]Shangorav Mukhopadhyay, Department of ENT, Sri Aurobindo Institute of Medical Science, Indore, India

Abstract

Objective. This study aimed to propose a systematic approach for managing thick-skinned rhinoplasty patients.

Methods. A retrospective review of the treatment of 26 thick-skinned patients with aesthetic and/or functional problems over a period of three years from January 2018 to January 2021 with a follow up for one year. A presurgical evaluation of skin was carried out initially. Skin thickness due to sebaceous overactivity was treated with retinoic acid derivatives, and skin thickness due to increased adipose tissue or hypertrophic fibrofatty layers was treated surgically. Open rhinoplasty was performed in all patients and a strong osseocartilaginous framework was created with the skin stretched as much as the aesthetic tolerance allowed.

Results. Post-operative outcomes were based on subjective assessment, photographic evaluation and the Rhinoplasty Outcome Evaluation questionnaire, which indicated significant patient satisfaction.

Conclusion. Using this systemic approach for treating thick-skinned rhinoplasty patients, predictable results with improved aesthetic satisfaction in patients were achieved.

Main Article

Sreena Dev takes responsibility for the integrity of the content of the paper

Cite this article: Baser B, Dev S, Mukhopadhyay S. A comprehensive approach to rhinoplasty for thick-skinned patients. *J Laryngol Otol* 2024;**138**:512–519. https://doi.org/10.1017/S0022215123002220

Received: 6 February 2023
Revised: 1 October 2023
Accepted: 11 October 2023
First published online: 7 December 2023

Keywords:
Rhinoplasty; isotretinoin; triamcinolone; subcutaneous tissue

Corresponding author:
Sreena Dev;
Email: Sreenadev27@gmail.com

Introduction

Rhinoplasty is one of the most commonly performed facial plastic surgical procedures worldwide. The outcome of rhinoplasty depends on both surgeon and patient factors. Rhinoplasty differs between individuals with thick skin and individuals with thin skin. Thick-skin rhinoplasty presents a challenge to rhinoplasty surgeons.

The quality and thickness of nasal skin can impact the cosmetic results of rhinoplasty. Both thick and thin skin can produce undesired results in rhinoplasty. Intermediate thickness skin (Fitzpatrick scale skin types 3 and 4), when managed properly, yields the most predictable results. Intermediate thickness skin experiences less post-operative swelling and redrapes favourably over the underlying nasal skeleton without revealing minor subsurface skeletal imperfections. Thin skin (Fitzpatrick scale skin types 1 and 2) may undergo contracture and result in excessive skeletal transparency. However, thick nasal skin (Fitzpatrick scale skin types 5 and 6) conceals desirable tip definition and contributes to unwanted broadness at the tip.

The thickness of the skin can be attributed to several factors, including dermal thickening, an increased amount of adipose tissue, an increased number of sebaceous glands and the hypertrophic subcutaneous fibromuscular tissue layer. Within the nose itself, skin thickness varies in different parts, with more thickness observed in the nasal radix and tip, and thinness over the rhinion and columellar area.[1] This thick skin is typically associated with a weak underlying cartilaginous framework. Post-operatively, because of the reduced elasticity of thick skin, correct redraping over the nasal skeleton will not occur, leading to dead space and secondary subcutaneous fibrosis. This, in turn, leads to the formation of scar tissue and permanent thickening on the nose, primarily observed over the supratip and tip areas. These changes can contribute to the development of polybeak deformity and a broad nasal tip, respectively.[2] Because of increased volume and the higher likelihood of post-operative oedema, thick skin is unable to contract and conform to the underlying skeletal framework, and thus it masks the surgical outcome.

