Hair transplant surgery has come a very long way since the days of unnatural looking cornrow plugs, however most prospective hair transplant patients are unaware of what true state of the art hair transplantation is, and what the procedure entails.

Today's gold standard in surgical hair restoration is a procedure known as Follicular Unit Transplantation (FUT). Follicular Unit Transplantation might appear to be a simple outpatient procedure, but a very specific skill set is needed to perform it well. Hair transplantation is a team effort, and each member of the surgical staff must be highly trained in order to achieve the desired cosmetic result.

Hair transplant surgery is as much an art as it is a science. The goal is to create a completely natural looking result that's consistent with the patient's hair supply, the patient's specific hair characteristics, and just as importantly, the patient's goals. During the hair transplant procedure a thin strip of DHT resistant hair baring tissue is removed from the back and the sides of the scalp. The size of this strip is dependent on the total number of follicular units or grafts that need to be redistributed to the patient's balding and thinning areas. After removal of the donor tissue, the area from where the strip is removed is sutured or stapled closed. The suture line is easily covered by the patient's existing hair, and in most cases heals to the point of being imperceptible when performed correctly.
The donor tissue is then given to the surgical staff to begin the labor intensive and highly skilled task of dissecting the tissue into follicular units. These tiny, naturally occurring hair grouping are also known as grafts, with each FU graft containing between one to four hairs. High powered dissecting microscopes are use to aid in the dissection process. Each surgical technician must make sure that each graft is completely intact and trimmed of excess tissue before implantation. Once the grafts are dissected they are submerged in a holding solution, usually saline and kept refrigerated in order to keep them viable while the team finishes the dissecting process. Each step of this process must be performed with the utmost care in order to insure the final result of the hair transplant.

While the grafts are being prepared, the hair transplant surgeon meticulously makes the recipient sites (the sites where the grafts are transplanted) using tiny cut to size blades, and or the bevel of a tiny hypodermic needle. This process must be performed carefully to insure proper depth, angulation and density. If the recipient sites are made in a haphazard fashion, the newly transplanted hair follicles will grow in an unnatural direction making it difficult for the patient to properly style his hair once the transplant has matured. The level of skill that this takes should not be underestimated. This is a very time consuming process and takes significant experience to master.

Once the surgeon completes the recipient sites, it's time to place the follicular units. Placement of these tiny hair follicles into the scalp is a demanding skill and can take up to ten hours to perform depending on the size of case.

Once the procedure is completed the patient is sent home, bandage free in most cases, and in some cases wearing a light head band and a baseball cap provided by the facility. Post operative instructions are provided as well as antibiotics as a prophylactic to avoid the possibility of infection. Pain medication is also provided in case the patient feels any discomfort the following few days.
The day after the procedure the patient usually returns to the facility to have his head shampooed for a post operative follow up. Normal activities can resume usually within a week, but heavy weight training and other strenuous activities should be avoided for at least one month after the procedure to ensure proper donor healing.

**History of Hair Transplantation**

Today's state of the art surgical hair restoration is an evolution of a technique that was actually cultivated in Japan in the late 1930s. It was in 1939 when Japanese dermatologist Dr. Okuda described in detail a technique of grafting skin and hair to the scalps of burn victims. In his description, he utilized a punch technique to extract round plugs of hair bearing skin which were then inserted into round holes made in the burned skin. After the skin healed, the transplanted hair began to grow normally in the previously burned and bald areas of the scalp.

Five years later Dr. Tamura, another groundbreaking Japanese dermatologist began experiments with significantly smaller and more refined grafts consisting of one to three hairs to replace lost pubic hair in his female patients. Dr. Tamura used an elliptical incision to extract the donor tissue and then dissected each individual graft. Interestingly enough, Dr. Tamura's technique was very similar to the techniques being used today.

Due to Japan's role in World War II, the groundbreaking work of both Dr. Okuda and Dr. Tamura were lost for over a decade and completely unknown to western medicine. It wasn't until years after the war that the documentation of these scientific finding were found and shared.
Here in the west, it is New York Dermatologist Dr. Norman Orentreich who is credited with the invention of modern day hair transplantation by performing the first known hair transplant in 1952 on a patient suffering with common male pattern hair loss. Seven years later Dr. Orentreich published his findings and set forth his theory of "Donor Dominance" in the Annals of the New York Academy of Science. His finding proved that the hair that remains in what's known as the Hippocratic wreath, the hair found on the back and sides of the heads of most balding men, is for the most part genetically resistant to the balding process.

By the 1960's hair transplantation began to become more prevalent, unfortunately Dr. Orentreich's technique mirrored the less ascetically acceptable punch graft process of Okuda instead of the more naturally appearing smaller grafting techniques of Dr. Tamura. Dr. Orentreich's crude technique of hair transplantation set the stage for countless tragic outcomes and gave the field of surgical hair restoration a less than stellar reputation which had plagued it until very recently. In the mid 1990's modern day hair transplantation began to hit its stride and several hair transplant surgeons were adopting techniques that were producing impressive results for their patients.

By the year 2000 follicular unit transplantation became the gold standard bringing modern day hair transplantation to a whole new level of state of the art cosmetic surgery. Today surgical hair restoration is truly a viable option for many suffering with common genetic pattern hair loss and had significantly improved the lives of many.