

# Hairline Advancement: Treatment Options and Techniques

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The [hairline advancement](#) procedure is one that can lower the overly high hairline whether due to genetics, hair loss, or prior surgery such as browlifts. In addition to lowering, it is possible to actually change the shape of the hairline, making it more oval or rounded by filling in the upper temporal/side regions. This is a procedure in which I specialize, offering the opportunity to assess the size of the forehead as a component of facial aesthetics, and to intervene surgically, an opportunity offered by practicing surgical hair restoration within a facial plastic surgery practice.

## TREATMENT OPTIONS



**A 45-year-old female, before and 12 months after 2,800 grafts to advance as well as round out the frontal hairline, meeting the patient's goals to significantly change the appearance of her face. Such rounding out could not have been achieved by a surgical advancement procedure.**

Over the past almost 20 years, during which I have performed more than 8,000 hair procedures, has been a time of significant developments in improved techniques of [hair transplantation](#). This evolution has enabled physicians to create increasingly impressive and aesthetic results for their patients.

Follicular unit grafting is one of the most notable, which has made possible procedures of 2,400 or more grafts obtained by microscopic dissection, permitting for the advancement of high and/or receded frontal and temporal hairlines in a single procedure, with truly natural-appearing results when transplanted aesthetically.

When placed closely together in recipient sites as small as 0.5 mm, transplanting

with these grafts provides the ideal combination of naturalness and density. Each recipient site is made at precisely the proper angle, which varies considerably in different areas of the hairline. These grafts can be placed essentially anywhere, including into areas of thinning farther back, allowing for excellent control in designing the shape of the hairline.

The other technique for treating the overly high hairline is the [surgical hairline advancement](#). Performed via a single incision right along the hairline, the scalp is undermined back to permit the maximum amount of forward extrusion. When desired and appropriate, a simultaneous browlift/browplasty can be done, permitting elevation of the brows.

## EVALUATION AND CONSULTATION



Another hairline advancement result, showing before and 2 months postop, this time achieved with the surgical hairline advancement procedure. At this 2-month visit, the patient underwent a procedure of hair grafting to allow for filling in of the frontotemporal hairlines, as well as to help conceal the hairline scar. Grafting after surgical hairline advancement was always the plan, first taking advantage of excellent scalp laxity and then rounding out of the hairline with grafting.

Patients presenting for hairline advancement must be evaluated with a thorough history and examination. This information allows the surgeon to determine whether or not the patient's goals are realistic, and to determine the possible progressive nature of hairline recession, which can guide in the choice of treatment options. These considerations include determining whether the actual concern is over a hairline or some other cosmetic issue and defining the "ideal" aesthetic goal so that hairline is located so the face is divided into three similarly sized areas- the lower, middle, and upper one-thirds.

Along with position, the shape of the hairline must be considered as to its contribution to the cosmetic concerns of the patient. In women, frontotemporal recessions can create an unfeminine appearance; whereas in men they can be considered attractive, although most men in their 20s may not agree but need to be educated as to the permanency of the procedure. The classic feminine hairline varies in its shape, but in general some degree of "roundedness" with narrowing of the horizontal dimension of the forehead is desirable.

The next consideration is the potentially progressive nature of the hair loss, for this helps not only in deciding which procedure is most appropriate, but also in determining the best position and shape of the hairline. Genetically [high hairlines](#) and those hairlines elevated as a result of prior browlift surgery can in most women be considered stable, although there is the risk of future hairline recession with increasing age.

In men, hair loss is usually progressive, most commonly starting by the early 30s but in some men beginning as late as the 50s. As a result, male hairlines can rarely be considered stable, even with the taking of Propecia (which has only limited efficacy, especially in the frontal half of the scalp). Most male-to-female transgender patients who are either surgically and/or chemically castrated can also be assumed to fit into this stable hairline category.

## **HG AND SHA PROCEDURES**



**Another surgical hairline advancement, with results shown at 2 months**

**postop. Outstanding scalp laxity allowed for the advancement of the hairline by 4.5 cm.**

Thus, those patients assumed to have a stable hairline can be treated with either of two surgical approaches: the hair grafting (HG) procedure or the surgical hairline advancement (SHA) procedure.

In most men, with some exceptions, and a minority of females who report progressive hair loss, the risk of further recession of the surgically advanced hairline that would eventually expose a hairline incision scar makes them much more suitable candidates for HG.

Another consideration is the flexibility of the scalp, and with it the location of the brows with the possible indication for a browlift. In order that a patient have a reasonable improvement with the SHA procedure, the scalp must have sufficient laxity to allow sufficient advancement. In patients undergoing the SHA procedure, this is the ideal time to address the position and shape of the brows, as a browlift can be appropriately performed via this same hairline incision.

Other considerations include the history of prior scalp/forehead surgeries, the potential supply of donor hair, and the density of the existing hairline. If the patient has already had a forehead lift via anything other than a trichophytic hairline incision, it is generally not advisable to perform the SHA—the amount of advancement may be restricted and, more critically, there is a risk of ischemia to the intervening area of scalp between the two incisions. In these cases, HG is usually the procedure of choice.

