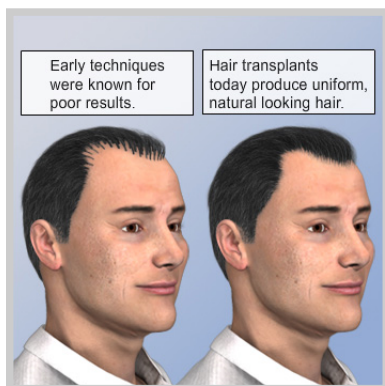


Hair Transplants

Hair loss and balding are often an unexpected and unwanted part of life. Fortunately, with recent advances in technology, hair loss can be slowed or stopped, and there are remedies for thinning hair and baldness. Hair transplants are an effective, permanent solution for replacing hair in suitable candidates. Hair transplant techniques have been in use since the early 1950s. However, unlike early procedures that were known to yield hair in clumps, or which grew at odd angles, hair transplant techniques today have evolved to highly precise procedures that use much smaller implants and produce uniform, natural looking hair in areas that have lost hair.



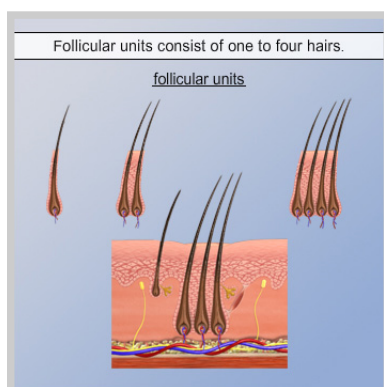


Hair Transplant Introduction

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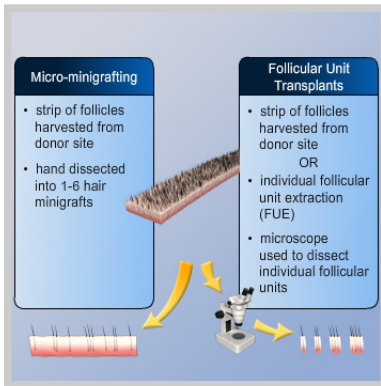
Doctor's Personal Note: A Message From Your Doctor

Thank you for visiting our website and viewing our 3D Animation Library. These animations should assist you in better understanding your condition or procedure. We look forward to answering any additional questions you may have at our next appointment.



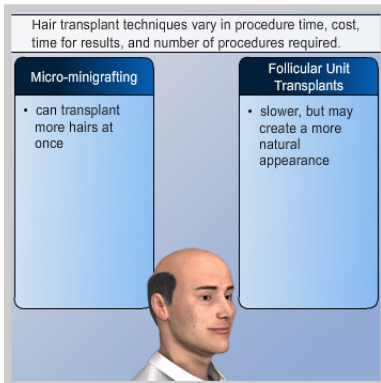
How Hair Transplants Work

To understand how hair transplants work, it helps to understand some basic hair anatomy. A typical hair consists of the shaft, which is the part you can see above the skin, and the hair follicle beneath the surface. Hair tends to grow in small bundles, which are called follicular units. A follicular unit consists of 1-4 hair follicles with full-sized hairs, 1-2 fine vellus hairs, sebaceous glands, a small muscle, nerves, and blood vessels. Each follicular unit is surrounded by a band of collagen, and these units can be seen as independent structures when a cross-section is viewed under a microscope. At the surface, follicular units appear as a tiny group of hairs growing together. Hair transplants relocate intact follicular units from a safe donor zone at the back and sides of the head to balding or thinning areas. The follicles harvested from the donor areas are not genetically inclined to go bald, and once they are transplanted, they will continue to produce hair throughout a patient's lifetime.



Types of Transplants

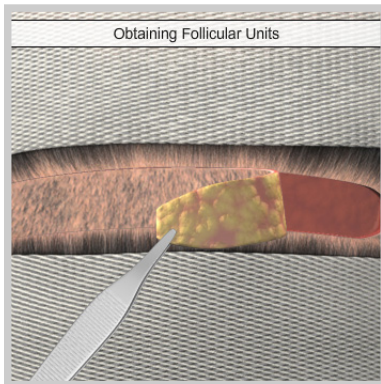
A variety of hair transplant techniques exist, and two of the more popular techniques today are what are known as micro-minigrafting and follicular unit transplants. Both of these processes can be done by dissecting a small strip of hair follicles from the donor site. Follicular unit transplants can also be harvested in a process called follicular unit extraction (FUE), wherein a one millimeter or smaller diameter punch is used to remove individual follicular units. When harvesting follicles from a strip, the key difference between micro-mini grafts and follicular unit transplants is that the micro-mini grafts are hand dissected into minigrafts of one to six hairs with skin between the follicles, whereas the follicular unit method takes the strip under a microscope to remove interfollicular hairless skin and dissect individual follicular units containing one to four hairs.