To achieve satisfactory tip definition in thick-skinned individuals, several treatment strategies must be incorporated in addition to those used for a nose with thin skin. These strategies include maximising the stretching of the overlying thick skin and concurrently addressing its thickness. Stretching the skin is accomplished by enlarging and reinforcing the underlying skeletal framework through various grafts and suture techniques, as well as by thinning the skin–soft tissue envelope. The skin should be stretched as much as aesthetically feasible, while avoiding any pathological increase in closing tension. Excessive stretching, beyond the skin tolerance, can result in decreased perfusion, ischemia, telangiectasia of the skin and unwanted pressure over the underlying osseocartilaginous framework, potentially leading to deformities.[3]

The skeletal framework is strengthened using techniques such as lateral crural strut grafts, columellar strut grafts, tip grafts, dorsal augmentation grafts, septal extension grafts and various sutures, including trans domal and interdomal sutures. Domal equalisation sutures also help in defining the tip. Skin thickness secondary to sebaceous overactivity can be reduced through the use of retinoic acid derivatives and other skincare routines. However, skin thickness resulting from subcutaneous tissue hypertrophy will not respond to skincare routines and must be addressed through surgical means.

Thus, skin evaluation prior to surgery is of particular importance as it directly influences the outcome of rhinoplasty. When comparing the Indian nose to the Caucasian nose, it is observed that the former often exhibits considerable thickness of the skin, greater pigmentation and weaker cartilage structures.[4] While Indian skin can vary significantly across different regions, it is very common to encounter individuals with thick skin, which is the focus of this paper. This paper aims to provide a systemic algorithm for approaching rhinoplasty in patients with thick skin. It is crucial to individualise the rhinoplasty approach, and pre-operative evaluation is necessary before undertaking any surgery.

Materials and methods

A retrospective study was conducted on 26 patients aged between 20 and 35 years who sought rhinoplasty at our centre. The study spanned a period of three years, from January 2018 to January 2021. Among the participants, there were 18 female and 8 male patients. Three of the 26 cases were revisions, while the other 23 underwent primary rhinoplasty. All patients were followed up at one month, three months, six months and one year after surgery. Pre- and post-operative photographs were taken for the purposes of comparison and documentation.

All the selected patients in the study were diagnosed with thick skin based on various criteria, including the skin pinch test, oiliness, elasticity and the presence of acne. As a part of their treatment, these patients were prescribed oral isotretinoin for six months, in conjunction with the surgical procedure. Additionally, triamcinolone injections were administered every six weeks. Close monitoring of these patients was carried out throughout the treatment period.

Before initiating oral isotretinoin, a baseline blood investigation was conducted, and monthly liver function tests and lipid-level monitoring were performed. Patients were informed about the teratogenic effect of isotretinoin and were advised to avoid pregnancy during the treatment phase as well as for six months after discontinuing the treatment. Furthermore, patients were instructed to use a salicylic acid-containing facewash, which is a mild exfoliant that helps reduce sebum production. They were also provided with tretinoin cream for local application.

In all patients the external rhinoplasty approach was used, focusing on strengthening the underlying cartilaginous and bony framework through the use of various grafts and sutures.

Prior to surgery, detailed counselling sessions were conducted with each patient during which their condition, available surgical options, associated advantages and limitations, potential complications and other relevant information were thoroughly explained. Written informed consent was obtained from the patients and their relatives. As this is a retrospective review of the surgical techniques employed, Institutional Review Board approval was not required. However, all procedures adhered to the principles outlined in the Declaration of Helsinki.

Feedback from the patients was collected, taking into account their overall satisfaction with the aesthetic outcome, as well as any social and psychological benefits experienced. To quantitatively measure these aspects, a Rhinoplasty Outcome Evaluation questionnaire was used.

Standard skincare regimen

All the patients selected for this study had thick, acne-prone skin. Many of them presented with a bulbous nasal tip and a weak underlying cartilaginous framework. It is important to note that thick skin can conceal the definition of the nasal tip after surgery, potentially resulting in a broader appearance. It is therefore advisable to address the skin thickness condition in conjunction with the surgical intervention to achieve the desired aesthetic outcome.

A comprehensive skincare regimen should be initiated 4–6 weeks before surgery and continued until 5 days prior to the procedure. It should then be resumed 10 days after surgery for a period of 6–8 months. This regimen should include using a salicylic acid or benzoyl peroxide containing face wash and tretinoin cream for local application, along with a suitable moisturiser and sunscreen. In addition to the topical treatment, the patient should also be prescribed oral isotretinoin as part of this regimen. The administration of oral isotretinoin should be discontinued one week prior to surgery and resumed two to three weeks after the procedure. The oral isotretinoin treatment should be continued for a period of six to eight months.

