

Surgical Treatments for Hair Loss

Communication: The Bridge Between You and Your Physician Hair Restoration Specialist

When you consult a hair restoration specialist, you and the physician share the same objective—to determine if your needs and wishes can be satisfied by a hair restoration surgical procedure or medical treatment. You and your physician have to begin building mutual understanding about:

- . Your objective and subjective perceptions of yourself and what you want hair restoration to accomplish;
- . The physician's objective evaluation of what can be accomplished technically and aesthetically; and,
- . The cost of recommended treatment options.

The bridge of understanding is built by honest two-way communication:

- . You tell the physician why you want hair restoration, and what you want hair restoration to accomplish in improving your appearance. Hair restoration may be only a part of your perceptions regarding self-image. Thinning or lost hair is not an isolated condition; it influences your image of yourself and the image you want to present to others. Your wishes regarding hair restoration should be discussed in the context of your overall wishes—for example, “to look and feel younger”, “not having a scalp that looks shiny and bare”, “being more comfortable around people”, “to improve self-confidence”. Of particular importance is the area of your scalp where hair loss bothers you the most.
- . After the physician hair restoration specialist conducts a medical, physical and scalp examination, options for hair restoration can be discussed, based on diagnosis and assessment of the probable progression of hair loss. In rare cases a patient's medical history and/or examination indicates that the patient is not a candidate for hair restoration, or that the options for treatment are limited. In the majority of persons the cause of hair loss is male or female pattern androgenetic alopecia (inherited pattern hair loss) that is easily treatable.
- . The physician hair restoration specialist will show you collections of illustrative photos or sketches that you and the physician can use to

- identify the “look” you want to achieve. On the basis of diagnosis and assessment, the physician will describe and recommend the surgical and/or non-surgical treatment most likely to give you that “look”. You should discuss with the physician the relative cost of the recommended treatments in dollar amounts, avoiding imprecise terms like “expensive”, “inexpensive”, “more” and “less”.
- . Before agreeing to a treatment plan you should be certain you understand your options, and each treatment’s benefits, risks and cost. You should be comfortable that all of your questions have been addressed.
 - . After you are comfortable that all of your questions have been addressed, you and the physician hair restoration specialist can agree on a hair restoration treatment plan, including the outcome of treatment that can reasonably be expected. Most hair restoration patients are very satisfied with the outcome of treatment. Mutual understanding between you and the physician hair restoration specialist is one of the most important steps in achieving satisfaction.

Hair Transplantation

Hair transplantation is the most common surgical method of hair restoration. The most common reason for hair restoration is hair loss due to an inherited tendency for androgenetic alopecia (AGA). In men, AGA is better known as male pattern hair loss, in women as female pattern hair loss. While hair transplantation is performed more often in men, it is also a successful method for surgically correcting the diffuse pattern of female pattern hair loss.

Hair transplantation is an operation that takes hair from the back of the head and moves it to areas of hair loss elsewhere on the scalp. The fringe (back and sides) of hair on a balding scalp is known as donor dominant hair. It is hair that will continue to grow throughout life, even in men who have the most extensive form of male pattern hair loss. Donor dominant hair follicles are under a different form of genetic control than follicles on the front and top of the head; they are not subject to inherited effects of “balding genes”.

When donor dominant hair follicles are transplanted to bald areas of the scalp they continue to grow hair. Donor dominance is the scientific basis for the success of hair transplantation.

The area to which donor dominant hair follicles is transplanted is called the recipient area. Candidates for hair transplantation are those individuals with hair loss who have sufficient donor dominant hair from the back and sides of the scalp to transplant to recipient balding areas.

The most common method for harvesting donor dominant hair is to slice it out in strips with a special scalpel-like device. Follicles are separated out from the strip and prepared for transplantation. The transplant grafts are placed into the recipient areas. Depending on how large a recipient area is involved, and on individual patient characteristics, transplantation of the recipient area may be accomplished in one, two, three or more sessions. Multiple sessions are usually spaced several weeks apart.

Among the assessments made by the physician hair restoration specialist are (1) how rapidly, and (2) how much of the patient's remaining hair is likely to be lost. A man with progressive male pattern hair loss may require a number of hair transplantation procedures over a number of years to keep pace with hair loss. In these patients the physician hair restoration specialist wants to be certain that an adequate supply of donor dominant hair will be available for future transplantation. In some cases the progression of hair loss between transplant procedures can be slowed or halted by supplementary medical therapy with an FDA-approved hair restoration drug—topical minoxidil (Rogaine®) or orally administered finasteride (Propecia®).

Hair transplantation surgery techniques have improved enormously over the past decade and are still improving. The first hair transplants were

characterized by “plugs” and “corn rows” of transplanted hair. Today, most hair transplantation is done with mini-grafts of fewer than 5 hair follicles, micro-grafts of 2 or 3 hair follicles, and single-hair grafts. Plugs are occasionally used for special purposes in individual patients. Employing newer techniques and newer instruments, the physician hair restoration specialist can create a natural hair appearance that is appropriate to each individual patient.

