

Hair Restoration: A Letter to My Patients

Thank you for consulting with the Hair Transplantation Clinic of Sacramento (HTCS). Your consultation will provide you with an opportunity to become familiar with state-of-the-art hair restoration as performed at HTCS. The vast majority of our patients, whether male or female, have male pattern baldness, also known as androgenic alopecia. This is a condition in which hair follicles at the front and top of the scalp are genetically programmed to progressively fall out under the influence of androgenic hormones (testosterone and DHT) as you age. Hair transplantation takes advantage of the fact hair follicles at the back of the scalp grow throughout life and do not fall out: it is these that are taken and transplanted to the bald or thinning areas, where they grow permanently. HTCS has the proud tradition of being a leader in pioneering the most modern techniques in the field of hair restoration with more research articles published in peer reviewed medical journals, in 2001, than any other hair restoration facility in the world.

Hair restoration is a remarkably successful and safe but it is important that you understand the process fully before deciding if it is for you. What follows is information designed to help you make this decision. At your consultation we will discuss what you hope to achieve. If your expectations exceed what is possible this will be explained and details given of alternative treatments that may be available. The possibility of your losing more hair as you age and how you may be able to prevent this will also be discussed. Your scalp and hair will be thoroughly examined. The quality and disposition of your hair; the adequacy of the donor area for comprehensive hair transplantation together with its color, caliber and curliness, are just some of the factors be taken into consideration. Based on the examination and our discussion, a plan of treatment calculated to produce the best possible result will be devised. Your personal input in developing this plan is most important. Hair restoration comprises two distinct treatments: hair transplantation and scalp reduction. All procedures are done under local anesthesia as an outpatient. Sedation is available. While transplantation is far more commonly performed than scalp reduction, the latter has been found to be particularly useful in many instances. Scalp reduction is a simple, safe procedure in which a significant part of the baldness is removed from the top and back of the scalp. This achieves a result comparable to 4000 hair transplant. HTCS has pioneered a highly effective scalp reduction technique now successfully used in over one thousand patients. At consultation details will be explained should you be a candidate for this operation. Donor hair, that is the hair taken from the back of the scalp for transplanting, is not an inexhaustible source. The average human scalp has approximately 100,000-120,000 growing hairs. The average donor area at the back and sides of the scalp can provide about 15,000 hairs before becoming somewhat depleted. Fortunately, however, only a portion of the scalp tends to bald and the amount of hair available for transplanting is usually sufficient to produce dramatically successful and natural results. It is nevertheless mathematically impossible to provide any patient who has lost most of his/her hair with a truly full head of hair with hair transplantation alone. In these cases scalp reduction is especially useful. A further concept that you should understand is hair density. Hair density is defined as the number of hairs per square centimeter on the scalp. In the normal scalp there are approximately 100-120 hairs per square centimeter. Despite our greatest efforts the highest density that is achievable in the typical case is between 60 and 70 hairs per square centimeter - and this only after two or more procedures. A good rule of thumb is that approximately 25 hairs per square centimeter can be transplanted at a single session. However a density of this 60 to 70 hairs per square centimeter allows for a very natural appearance. Every effort to achieve the maximum at each hair restoration procedure is made and the patient commonly expresses enthusiastic approval even after one procedure.

All hair transplantation procedures begin with harvesting the donor site at the back of the scalp. An appropriately sized horizontal strip of permanent hair is excised under local anesthetic. Suturing is done immediately and normally leaves a virtually undetectable scar hidden under adjacent hair. Small segments of permanent hair-bearing tissue called grafts are then meticulously fashioned from the excised strip. Depending on the number of hairs in the graft and its physical dimensions, the terms follicular unit grafts and slot micrografts are used.

Follicular unit grafts, the smallest grafts, are placed into small slit incisions in the bald frontal area. Follicular grafts give a soft sophisticated appearance to the frontal hairline zone. At HTCS follicular grafts are used to produce a natural virtually undetectable hairline. At HTCS, slot micrografts, a technique pioneered by Dr. Hause, are placed into fine slots behind the hairline zone and in areas requiring the highest density. Each of these grafts transfer 4 to 8 hair follicles and are placed at natural angles and staggered to give the best density and natural look. The combination of follicular grafts in front and slot micrografts behind produce an appearance that is soft and natural in front and achieves the desired density behind. This method results in cost savings to you,

optimizes density and can transfer an equal amount of hair and superior results with far fewer grafts than the much more expensive megasession follicular unit grafting requiring 1,500-3,000 grafts.

Transplantation is routinely done under local anesthesia Patients requesting intravenous or oral sedation are accommodated. However, for obvious reasons, the sedated patient is not allowed to drive home and a designated driver is required. After hair transplantation a mild overnight compression dressing is recommended. With scalp reduction a dressing is not required. Most patients should expect to take a few days off work, but normal activity can almost always be resumed within 5-7 days. Patients return in seven days for suture removal. Hair transplantation grafts crust over for approximately one week. Once the crust separates the hair begins to grow in many patients, but it is more usual that the transplanted hair spontaneously falls out in about ten days. Following a dormancy period of about 8 to 12 weeks, the permanent hair grows at the rate of about half an inch a month. The new hair is initially fine and slender but increases in caliber and quality over the weeks and months. Transplanted hair takes at least 8-12 months to achieve its full potential. Further procedures, if required, are scheduled several months apart.

Patients interested in treating both the frontal and posterior scalp simultaneously can undergo hair transplantation and scalp reduction at the same time. This is a routine practice at HTCS.