If the skincare regimen not possible before surgery

If the patient does not wish to wait four to six weeks for surgery, the skincare regimen is started at the initial consultation, continued until 5 days before surgery and then resumed 10 days after surgery. The oral isotretinoin is started three to four weeks after surgery and continued for a period of six to eight months.

A low-dose treatment of 20 mg of oral isotretinoin once daily is given along with daily application of tretinoin cream (0.025 per cent) at night and a good moisturising lotion. It has been shown that low-dose isotretinoin has comparable efficacy to high-dose conventional treatment but with fewer side effects. Isotretinoin is a derivative of vitamin A that is metabolised in the liver using cytochrome P450.[5] It acts by significantly reducing sebum production and has anti-inflammatory properties, which help to reduce the inflammation associated with acne and subsequently decrease colonisation by *Propionibacterium acnes*, thus reducing acne formation. It does not have direct antibiotic action against *P. acnes*.[5]

Because isotretinoin is an analogue of vitamin A, most of its side effects are similar to those of hypervitaminosis A, such as cheilitis, dry nose, xerosis, papilloedema, abdominal pain, headache etc., but because treatment is initiated with low-dose isotretinoin tablets, most of these side effects are not encountered. A few patients complained of mild cheilitis, which usually improves with local application of glycerine. Two patients also reported dry skin and nose, along with cheilitis. In those cases, the dose of oral isotretinoin was reduced to 10 mg on alternate days with twice weekly application of tretinoin cream (0.025 per cent) on the face at night, along with proper moisturiser usage.

Because isotretinoin is metabolised in the liver, it can cause an increase in liver enzymes and lipid profile,[6] therefore all the

https://doi.org/10.1017/S0022215123002220 Published online by Cambridge University Press

patients treated with oral isotretinoin were monitored monthly for liver function and lipid profile.[7] One patient exhibited elevated liver enzyme levels after three months of isotretinoin usage, which led to discontinuation of the oral isotretinoin treatment. All the patients were strictly advised to avoid pregnancy due of the teratogenic effects of isotretinoin.

Thick-skinned patients are prone to prolonged postoperative oedema and formation of dead space in the supratip area, which can result in granulation tissue formation and polybeak deformity. To address this, our patients received an injection of 0.2–0.3 ml of triamcinolone (10 µg/ml) at the supratip area, deep into the subcutaneous tissue, every 6 weeks. This injection has been shown to decrease postoperative oedema and scar tissue formation.[8] The injections were initiated one month after surgery and continued until the oedema resolved. It is important to administer the injection deep into the soft tissue and not into the dermis, as injection into the dermis can cause dermal thinning, telangiectasia, fat necrosis, cartilage resorption and localised infection.[3]

Surgical treatment of a thick-skinned nose

An external rhinoplasty approach was followed for all patients, using a bilateral marginal alar incision connected by a transcolumellar stair step incision. The nasal skin was elevated in the sub-superficial musculoaponeurotic system plane.

The thickness of the skin may be attributed to a hypertrophied superficial musculoaponeurotic system layer. In such cases, surgically debulking the superficial musculoaponeurotic system can aid in thinning the skin, leading to improved tip definition. However, caution must be exercised to avoid damaging the subdermal vascular plexuses (embedded within subdermal fat), to ensure adequate perfusion of the skin flap.

The debulking of the superficial musculoaponeurotic system should be tailored to each individual. It is important to avoid indiscriminate excision of the entire superficial musculoaponeurotic system, as this can result in excessive thinning of the nasal skin and discolouration. Typically, superficial musculoaponeurotic system excision is performed in the midline supratip area and the infratip lobule to enhance tip definition.[3,9] However, direct superficial musculoaponeurotic system excision over the nasal tip is rarely performed, as this can create an unattractive prominence of the dome or tip graft.[9] Careful consideration and precision are essential to achieve optimal results and maintain the aesthetic balance of the nose.