Which Procedure Should I Use?

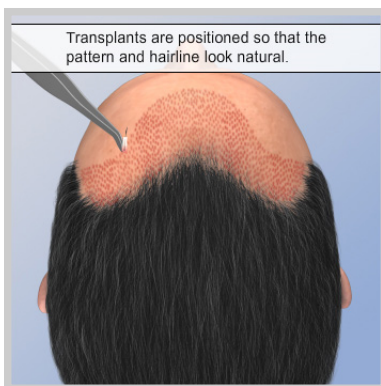
Determining which hair transplant technique is right for you is a matter of personal choice based on factors such as procedure time, cost, time that you are willing to wait for results, and number of procedures required. In general, the micro-minigraft can transplant more hairs at once and follicular unit transplants are slower but may create a more natural appearance. Among follicular unit procedures, the strip harvesting procedure is more rapid and generally less expensive than follicular unit extraction. The FUE technique produces multiple, extremely small scars that are difficult to identify, and the strip procedure produces a single scar, which can be concealed underneath existing hair. This animation will primarily discuss follicular unit transplants, but each of the treatments can produce desired results.

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Donor Procedure

Hair transplants require two surgical procedures: one for obtaining the follicular units, and one to implant the grafts. Both procedures are performed during the same visit. Your scalp will be scrubbed with a disinfectant solution and a local anesthetic, which typically consists of lidocaine with epinephrine, will be injected to numb the area and help control bleeding. An incision or a punch will be used to cut vertically down into the scalp to harvest the donor hairs without damaging follicular units. The incisions are typically just deep enough to harvest the entire follicular unit as well as some underlying fat that can be grasped while working with the grafts. The FUE technique will remove single follicular units. The strip technique involves harvesting a thin strip of donor tissue, which is subsequently divided into individual follicular unit grafts by a team of technicians. After the donor tissue is harvested, the site is sutured closed with either stitches or small staples.



Recipient Procedure

Transplanting follicular units into the recipient area requires making multiple, tiny, needle-sized incisions to place each follicular unit or micrograft. A small blade or needle may be used to make each incision to the appropriate depth for the hair grafts. A combination of follicular units is usually used in the restoration process. Single hair units are typically used at the hairline. Units with two or more hairs are used behind it, and those with three and four hairs are used farther back to add fullness. The density of transplanted units also increases behind the hairline. The transplants are placed in a random, irregular pattern, to mimic nature, and the physician will take care to position them according to the angle and direction the hairs should grow to result in a hairline that looks natural. After transplantation, the recipient site incisions will heal in a few days.



Recovery and Results

The scalp contains a large number of vessels, and immediately after the transplantation, the surrounding tissue begins nourishing the transplanted follicles. You should be able to return to work and most normal activities the day following your procedure, but should refrain from strenuous exercise and heavy lifting until any non-absorbable sutures in the donor site are removed in 7 to 12 days. As healing begins, some crusts may develop at the base of the grafts. After several days these can be gently removed while shampooing. Most transplanted hairs will be shed between 2 to 4 weeks after surgery, but the follicles remain, and hair that has been transplanted may require as long as 3 to 5 months to begin growing. Once hair growth begins, there will be a progressive cosmetic improvement, which will continue for up to 12 to 15 months after surgery.



Conclusion

Regardless of the hair transplantation technique you choose, you may require a second or possibly even a third procedure depending on the extent of your hair loss and degree of coverage desired. Follow-up procedures are typically performed after around eight months, when all the implanted grafts are growing. Also, as some of the hairs surrounding the transplant may continue to be lost, a future hair transplant may be recommended to maintain even coverage. Consult with a hair restoration professional who will take into consideration your particular balding pattern, degree of hair loss, and needs in order to determine the best technique and amount of coverage to achieve optimal results for the look you desire.