The supply of donor hair determines the total number of grafts available for transplanting to advance the hairline, but also for future transplanting if there is a progression of hair loss.

Finally, the degree (if any) of miniaturization of hairs in the existing hairline needs to be taken into consideration when determining which of the two procedures are most appropriate. These miniaturized hairs will be lost if the SHA procedure is chosen, and thus the hairline incision must be made behind these hairs. One must also consider how aggressively the existing frontal hairline should be filled in behind the new hairline created with a HG procedure, for these miniaturized hairs are at high risk of effluvium.

**THE SURGICAL HAIRLINE ADVANCEMENT PROCEDURE**



**A 29-year-old African American female who had one procedure of 1,900 grafts to the hairline. Results are shown 11 months postprocedure.**

Most of these procedures are performed under local anesthesia with oral sedation, but intravenous twilight sedation is offered.

Patients are told about the limitations, risks, and benefits of this procedure, which include the factors discussed above, and others. The possibility of performing a hair-grafting procedure several months after the SHA procedure is discussed with all patients. This [hair grafting](#) can not only help conceal any visible scarring, but can also create a more rounded shape to the hairline.

As impressive as the results of the SHA procedure are, the ability to round out the hairline as well as fill in any areas of thinning of the temporal region is significantly limited. Therefore, hair grafting can be offered as part of the total procedure plan for those who desire a more rounded hairline.

## **HAIR GRAFTING**



**A 48-year-old transgender male-to-female patient with stable frontotemporal and frontal recessions due to hormone supplements. Shown before and 14 months after a single procedure of 3,400 grafts,**

**made possible due to the outstanding donor area density.**

Although considered a less "surgical" procedure than SHA, the HG procedure takes a significantly longer time to perform, typically 5 to as many as 8 hours, depending on the number of grafts, versus less than 90 minutes for SHA. These procedures are also usually performed under oral sedation and local anesthesia injected along the proposed frontal/temporal hairline, as well as the donor area in the back of the scalp.

The design of the proposed hairline is more involved, for it usually incorporates temporal grafting and there is more control to refine the actual shape of the hairline. Once the patient approves the design, the hair can be trimmed in the donor area, usually located along the mid occiput region, extending to the sides of the head if additional grafts are indicated.

The key aesthetic step in this procedure is the making of the recipient sites, using tiny blades typically 0.5, 0.6, and 0.7 mm in size, which allow for the placement of grafts containing one, two, and three hairs, respectively. This is a meticulous process in which each recipient site determines the direction and angle of growth, as well as the distribution of hairs, which change constantly along different aspects of the hairline.

The direction of hair growth as discussed above can vary tremendously, and the existing hairline can provide a template from which the more frontal grafts can follow. Hair growth direction, with the exception of cowlicks, is generally in a frontal direction along the hairline and as one moves laterally, in a more downward—and eventually along the sides—a more posterior direction.

In a typical procedure, 1,400 to as many as 2,200 (or even more) grafts will get transplanted. No dressings are placed, and most patients return to the office a day after the procedure for a hair wash. With some creative hairstyling (especially in women with long hair) or the wearing of a hat, patients are presentable the next day. Crusts usually fall off within a week, and sutures get removed at 10 days. Regular exercise is permitted on the sixth day.

Regrowth of the transplanted hair begins at 3 to 5 months, after which it continues to grow at the rate of 1 to 1.5 cm per month. Typically, 8 to 10 months pass before there is a cosmetically significant improvement, and patients are advised to wait a minimum of 12 months before deciding if a second procedure is indicated to achieve any desired greater density.

Approximately 20% of patients choose to undergo a second procedure, and the majority of these patients are advised ahead of time that they are likely to be in this category due to the expressed desire for maximum density and/or the presence of a low donor supply density.

## **RESULTS**



Over the past several years, the SHA has become more popular than in the past, due to the increased awareness of the advantages of the technique. While few surgeons offer it with regularity, it has as its main advantage the dramatic and nearly instantaneous results of a lower hairline. HG remains, however, the more common procedure.

The amount of advancement with SHA has ranged from 2 cm to 6 cm. This amount of advancement, especially when combined with browlifting, can significantly shorten the forehead.

Similar to SHA, satisfaction with HG has been very high. Approximately 20% of patients have needed or desired touch-up procedures to enhance density. Most of these patients have had lower than the 90% expected rate of hair regrowth.

Every patient needs to understand the advantages and disadvantages of the two procedures, as well as be evaluated for potential candidacy for each. The main advantages of SHA, besides the ability to achieve virtually instant results, are the most efficient utilization of available donor hairs, and unsurpassed frontal density. However, the fear of a fine-line scar along the hairline understandably creates unwillingness in many patients to undergo the procedure. Furthermore, the limit in scalp laxity, and in others the desire to have a more rounded appearance and not just a lower location of the hairline, makes HG the procedure of choice. The ability to offer patients a choice between these procedures ensures the highest degree of satisfaction in meeting expectations.