Once the nasal skin is elevated, it is possible to remove the interdomal fat, skeletonising the underlying framework. Studies conducted by Coskun *et al.* have demonstrated that the fat pad in the interdomal space differed from the subcutaneous tissue in the nasal tip.[10] The interdomal fat pad is composed of pure adipose tissue whereas the subcutaneous tissue of the nasal tip consists of fibroadipose tissue.[10] The interdomal fat pad extends from the nasal tip to the supratip area, and its volume affects the intermediate crura and interdomal distance.[11] Tip width is accepted to be the distance between the two dome defining point. Consequently, a larger interdomal fat pad leads to a wider dome defining point and a more bulbous tip appearance. To achieve a thinner tip, one approach is to remove the interdomal fat pad through 'defatting' techniques, combined with other suturing techniques that reduce the interdomal distance (Figure 1).

Thick skin is often associated with a weaker underlying cartilaginous framework. One method of achieving satisfactory results in thick-skinned individuals is to stretch the overlying skin by enlarging the underlying nasal framework.[1] The nasal framework should be projected and elongated to the extent that is aesthetically acceptable.[3] It is important to avoid excessive closing tension because this can impede nasal perfusion, leading to ischemia and increased pressure on the grafts, potentially resulting in deformity.[3] Therefore, to create a firm underlying framework, the existing cartilaginous structure should be reinforced with rigid cartilaginous grafts for support.[12] Along with grafts, various tip sutures are used to achieve the desired tip definition. The choice of grafts and sutures is individualised depending on each patient's specific nasal characteristics and needs.

In this study, for patients who had undergone primary rhinoplasty, the cartilage grafts were primarily harvested from the nasal septum. If necessary, additional cartilage grafts were obtained from the conchal cartilage. In the case of patients who underwent revision rhinoplasty, rib cartilage and conchal cartilage were used as graft sources. To address issues with nasal width, we performed lateral and intermediate osteotomies to narrow the nasal vault. To reinforce the nasal framework, we used septal extension grafts and expander grafts. Cartilage grafts were reshaped and stacked for dorsal augmentation, while diced cartilages were used for the same purpose (Figure 2). Additionally, lateral crural strut grafts were used to strengthen the lower lateral cartilages.

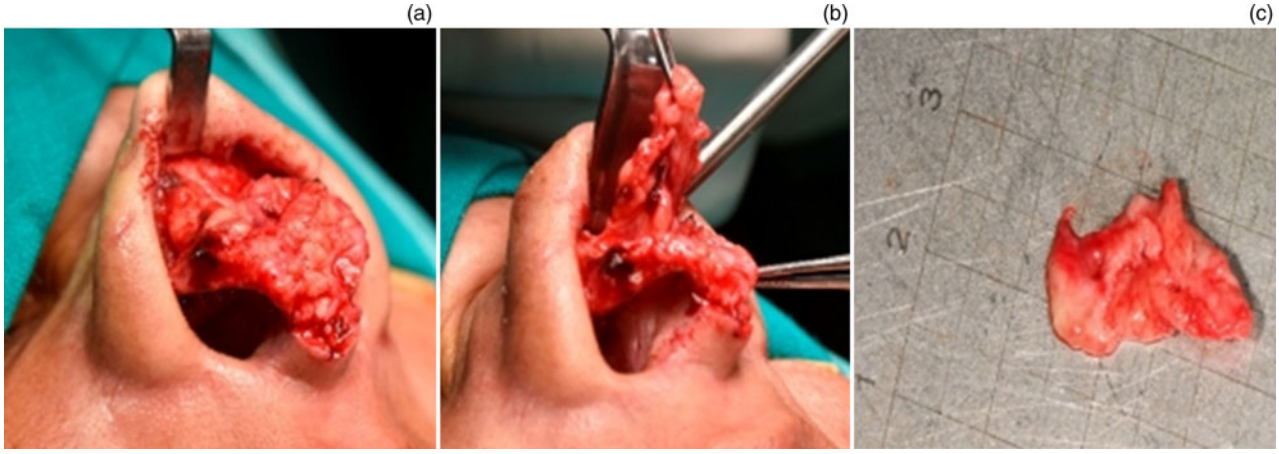

Figure 1. (a) Interdomal fat pad. (b) Dissection of the interdomal fat pad. (c) Removed fat tissue.