Naturalness of appearance is the goal of all hair transplantation today.

Mini-, micro-, and single-hair grafts provide the “softness” necessary for creating a natural hairline. Graduated placement of single-hair, micro-, or mini-grafts allow creation of a gradually increasing hair density from hairline to mid-scalp. Individual physician hair restoration specialists make their own adaptations of new technology to achieve desirable aesthetic results for individual patients.

Side effects of hair transplantation surgery are usually minor: mild pain and discomfort for a few days postoperatively, swelling over the operated areas, and scab formation. The physician hair restoration specialist provides medical for discomfort control and information about scalp care. The physician also provides information and recommendations for long-term hair and scalp care to maximize the patient’s appearance.

Scalp Reduction

Scalp reduction is simply the surgical removal of bald scalp. The operation is highly effective (1) in carefully selected patients, and (2) when performed by a skilled and experienced physician hair restoration specialist. The good candidate for scalp reduction is a man who has full hair on the back and sides of the head that can be stretched upward to cover the area where bald scalp is surgically removed. A small number of hair transplant grafts may still be needed to cover residual bald areas.

Scalp reduction may, in some patients, be preceded by scalp expansion. A thin plastic envelope is inserted under the scalp and gradually inflated with saline over a period of time. As the envelope inflates the scalp expands in response to the inflation. When the envelope is removed, there is an excess amount of bald scalp available for removal and for “stretching” hair-bearing scalp upward.

Scalp reduction can be associated with postoperative complications of scarring, stretch-back of the bald area, and the creation of an unnatural appearance called a slot deformity.

Scalp Flaps

Scalp flap surgery entails moving entire segments of hair-bearing scalp into a bald area. The movement is accomplished by surgically creating a “flap” of hair-bearing scalp that can be moved along with its blood supply to a bald area. Scalp flaps are also employed in reconstructive surgery to cover scalp areas with hair loss due to burns or physical injury. The surgeon performing scalp flap surgery should be skilled and experienced in the procedure.

Eyebrow and Eyelash Restoration

Eyebrows and eyelashes are important components of facial symmetry. They can be lost or lacking for a number of reasons—physical injury, burns, disease, chemotherapy, radiation, scarring caused by long-term plucking, and congenital inability to grow them.

Eyebrows and eyelashes can often be restored by (1) transplantation of hair-bearing skin from another area, or (2) flap surgery to move a flap of hair-bearing skin from the scalp to the eyebrow. Eyebrow and eyelash restoration requires a skilled and experienced surgeon.

Non-surgical Treatment

Two hair restoration medications have been approved by the U.S. Food and Drug Administration (FDA) after appropriate double-blind, placebo-controlled clinical trials. It is important to note that only two hair restoration medications have won such approval. Many products are advertised and marketed with a claim for hair restoration, but few have ever been subjected to the clinical trials necessary to prove efficacy and safety.

The U.S. FDA-approved hair restoration medications are:

- Minoxidil (Rogaine®)—a topical solution available over-the-counter in 2% and 5% strengths. Minoxidil is effective in some people, moderately effective in some, and ineffective in others. When effective, minoxidil can retard hair loss and stimulate new hair growth. Its mechanism of action is not well understood. Best results with minoxidil are often achieved by combining the topical solution with hair restoration surgery.
- Finasteride (Propecia®)—an oral medication that treats the root cause of male-pattern hair loss by inhibiting the activity of the hormone responsible for hair loss. Finasteride is available only by prescription. Finasteride is usually not prescribed for women; women who may become pregnant are at risk for a certain type of birth defect in the unborn child. Finasteride works best for early to moderate degrees of hair loss. Men with extensive hair loss are unlikely to have much regrowth. Regrowth associated with finasteride is better over the crown of the scalp than at the frontal receding hairline. When used in conjunction with hair transplantation, finasteride may prevent further hair loss while transplantation fills in areas such as the frontal hairline.

Hair Additions and Replacements

A small number of people with hair loss are not candidates for surgical or medical hair restoration. For these persons, hair additions and total hair replacement may be considered:

- . A person with temporary total hair loss due to radiation or chemotherapy may be a candidate for temporary total hair replacement (a wig).
- . A person who is congenitally unable to grow hair may be a candidate for permanent total hair replacement (a wig, or several wigs for different occasions)
- . Hair additions may be a temporary measure for the person who wants hair loss corrected but is not yet ready to undergo hair transplantation.
- . Hair additions or replacements may be considered by the person who has too little donor dominant hair for use in hair transplantation.

The physician hair restoration specialist can recommend hair additions and replacements for those persons who are not candidates for surgical or medical hair restoration.