RISKS:

Since its establishment twelve years ago, HTCS patients have had no complications or side effects of any serious consequence. No patient has required treatment in a hospital as a result of procedure or procedures performed at our clinic nor, as far as we are aware, has any outside doctor even been consulted by any of our patients. HTCS also has a perfect record of zero liability claims. Nevertheless the occasional complication or side effect will occasionally occur. In our experience these are virtually never serious and easily treated. What follows are examples.

Bleeding

Bleeding and blood clots under the skin are potential risks of any operation. In the history of the clinic no patient has required any type of blood transfusion or visit to the hospital emergency room for this complication. Rarely the placement of extra sutures are required to control the bleeding

Infection

Infection is a potential complication of any operation. Patients are routinely given prophylactic antibiotics and infections are exceedingly rare.

Graft Survival.

We estimate that approximately 95+% of all grafts grow normal healthy hair.

Visible Scars

Despite every effort to minimize the detectability of scars, scars result with all operative procedures. These are normally concealed by adjacent hair. Scalp reduction scars and donor site scars routinely heal with minimal detectability. However some degree of scarring is an inevitable accompaniment of all surgery.

Accelerated Hair Loss

Any operation on the scalp can result in acceleration of the natural hair loss process. This occurs to some extent in all patients and then stabilizes. Rogaine is routinely prescribed for one-month post transplant to limit the extent of this. In most instances any hair lost will return as the grafts begin to grow.

Skin Changes

Patients may have some surface irregularities in the weeks and months following transplantation. This tends to minimize over time. Patients can also have some increased pigmentation from excessive exposure to the sun. We recommend a hat be worn when out of doors during the first few days. Later some type of sun block or a cap should be worn when exposed to protracted periods of sunlight for 6 to 12 months following surgery.

Sensation Changes

Some small amount of trauma to fine nerve endings is inevitable in all surgery. The scalp is no different and some diminution in sensation occurs which generally abates after several months. Some patients may experience itching of the scalp and, rarely, prolonged soreness.

Edema (Swelling):

Approximately 30% of the patients experience some forehead swelling that usually lasts 3-4 days. However, it can last for up to 1-2 weeks in the occasional patient.

Standard Anesthetic Risks

Local anesthetics employed at the Hair Transplantation Clinic are extremely safe. Sedation used is mild and the patients are monitored throughout the procedure. Reactions to these anesthetic agents rarely occur. Although extremely rare, severe reactions and complications including death (estimated at approximately 1:240,000) can occur with any type of anesthesia.

I would like to briefly discuss the medical therapies available for patients suffering from hair loss.

Rogaine

Rogaine is topical minoxidil, a medication that was used for high blood pressure in the past. Due to significant side effects, it is not generally used for hypertension therapy. However, a significant amount is absorbed when placed on the skin. This results in local vasodilatation of the blood vessels and increased blood supply. Since hair is very responsive to local changes in blood supply and nutrition, it has been shown to be somewhat helpful in the quality of hair growth and maintaining hair in a small percentage of patients. However, Rogaine does not change the relationship of testosterone and the stimulation of the hair follicles to become dormant. Therefore, overall it has a low 5-10% response rate, which tends to be short-lived and diminishes over a period of 2-3 years. Although used by a fair number of our patients, Rogaine is not routinely prescribed by the Hair Transplantation Clinic of Sacramento. We do believe it has a role to play in the immediate postoperative period for hair transplantation grafts. The stimulation of increased blood supply can aid in the healing of the grafts and decrease the time in which it takes the grafts to grow normally. We therefore prescribe it for one month after hair transplantation procedures.

Propecia

Propecia, or finasteride, is a medication that actually blocks the conversion of testosterone to DHT (dihydrotestosterone). DHT is responsible for stimulating the hair follicle to go irreversibly dormant. Propecia has approximately a 65-70% response rate in patients with growth of new hair and improvement in the growth of the existing hair. Propecia is taken as a daily 1 mg tablet and tends to have a greater effect on the crown of the head. Although there are few side effects described with Propecia, there is approximately a 10-15% incidence of sexual dysfunction. However, few of our patients have complained of this. The other source of some concern is that Propecia has only been available for less than 10 years and there are no long-term studies to show the effects of prolonged exposure to Propecia. However, the initial studies indicate that it is relatively protective against prostate enlargement as well as pre-malignant changes that can occur in the prostate with age. Here at the Hair Transplantation Clinic of Sacramento we offer Propecia as an option for patients and feel that it has helped optimize the results in certain individuals.

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In closing, I would like to reiterate the fact that hair transplantation and scalp reductions are two procedures that are very effective in improving upon the ravages of hair loss. However, due to the issues of limited donor site, hair density, the need for repeat sessions and the time in which it takes the hair transplantation grafts to heal, these procedures are less than perfect. As most patients know, I have undergone hair restoration surgery and am very satisfied with the results. It has changed my appearance in both photographs and activities of daily living. I feel confident swimming and partaking in outdoor activity without being self-conscious about my hair. However, like any elective cosmetic procedure, not every individual is a good candidate for hair restoration. It is critical that one understands the limitations of any procedure undertaken and has realistic expectations for its result. Patients with male pattern baldness must also come to grips with the fact that hair loss is progressive throughout life and that more procedures may be necessary to optimize or maintain a desired look.

I trust that this letter has been helpful in educating you regarding the option of surgical hair restoration. Please take the opportunity during your consultation to ask any question that may be of interest. In case you forget, you are always welcome to call our office for clarification by one of our staff or me. We look forward to being of service to you.

Sincerely,	
Donald W. Hause, M.D.	
I certify that I have read and that I understand all 4 pages of the regarding Hair Restoration with Dr. Hause during my consulta	
Patient Name	
Patient Signature	Date
Witness Signature	Date