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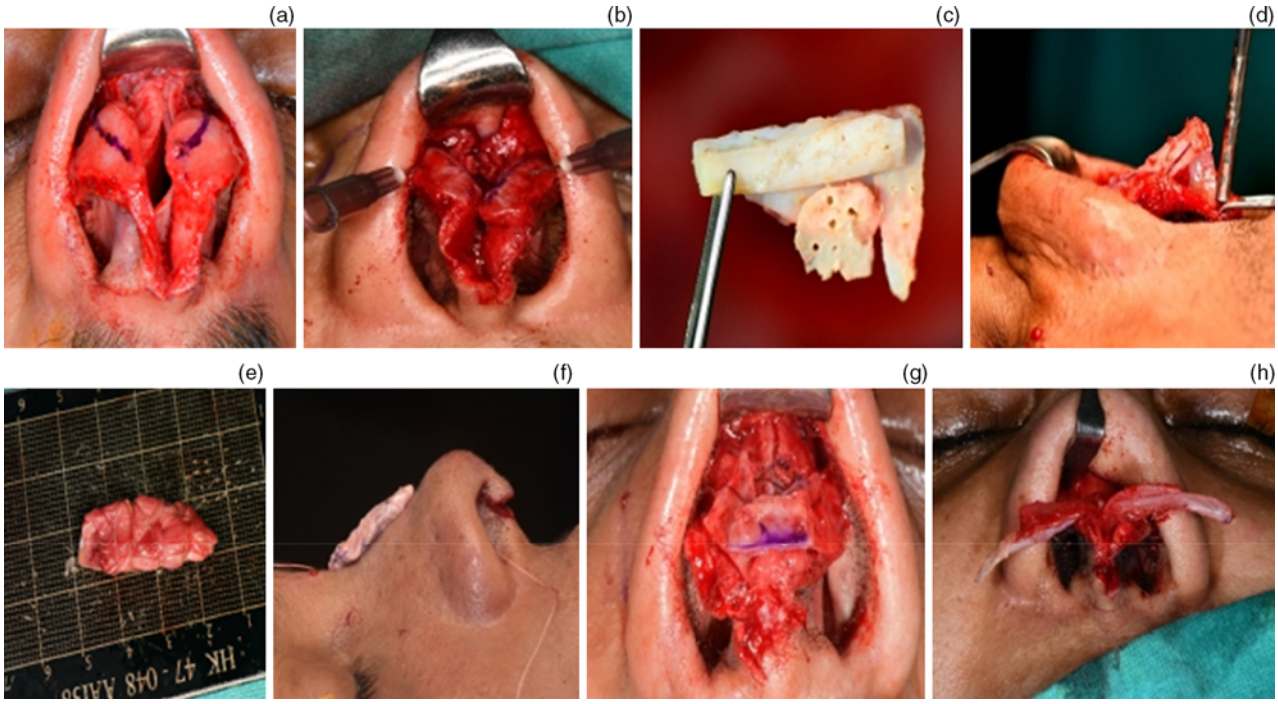

Figure 2. Surgical approach in thick skin rhinoplasty. A strong osseocartilaginous framework is necessary to stretch the overlying skin–soft tissue envelope to get the desired surgical result. Various structural grafts are used for this. (a, b) Cephalic infolding of the lateral crus: to reduce the width of the tip. (c, d) Septal extension graft with expander graft: to reinforce the nasal framework. (e, f) Diced cartilage in the fascia: for dorsal augmentation. (g) A cap graft over the dome improves the definition of the tip. (h) Lateral crural strut graft: increases support to the lateral crura.

Tip plasty

For tip plasty in patients with thick skin, a variety of suturing techniques and tip grafts are employed, tailored to each individual nose. Suturing allows for graded and controlled shaping of the nasal tip. It is common for patients with thick skin to have a broad lateral crus. To address this, symmetrical rim strips are created through techniques such as cephalic infolding (lateral crural turn-in flap) or cephalic trimming of the lateral crura, if necessary (Figure 2).[13] Columellar strut grafts are used to enhance tip projection. To achieve tip narrowing and symmetry between the two alar units, a single dome suture (domal mattress suture) is used. This suture technique helps to narrow and define the tip. A double-dome suture (trans domal mattress suture) is used to stabilise and join the individually defined domes into a single unit.[14] This stabilisation is useful in achieving long-term results.[14] Alar spanning sutures are placed along the cephalic margin of both lateral crus, immediately superior and adjacent to the domes. These sutures are tied at the midline, resulting in a narrowed nasal tip, reduced alar convexity and reduced supratip bulbosity.[13]

In cases where the nose is overprojected or has a long plunging tip, the alar cartilages may be excessively long. Instead of resecting the alar cartilages, techniques such as lateral crural overlay or medial crural overlay are used. This involves cutting the edges of the lateral or medial crura, overlapping them and suturing them in place. The lateral crural overlay produces upward rotation of the nasal tip and shortening of the nose, while the medial crural overlay produces counter rotation and de-projection of the tip.[13]

In addition to sutures, add-on tip grafts are used to enhance tip definition and projection. These grafts can be used in a single or double layer, depending on the desired level of definition (Figure 2). Commonly used grafts include a shield graft or cap graft at the tip, in conjunction with a columellar strut graft to increase projection and definition.

One challenge encountered with thick skin is the formation of dead space beneath the skin, particularly in the supratip and tip area, even after establishing a rigid osseocartilaginous framework, because of decreased elasticity and poor redraping of thick skin. This dead space can lead to the development of granulation tissue and subsequent fibrosis, resulting in potential complications such as a polybeak deformity and a broad nasal tip. The elimination of dead space is hence crucial. To address this issue, diced or crushed cartilage can be used to fill the dead space, effectively minimising the risk of complications. Alternatively, a supratip stitch may be employed to approximate the skin to the underlying cartilage, reducing the presence of dead space and promoting proper healing and redraping of the skin.

Removal of the excessive skin envelope

Stretching the overlying skin while establishing a strong underlying nasal framework is a crucial step in thick skin rhinoplasty. This technique applies gentle and constant pressure to the skin, promoting thinning of the dermis over time.[1] After creating a solid nasal framework, the overlying skin is redraped over it. If there is any excess skin overlapping at the columella, it is trimmed following the columellar incision and sutures are applied for closure (Figure 3).

This step is particularly important in patients with thick skin and an overprojected nose. In such cases, excessive stretching of the skin can lead to an unappealing aesthetic outcome, therefore after achieving a proportionate nasal framework, redundant skin is removed at the columella and tapered laterally along the original alar incision. It is essential to exercise caution not to remove excess skin, ensuring a tension-free closure of the skin at the columella using 6-0 prolene sutures.

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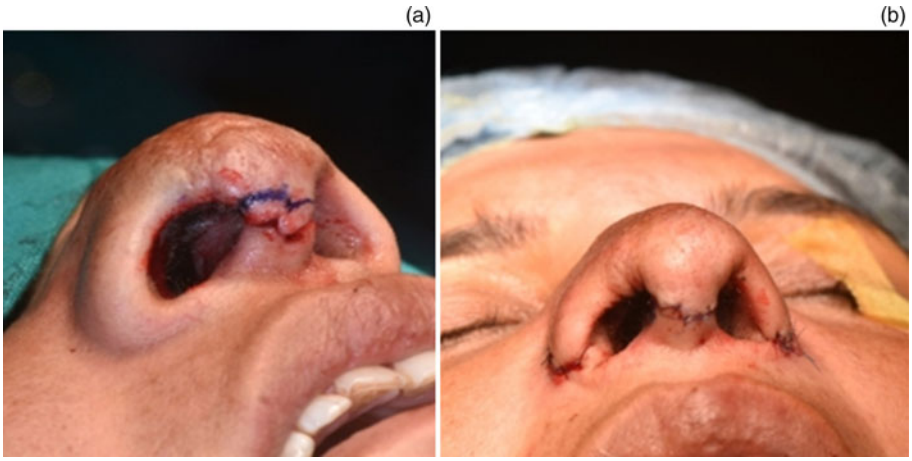

Figure 3. (a) Columellar skin trimming following the stairstep incision on columella. (b) Suturing done after removal of redundant skin with alar base reduction to reduce the width of the nostrils.

Results

A total of 26 patients with thick skin with nasal obstruction and/or aesthetic concerns were enrolled in the study. All patients underwent rhinoplasty using the open approach.

Out of the 26 patients, 23 underwent primary rhinoplasty, while the remaining 3 underwent revision rhinoplasty, after previously being operated elsewhere. Autografts were used in all patients, sourced from the nasal septum, conchal cartilage or the rib cartilage in cases of revision rhinoplasty. These patients were followed up for a minimum one year to evaluate the post-operative outcomes and results. Pre- and post-operative photographs were taken to assess the post-operative outcome and results.

The overall results of the study were assessed based on patient satisfaction, photographic evaluation, and the Rhinoplasty Outcomes Evaluation index. The Rhinoplasty Outcomes Evaluation index is measured using a questionnaire consisting of six questions, each one with five answer options ranging from 0 to 4. The total score on the Rhinoplasty Outcomes Evaluation questionnaire can vary from 0 to 24. To facilitate understanding, the score obtained is divided by 24 and multiplied by 100, resulting in a score that varies from 0 to 100. A higher score indicates greater patient satisfaction with the nose surgery (Table 1).

The subjective assessment of patients revealed 20 out of 26 patients (76.92 per cent) reported marked satisfaction with the surgical outcome after 1 year of surgery. Five patients (19.2 per cent) expressed moderate satisfaction and 1 patient (3.8 per cent) experienced mild improvement (Figures 4–7).

Photographic evaluation involved comparing pre- and post-operative photographs. The results showed marked aesthetic improvement in 23 patients and moderate improvement in 3 patients. None of the 26 patients required revision surgery, indicating satisfactory outcomes.

Table 1. Post-operative Rhinoplasty Outcome Evaluation score improvement over one year

	Number of patients			
Post-operative total score	At first month	At third month	At sixth month	At 1 year
Score <50	19	9	3	1
Score >50	7	17	23	25

Discussion

The process of performing rhinoplasty in patients with thick skin presents a significant challenge. Thick skin often leads

Figure 4. Comparative pre- and post-operative photographs of a 23-year-old male patient with thick skin one year after rhinoplasty.

https://doi.org/10.1017/S0022215123002220 Published online by Cambridge University Press

Figure 5. Comparative pre- and post-operative photographs of a 34-year-old female patient with thick skin one year after rhinoplasty.

Figure 6. Comparative pre- and post-operative photographs of a 37-year-old female patient with thick skin one year after rhinoplasty.

to poor projection and deformities in the supratip and tip areas of the nose. Even after rhinoplasty, the thickness of the skin can mask the definition of the underlying cartilaginous nasal framework, resulting in an ill-defined tip and supratip area, which were the initial concerns for the surgery. Over the years, various modifications have been developed in rhinoplasty techniques for patients with thick skin. However, there is no consensus on the preferred surgical approach. One approach to addressing thick skin in rhinoplasty is to reduce the thickness surgically. This can be achieved by partial debulking of the superficial musculoaponeurotic system layer or defatting the interdomal pad of fat.

However, caution must be exercised to avoid damaging subdermal blood vessels because this can result in permanent scaring of nasal skin. Nevertheless, the most crucial surgical step in performing rhinoplasty for thick-skinned patients is to stretch the skin as much as possible by reinforcing a strong underlying cartilaginous nasal framework. By reinforcing the nasal framework, a strong foundation is created, and gentle but constant pressure is applied to the overlying skin. This process helps to thin the dermis over time.

Providing a rigid underlying support with grafts such as a septal extension graft, a columellar strut, a tip graft and lateral crural strengthening manoeuvres can significantly contribute to achieving good projection and definition of the tip. The prevention of dead space formation is crucial in these cases because this can lead to the development of fibrous tissue and subsequent deformities such as polybeak deformity or a broad nasal tip. To address this, injection with triamcinolone every six weeks after surgery has shown promising results in reducing fibrous tissue formation in the tip and supratip areas. However, it is important to exercise caution when administering triamcinolone injections. The injection should be targeted at the subcutaneous tissue, as a superficially placed injection can lead to complications such as telangiectasia, skin atrophy or a change in skin colour, which can be permanent.

Post-operative nasal taping is an additional measure that can be used to help compress the skin envelope onto the underlying framework and minimise the presence of dead space in the nasal region. Nasal taping is typically initiated once the nasal splint is removed, usually approximately 14 days post surgery. It is then continued for a period of four

https://doi.org/10.1017/S0022215123002220 Published online by Cambridge University Press

Figure 7. Comparative pre- and post-operative photographs of a 24-year-old male patient with thick skin one year after rhinoplasty.

weeks, primarily during the night. This technique has been shown to reduce supratip fullness in thick-skinned rhinoplasty patients. Ozucer *et al.*, in a randomised control study, demonstrated that four weeks of post-operative nasal taping significantly reduced supratip oedema in thick-skinned patients compared with a control group where no nasal taping was applied.[15]

These findings highlight the potential benefits of incorporating post-operative nasal taping as part of the management strategy in thick-skinned rhinoplasty patients because it can contribute to improved outcomes and reduced supratip fullness during the recovery period.

Rhinoplasty is mostly done in the adolescent age group and in this group acne is also more prevalent. It has been reported that after rhinoplasty, there is a 27 per cent increase in acne occurrence during the first month when compared with patients who underwent only functional nasal surgery.[16] Several factors may contribute to this flare up, including increased stress, an irregular cleaning routine and extended use of nasal taping.

In patients with thick dermis and oily skin, which is often seen in individuals with acne-prone skin, oral isotretinoin treatment along with salicylic acid or benzoyl peroxide face washes or local application has shown to be beneficial. Isotretinoin has both an anti-acne effect and the ability to reduces sebum production, leading to improved patient satisfaction. The treatment is initiated one month after surgery and a low-dose regimen is administered for six to eight months to achieve desirable effects. Kosins *et al.* have implemented a similar regimen, starting isotretinoin at three to four weeks post-operatively and continuing for five months.[17]

Despite the implementation of various techniques and measures, achieving optimal results in rhinoplasty for individuals with thick skin can be more challenging compared with those with thin skin. Thick skin presents limitations during different stages of the procedure, such as the restricted debulking of the subcutaneous musculoaponeurotic system and the limited stretching of the skin because of its decreased elasticity.

- Thick skin rhinoplasty is a challenging topic faced by rhinoplasty surgeons because it has less elasticity and an increased chance of post-operative oedema
- The thickness of the skin can be due to a number of causes, each of which must be treated specifically
- Thick skin is usually associated with a weak osseocartilaginous framework and stretching the skin by enlarging this nasal framework has been shown to produce good results
- Injecting triamcinolone in the tip and supratip areas decreases post-operative oedema and fibrous tissue formation
- Skin treatment along with surgery produces better cosmetic results and patient satisfaction

It is crucial to ensure that patients with thick skin are well-informed and adequately counselled before undergoing rhinoplasty. They should have a realistic understanding of the limitations and potential outcomes associated with their thick skin condition. Managing patient expectations and providing a comprehensive explanation of the potential challenges and limitations can help to prevent unrealistic expectations and ensure a more satisfying surgical experience.

Conclusion

To achieve optimal results in rhinoplasty, it is essential to consider not only the underlying osseocartilaginous framework but also the soft tissue covering it, including the thickness and quality of the skin. By addressing the structural aspects of the nasal framework and modifying the skin thickness, surgeons can achieve enhanced outcomes in patients with thick skin.

By treating the skin and nasal framework together, surgeons can overcome the limitations posed by thick skin and achieve greater success in improving the nasal shape and aesthetics. This may involve techniques such as reinforcing the osseocartilaginous framework with grafts, sutures and support structures, while also implementing measures to modify and optimise the skin thickness intra- and post-operatively.

Ongoing research and advances in understanding the soft tissue dynamics and modifications during rhinoplasty can further contribute to improving outcomes in patients with thick skin. By gaining a deeper understanding of how different techniques and manoeuvres affect the soft tissue envelope, surgeons can refine their approaches and tailor their strategies to each patient's specific needs, ultimately leading to more successful and satisfying results.

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